Australian Government
Department of Health and Aged Care

NATIONAL HEALTH AND CLIMATE STRATEGY

Detailed submission form

This form allows you to provide responses to the full set of questions in the Consultation Paper available here.

Alternatively, you may wish to complete the briefer online survey available here.

Please submit this form in Word format to Health.Climate.Consultation@health.gov.au.

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The Climate and Health Alliance
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Overarching Advice

Why we must act

Challenges posed to human health by climate change are significant and accelerating. Climate change directly impacts human health, and increases both demand for health services and stress on the people and institutions providing those services.



It is clear that action on climate and health is hugely beneficial for social, environmental, cultural and economic outcomes. However, these benefits can only be achieved with urgent and decisive action, and the funding to execute it.

For over a decade, the Climate and Health Alliance (CAHA), its members, and its allies in the health and environment sectors have been advocating for a national approach to climate and health. We welcome the recent establishment of the National Health, Sustainability and Climate Unit (NHSCU) and the development of Australia's first National Health and Climate Strategy(1) (the Strategy).

The importance of this Strategy can not be understated.

This consultation is a once in a generation opportunity to meaningfully prepare to meet the health needs of all people in Australia in the face of the climate crisis. To ensure the Strategy

meets the needs of the community, it is crucial the remit of the NHSCU is broadened to take a 'Health in All Policies', whole of government approach, where climate and health leadership is supported throughout all Commonwealth policy planning. This approach should be coupled with tangible mechanisms for implementation including science-based targets and funding.

In June 2023 Assistant Minister for Health and Aged Care, the Hon. Ged Kearney MP, and Assistant Minister for Climate Change and Energy, Senator Jenny McAllister launched a consultation for the Strategy(2). As the peak body on climate change and health in Australia, representing over 100 member organisations, CAHA has been working closely with the NHSCU and health and environment stakeholders to ensure the Strategy is as effective as possible.

To that end, we've worked with members and stakeholders (including the Gunnu-maana (Heal) Aboriginal and Torres Strait Islander Health Program at The George Institute for Global Health) to develop a submission. The aim of our submission is twofold:

1. To provide overarching recommendations on the structure and focus of the Strategy.
2. To provide recommendations in response to consultation questions to ensure the Commonwealth receives best advice.

As per the CAHA-led 'Healthy, Regenerative and Just' framework(3) for a national strategy on climate, health and wellbeing: "*Achieving a better future involves a clear-eyed look at current structural political, social, economic, environmental and public health challenges, identifying and implementing integrated strategies. The approach must be holistic. We must move beyond silos in terms of public dialogue, policy portfolios, investment strategies, political and business priorities, and leadership*".

This imperative requires a nationally coordinated approach, led by the Department of Health and Aged Care (DHAC), to embed climate and health outcomes into the business of government. The Strategy must clearly outline how the Department will take a whole of government approach to embedding health across every portfolio, not just DHAC. As such, the following section reflects high level guidance on how the Strategy can better meet sector needs. Specific guidance on the Consultation Paper questions appears further below.

We welcome the opportunity to engage further with the NHSCU.

High Level Structure of the Strategy

We urge the Department and consultants assisting to refer to the overarching structure and the almost 200 specific recommendations made in *Healthy, Regenerative and Just*(3) to guide this Strategy. Each of the eight Areas of Policy Actions and accompanying recommendations are considered vital elements of the task to reduce the impacts and risks to health from climate change, and maximise the health benefits associated with well designed climate mitigation and adaptation strategies (more below). The framework is informed by consultation with climate and health experts and health stakeholders over an extended period and across multiple forums. It represents the insights and expertise from academics, researchers, health service managers, policymakers, professional associations, unions, and health and medical professionals from many disciplines.

Recommendations

- **Make the protection of population health and wellbeing the primary focus of the Strategy**

All dimensions of climate change are interlinked with human health. Health should be understood in the holistic sense, as "… a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity"(4). Therefore action to reduce

the health risks from climate change (described in the infographic above) requires working across all sectors and all levels of government.

The outcome of the Strategy must be: to prevent illness, injury and death associated with climate change; minimise the healthcare systems' contribution to Australian emissions; and, ensure health systems resilience. This requires dedicated systems and processes to apply a health lens that evaluates potential for health benefits and harms to policy development in other sectors, including energy, resources, transport, agriculture, infrastructure, planning, and environment. The Strategy should clearly outline how DHAC is going to lead and contribute to this effort, and how the NHSCU will be equipped to do this work.

In the Consultation Paper, the stated purpose of the Strategy is "protecting the health and wellbeing of Australians from the impacts of climate change". However, the Consultation Paper does not make clear how the Strategy can reduce the health risks of climate change without a whole of government approach.

As it stands, the Strategy is focused primarily on the health system and health sector, rather than influencing and guiding activities in all portfolios and sectors to achieve better climate and health outcomes. Addressing the health threats of climate change through the Strategy must include addressing the wider determinants of health: social, cultural, economic and environmental. It is clear that health outcomes are largely determined by factors outside of the health system. Policies that achieve better health and wellbeing outcomes while reducing greenhouse gas emissions and pollution are win-win options, and should be at the heart of the Strategy. There is little sense in the current Consultation Paper that there is an understanding about the broader definition of health, and the factors outside of the health system that result in health outcomes. This has led to key strategies required to protect and promote population health being omitted.

The primary focus of the Strategy, and the work of the NHSCU, should be to address health in a climate-impacted world across the Commonwealth Government. This must be rectified in the final Strategy to address community needs.

The Strategy must capture diseases exacerbated by incremental climate change (e.g. climate impacts on non-communicable diseases such as renal, injury, cardiovascular and neurological conditions), communicable diseases (e.g. vector-borne diseases after extreme weather events), as well as other conditions including carcinoma and cancers from exposure to pollutants and other environmental degradation. This should all be understood within the context of social determinants driving exacerbation.

The overall focus of the Strategy needs to be strongly directed towards reducing the current risks to population health from climate change, and to maximise the health co-benefits of carefully designed climate mitigation and adaptation actions. This can be achieved through the implementation of a Health in All Policies(5) (HiAP) initiative and a broader focus on the wider determinants of health. This approach was broadly endorsed by health and environment stakeholders when outlined in Healthy, Regenerative and Just(3).

While the 'introduction' of the Consultation Paper highlights the risks of illness, injury and death from climate change impacts, it remains unclear how the Strategy will specifically address these risks. It also does not address the cost of failing to mitigate and adapt to climate change (through disease prevention and reform in existing health systems), which are critical aspects of societal and health systems resilience.

The Strategy must also clearly outline how it will drive investment and implement policy and other initiatives in other sectors to reduce population health threats. For example, implementing an ambitious fuel efficiency standard(6) will reduce air pollution and, thus, the incidence of respiratory disease, cardiovascular disease and cancer(7-11). See Appendix A of

the Framework(3) for examples of relevant international and domestic policies that deliver integrated climate and health benefits.

The current structure of the Strategy, as implied by the Consultation Paper, needs revision in order to fully address the health risks posed by climate change. Furthermore, it is crucial to health outcomes that DHAC leads from the front as a key agency in the national response to the climate crisis. Owing to the need to restructure the current approach of the Strategy and the remit of the NHSCU, it is recommended the timeline for delivery of a final Strategy is extended so that the sector may have additional consultation and review a draft Strategy.

Governance

The Consultation Paper does not adequately explore the governance mechanisms required for the oversight and implementation of the Strategy, including how the limited remit of the NHSCU can achieve evidence-based outcomes. These must be clearly outlined in the Strategy and their functions made transparent to all parties.

- **Establish a Board to advise the Minister on the Strategy**

This Board should include representatives of public and private hospitals, general practitioners, allied health professionals, public health specialists, consumers, climate and health experts, and national climate agencies. The Board should provide advice to the NHSC Unit and an interdepartmental committee of senior officials from all jurisdictions and representatives from climate change coordination agencies in jurisdictions. It should produce an annual report on the implementation of the Strategy, and provide public communication on progress and outcomes. The Board should be responsible for approving climate and health grants and research programs, outside of existing structures such as the National Health and Medical Research Council.

The Board function should be linked into the Australian Centre for Disease Control (CDC) to ensure alignment on strategic direction and initiatives. There should also be coordination with EnHealth and the Australian Health Protection Principal Committee, with shared implementation objectives on key areas of the Strategy.

- **Establish an interdepartmental committee on climate change and health**

This committee should be made up of senior officials , including executive and bureaucracy, from Commonwealth, state and territory jurisdictions from the following portfolios: Health, Environment/Climate Change and Energy. There should also be regular engagement and consultation with ministers and bureaucrats with responsibility for related portfolios, such as Mental Health, Resources, Emergency Services, Planning, and Infrastructure.

This committee could consider how to progress an agenda for action, drawing on advice from the Health and Climate Board, EnHealth and the CDC. Examples could include:

a. Strengthening surveillance of vector-borne disease
b. Food safety (short- and long-term) and food security
c. Energy and transport emissions and air quality
d. Urban planning guidelines to address heat islands
e. Guidance for community support and mental health services
f. Appropriate housing design
g. Chemical and other waste reduction

Vision and Purpose

- **Have a clearly articulated vision and purpose**

The most effective strategies are those where tangible actions are underpinned by clear vision and purpose. The Consultation Paper does not contain a Vision Statement to underpin the objectives and actions of the Strategy.

The Consultation Paper states that the overarching purpose of the Strategy is "protecting the health and wellbeing of Australians from the impacts of climate change". However, there is little in the Consultation Paper to indicate how the Strategy will achieve this. The purpose should be clearly articulated, and developed to reflect a HiAP approach.

- **Proposed vision:** 'A healthy, climate resilient community and net zero healthcare system'
- **Proposed purpose:** 'To reduce the impacts of climate change on the health of the population and the health system; and, to guide healthcare decarbonisation in a culturally safe and just way'.

Tracking Progress

- **Set targets and timeframes for actions and implementation**

The Strategy must articulate emissions reductions targets at levels that will reduce the risks to health and wellbeing as quickly as possible. It is recommended these targets are set at a 75% reduction in greenhouse gas emissions below 2005 levels by 2030 and net zero greenhouse gas emissions by 2035(12), in line with best-evidence from the Intergovernmental Panel on Climate Change(13). Fossil fuel phase out is a crucial component of achieving net zero targets, and therefore should be a key action supported by the Strategy.

While it has been announced that the Strategy will be set for three years, it is crucial that actions in the Strategy include measurable goals and timelines for achievement. An Implementation Plan that accompanies the Strategy should set clear timelines for the achievement of goals and targets in the short-, medium- and long-term, and avoid the pitfalls of short-term political cycles.

- **Establish targets and measures for climate-related injury and disease prevention**

It is recommended that targets for disease, injury prevention and population health are set in line with other national strategies, and used to guide mitigation and adaptation actions. The establishment of an applied research program on measures to address health impacts of climate change will be necessary to support progress, and should be prioritised in funding.

- **Include mitigation targets in the Strategy**

Targets and goals within the Strategy should cover all aspects of implementation, including greenhouse gas emissions targets, as well as local environmental and air pollution(80) reduction targets.

- **Establish targets for health outcomes**

Disease prevention is one of the best guarantees of mitigating healthcare sector emissions. The NHSCU should be equipped to work across the whole of government to ensure that disease prevention is a priority of key portfolios—including transport, housing, First Nations and climate change—that can impact the social determinants of health.

- **Invest in upstream prevention - to save money and lives**

The prevention of disease and injury is the most certain way of reducing the health sector's environmental footprint. By preventing disease and injury, particularly chronic conditions, fewer people need to access health services and the carbon load is reduced. It is recommended that prevention of disease is embedded within mitigation approaches and that the Commonwealth budget reflects the commitment of 5% of health budget(26) spending towards preventive health.

- **Embed Health Impact Assessment in project assessments**

Health Impact Assessments should be used in guide approvals of new projects, including new coal and gas fired power stations and fracking projects, as well as transport and industrial infrastructure.

- **Use existing policy levers to drive accountability and action**

The use of existing levers, such as the National Safety and Quality Health Service Standards, to set targets for climate mitigation and adaptation, will support 'quick wins' as well as positive longer term outcomes.

Change will be driven most effectively when there are explicit incentives to act. Including an obligation and targets for all Australian governments to work on climate mitigation and adaptation strategies in funding agreements, such as the National Health Reform Agreements, with states and territories will ensure accountability for coordinated and strategic implementation and action.

- **Expand adaptation beyond the health system**

At present, the Consultation Paper refers largely to adaptation in the health system. There are two components to adaptation: how the healthcare system adapts, and how the community adapts to the health impacts of climate change. The latter will entail considering how the Strategy will support communities to prepare for, and respond to climate-related harms to health, and build resilience and capacity for the future.

Expand the Principles

- **Include the human right to health and intergenerational justice as principles of the Strategy**

Health and clean air are fundamental human rights that are being undermined by climate change(14-15, 81). As a signatory to the Paris Agreement(16), the Australian Government has committed to ensuring a healthy, just and safe climate for the benefit of current and future generations of all people living in Australia. This is particularly important for young people, who are faced with more risks across their life course than other age groups(17-23). As such, the right to health and the rights of current and future generations should underpin the objectives and actions of the Strategy.

Deepen and expand engagement; facilitate collaboration

- **Conduct genuine engagement with First Nations Elders and communities**

Australia's First Nations people are the longest continuing culture in the world, dating back over 60,000 years. Sovereignty over the land we call Australia has never been ceded. The rich and diverse Traditional Knowledge held by First Nations peoples can contribute to the development of the Strategy so that it supports the strength and resilience of First Nations peoples, as well as Australian society at large.

While the references to First Nations cultural knowledge and practice throughout the Consultation Paper are welcome, it is crucial that First Nations Elders and communities are engaged in the development of the Strategy and its related objectives and actions. The Strategy should adopt a strengths based, co-design model, and outline how it will engage First Nations Elders and communities, and incorporate cultural knowledge, practice and reciprocity during implementation.

- **Consult with affected communities**

For the Strategy to be effective, its development and ongoing implementation must be informed by engagement with communities. The lived experience of all people living in Australia, including consumers and patients, rural and remote people communities, young people and those experiencing vulnerability and disadvantage, will be invaluable in setting policy that can have real world impact. Consumer data should be adopted in goals and targets of the Strategy, and under principles of reciprocity and data sovereignty. Consultation with consumers should include the establishment of a consumer-led deliberative process that guides implementation of the Strategy(82).

- **Undertake consultation with expert consultation**

It is crucial that the objectives and actions of the Strategy are underpinned by best evidence and expert guidance to maximise current efforts. There are hundreds of climate and health experts in Australia who have not yet been engaged in the process of developing the Strategy, and from whose scientific knowledge it would benefit. An ongoing collaboration with experts should form part of the governance and implementation arrangements for the Strategy. This should include equipping the NHSCU to engage with experts outside of traditional health systems thinking, to leverage Australia's immense talent pool of world-leading experts.

- **Establish processes for ongoing collaboration**

It is crucial the Strategy specifically outlines how it will coordinate initiatives across the government to support climate and health outcomes, such as "collaboration between jurisdictions and key stakeholders including the sharing and adoption of best practices and reducing duplication of effort"(24). The Strategy should describe the infrastructure required to support ongoing collaboration to contribute to the coordination and implementation of initiatives. Given the extensive work already underway, state and territory jurisdictions are key stakeholders in the development and implementation of the Strategy and should be extensively consulted on goals and targets. The jurisdictions should also be considered a key enabler to implementation of the Strategy, and be supported and funded to expand existing work and tailor programs to localised solutions where needed.

- **Establish an ongoing national community of practice**

The Strategy should articulate how health and environment stakeholders will be involved in the development and implementation of proposed actions, goals and targets. The infrastructure for this should be to expand the remit of the NHSCU and be included as part of the governance arrangements. This should also include engagement throughout their implementation and evaluation through specific governance structures. Stakeholders for engagement include academics, not-for-profit organisations, industry and peak bodies, as wel as local consumers, community members and leaders across urbanised, rural, semi-rural and remote settings, First Nations peoples and youth. An ongoing national Health and Climate Community of Practice (as has been established in Western Australia) would allow for knowledge and information exchange, facilitate collaboration, and help build momentum and capacity for action.

Draw on existing initiatives and lessons learned

- **Maximise current activities to reduce carbon emissions**

In the absence of Commonwealth leadership over the last decade, health and environment sector stakeholders and state and territory governments have been demonstrating leadership in reducing carbon emissions. The Strategy should be informed by mapping of these efforts, and seek to maximise them, rather than duplicate, through Commonwealth support and coordination. The Strategy should also draw upon international examples, such as the United Kingdom National Health Service's Net Zero Suppliers Roadmap(25), to implement best practice in health systems mitigation.

- **Align with and inform national health and environment strategies**

It is crucial the Strategy takes a whole of government approach. It should clearly outline how it will engage with other departments on current national health and environment strategies, and prevent exposure to environmental toxins, waste by-products and other pollutants.

Language and Terminology

- **Make terminology consistent**

Accurate, plain language definitions and terminology are crucial to community support for the Strategy, and, thus, its successful implementation. It is recommended that the Strategy include a glossary of definitions so stakeholders can clearly understand the intention of objectives, actions and systems articulated throughout. This is particularly important when referring to the 'health system', 'mitigation' and 'adaptation'. As it stands, it is unclear what the Strategy considers the health system to be, and what is covered in mitigation and adaptation. This should also include a clear definition of health and wellbeing that reflects the WHO definition(4) and a definition of health that includes First Nations wisdom(27).

Healthy, Regenerative and Just

The science is clear: Australia must reduce its contribution to climate change, and prevent further harm to people here, and around the world. Coordinated action and national leadership is essential in getting this done.

In 2021, the Climate and Health Alliance developed the Healthy, Regenerative and Just Framework for a national strategy on climate, health and wellbeing for Australia (the Framework)(3). The Framework provides a comprehensive roadmap to support Australian governments, businesses and health and environment sector actors to protect the health and wellbeing of Australian communities from climate change, and fulfil its international obligations, including the Paris Agreement. The Framework in covers eight areas of policy action, and calls for:

1. Health-Promoting and Emissions-Reducing Policies

Policies that protect and promote health and wellbeing while simultaneously reducing greenhouse gas emissions.

2. Supporting Healthy and Resilient Communities

Enhancing the capacities of communities to anticipate their climate risks and reduce impacts on health and wellbeing in their communities.

3. Thriving Ecosystems

Restoring and safeguarding Australia's ecosystems, recognising that intact ecosystems are the fundamental basis of human health and livelihoods.

4. Emergency and Disaster-preparedness

Supporting the identification of vulnerable populations and gaps in policies and procedures, including in emergency services, in order to adequately prepare for the impacts of climate change.

5. Education, Communication and Capacity Building

Educating and raising awareness of the health impacts of climate change within the health workforce, and the wider Australian community.

6. A Sustainable and Climate-Resilient Health Care Sector

A net zero greenhouse gas emissions, environmentally sustainable, climate-resilient health sector which can effectively respond to the health impacts of climate change.

7. Research and Data

Supporting Australia's health and climate research capacity to evaluate specific health threats, priority needs, to design responses and to monitor trends and opportunities for maximising multi-sector benefits.

8. Leadership, Financing and Governance

Providing leadership and establishing appropriate governance and financing arrangements in order to effectively respond to climate change and health risks at national, state/territory, and local levels, and contributing to the international effort to limit global warming.

As per the Framework: "*Achieving a better future involves a clear-eyed look at current structural political, social, economic, environmental and public health challenges, identifying and implementing integrated strategies. The approach must be holistic. We must move beyond silos in terms of public dialogue, policy portfolios, investment strategies, political and business priorities, and leadership*".

While the Consultation Paper makes important steps towards addressing climate and health needs in Australia, CAHA believes the Strategy does not go far enough in addressing the underlying principles of a healthier, safer climate or the governance structures required to have meaningful impact, and prepare for the realities of the climate crisis. In evaluating the consultation paper against the sector-endorsed Framework, there are several areas that need improvement. Analysis of the approach for the Strategy as described in the Consultation Paper with the Areas of Policy Action outlined in the HRJ framework reveals there are considerable gaps between the vision of health stakeholders and experts and the Strategy as currently proposed.



Key concerns include:

- There is very limited attention paid to the health promoting aspects of emissions reducing policies in other sectors.
- There is very limited evidence on how the Strategy will support healthy and resilient communities.
- There is no mention of the fundamental role of thriving ecosystems in supporting the essential condition for human health.
- It is unclear how the Strategy will facilitate emergency and disaster preparedness, either in the community or in the health system.
- It is unclear how the Strategy will facilitate the essential education and capacity building required, either in the community, among policymakers, or within the health workforce.
- There is some evidence of impacts with regard to setting directions for a sustainable and climate resilient health care system, but no evidence of targets to ensure accountability or guide progress.

- The references to data and research so far relate to health sector emissions only, and not data regarding population health or health sector vulnerability to guide investment and action.
- There is no detail on the financing, governance or leadership arrangements that will be required for the Strategy's implementation, monitoring, and reporting.

As such, it is recommended a reevaluation and focus of the current structure of the Strategy, and commensurate capacity building within the NHSCU to execute it.

Questions for feedback from the Consultation Paper

Introduction

1. How could these objectives be improved to better support the vision of the Strategy?

The Climate and Health Alliance supports the use of objectives in the National Health and Climate Strategy (the Strategy) as a mechanism through which the Strategy's activities can be understood. We strongly support the use of 'Health in All Policies' to underpin objectives, the Commonwealth commitment to mitigation of health systems carbon emissions, and the Commonwealth commitment to embedding health systems resilience in Australia's response to the climate crisis.

To strengthen the Strategy, we recommend the following:

- **Include a Vision.** The most effective strategies are those where tangible actions are underpinned by clear vision and purpose. The Consultation Paper does not yet contain a Vision Statement to underpin the objectives and actions of the Strategy. This should be addressed as a priority so that the objectives can be reviewed fully. It is recommended the Vision should be: 'A climate resilient community and net zero healthcare system'.
- **Provide more detail.** The objectives currently lack detail to provide a fulsome review. The Strategy should outline more clearly what the objectives are, what they will do, and how they will support a fast, fair and inclusive transition to a climate resilient, healthy, and low carbon society and health system.
- **Commit to a health systems paradigm.** The intent of the Strategy, as articulated by the health and environment sector, is to secure the health of current and future generations in the context of the climate crisis. Therefore, it is recommended the current approach of the Consultation Paper be amended to reflect a health systems paradigm. It is recommended the order and emphasis be as follows:
    - Objective 1. Promoting and protecting health and wellbeing: This Strategy will inform and guide the development of policy and initiatives that embed health and climate considerations across all portfolios at both national, state and territory and local government level.
    - Objective 2. Build a climate resilient community and health system: This Strategy will support the development of initiatives to build community, health and aged care system resilience and capacity to respond to the health impacts of climate change.
    - Objective 3. Establish a net zero health and aged care system: This Strategy will guide the development of a national net zero plan for health and aged care, informed by a comprehensive assessment of the Australian health and aged care system's carbon footprint and reflecting best scientific evidence.
- **Support ambitious emissions reduction.** The Strategy should articulate specific emissions reduction targets, including an updated Nationally Determined Contribution that reflects the current climate crisis. Health and environment sector stakeholders are proposing a reduction in national greenhouse gas emissions of 75% below 2005 levels by 2030 and net zero emissions by 2035 for all sectors, including healthcare, and including emissions from exports.
- **Amended Objective 1.** The current Objective 1 should be accompanied by a list of specific elements that are to be measured.
- **Amended Objective 3.** The current Objective 1 should be considered an enabler, and moved into revised Objective 3 (outlined above).

2. How could these principles be improved to better inform the objectives of the Strategy?

The Climate and Health Alliance generally supports the six principles as outlined in the Consultation Paper. We strongly support those that recognise First Nations leadership, and the broader determinants of health and prevention.

To strengthen the Strategy, we recommend the following:

- **Clarify the principles.** The purpose of 'Principles' within the Strategy is to provide a lens through which the objectives and actions are evaluated. As such, it is recommended that the principles of the Strategy are primarily underpinned by the fundamental human right to health, a healthy environment and a liveable planet. They should also be underpinned by a holistic definition of health that includes First Nations understandings of health and wellbeing.
- **Include justice.** Principle 2, Tackling health inequalities', should include inter- and intragenerational health inequality in climate impacts. For example, young people are more impacted by the climate crisis and therefore need specific focus in policy development and implementation.
- **Take a strengths based approach.** Principle 2,'Tackling health inequalities', should be strengths based, going beyond 'supporting action' to 'taking action'.
- **Take a planetary health approach.** While the inclusion of Principle 4, 'One Health', is welcomed, it is crucial that the Strategy take a broad approach to the impacts of global environmental change on human health. It is therefore recommended that the Strategy adopt a Planetary Health(28) approach, which more fully captures the intersection of broader environmental impacts on human health outcomes in the context of planetary boundaries and sustainable development.
- **Consider how we use 'evidence'.** While the inclusion of evidence in developing policy is crucial to success and impact, it is also important to recognise the type of evidence and analysis being used to justify action. In Principle 5, 'Evidence-informed policymaking', the use of 'cost-effective analysis' can often overlook the lived experience of people and the qualitative analysis that informs user experience. It is recommended that 'cost-effectiveness' is balanced with equity and justice principles to ensure no one is left behind, particularly those communities experiencing vulnerability.
- **Include workforce.** Principle 6, 'Partnership-based working across all levels of government and beyond' should be expanded to include the role of the healthcare workforce across all settings including primary, tertiary, community and aged care.
- **Include consumers.** Principle 6, 'Partnership-based working across all levels of government and beyond', should be expanded to include collaboration with consumers. If the principle of Partnership is to be realised, the Strategy will need to establish governance mechanisms, programs and initiatives that enable and facilitate partnership across all relevant stakeholders.

3. Which of the various types of greenhouse gas emissions discussed above should be in scope of the Strategy's emission reduction efforts?

The Climate and Health Alliance strongly urges the inclusion of scope 1, 2 and 3 emissions in the priorities and actions of the Strategy. The ramifications of the climate crisis cannot be underestimated. It is crucial a whole of government approach is taken so that sources of emissions can be fully understood and mitigated. The health and aged care system must do its part and be as ambitious as possible in mitigating its emissions, and support other sectors

in doing so, without compromising quality patient care. This includes a full assessment of all associated emissions and how to best reduce them(29).

To strengthen the Strategy, we recommend the following:

- **Define the health system.** To best provide fulsome feedback on the inclusion of certain types of emissions in the Strategy, it is important that a clear definition of 'health system' is provided. Without a clear definition, there may be key sources of emissions that are omitted from the Strategy.
- **Support an ambitious Nationally Determined Contribution.** To ensure Australia, as a developed nation, does its fair share of the global task of reducing emissions, the Strategy should support an updated Nationally Determined Contribution (NDC) that reflects the current health-climate emergency. Under the Paris Agreement of the United Nations Framework Convention on Climate Change (UNFCCC), each country must outline and communicate their planned climate actions, known as their Nationally Determined Contributions. Health and environment sector stakeholders are calling for a reduction in national greenhouse gas emissions of 75% below 2005 levels by 2030 and net zero emissions by 2035 for all sectors, including healthcare, and including emissions from exports. To reach these targets, it will be important that the health sector has its own sectoral emissions reduction plan, which includes all emissions and identifies the necessary strategies to reduce them.
- **Include all emissions sources.** While it is recognised that under the Paris Agreement Australia is only responsible for emissions that occur within Australia, scope 3 emissions in the context of the Strategy should include all emissions that arise as a consequence of the delivery of healthcare in Australia. This includes healthcare products manufactured overseas. A high proportion of healthcare products are imported and, as such, the health system must be responsible for their associated emissions.
- **Include transport.** The Strategy should include all emissions that arise as a result of the health and aged care system, including patient and visitor transport(30).

4. What existing First Nations policies, initiatives, expertise, knowledge and practices should the Strategy align with or draw upon to address climate change and protect First Nations country, culture and wellbeing?

The Climate and Health Alliance strongly supports the meaningful inclusion of First Nations Elders and communities in the development and activities of the Strategy. We strongly support the inclusion of the impacts of climate change on First Nations peoples health and wellbeing, taking a strengths based approach to the inclusion of First Nations cultural knowledge, and the coordination of goals and targets of the Strategy with other policy that impacts First Nations health and wellbeing.

The Climate and Health Alliance supports recommendations from our First Nations members, allies and other First Nations peoples and organisations contributing to this consultation process. We wish to acknowledge the First Nations organisations who contributed to the development of this submission. We seek to learn from First Nations peoples, and imbed Aboriginal and Torres Strait Islander ways of knowing and being in our work.

To strengthen the Strategy, we recommend the following:

- **Commit to self-determination and reciprocity.** As a signatory to the United Nations Declaration on the Rights of Indigenous Peoples(31), the Commonwealth has committed to including First Nations views and needs in all aspects of policy

development. These should be determined through self-determination and reciprocity with First Nations Elders, leaders and communities.

- **Support Closing the Gap.** Closing the Gap is a crucial mechanism through which First Nations health and wellbeing is addressed. The Strategy should outline how it will support the work of Closing the Gap, and how those priorities are being centred in the Strategy.
- **Centre First Nations voices.** First Nations voices should be centred in the Strategy. This should include how the Commonwealth will integrate governance mechanisms and processes for community leadership according to best practice and with cultural safety principles.
- **Amplify success.** The First Nations response to the COVID-19 pandemic(32-33) was recognised globally as being extraordinarily successful. The learnings from this should be amplified within goals, objectives and actions of the Strategy.
- **Conduct genuine engagement.** The Strategy should clearly outline how genuine engagement with First Nations leaders, Elders and communities will occur, how leadership will be fostered, and how the health and wellbeing of First Nations peoples will be advanced through the Strategy.
- **Leverage existing consultation processes.** The Strategy should seek to integrate objectives and actions being developed through the Voice to Parliament Referendum, the Measuring What Matters Framework community consultation processes and the objectives of the Australian Centre for Disease Control.

5. What types of governance forums should be utilised to facilitate co-design of the Strategy with First Nations people to ensure First Nations voices, decision-making and leadership are embedded in the Strategy?

The Climate and Health Alliance strongly supports the meaningful inclusion of First Nations Elders and communities in the development and activities of the Strategy. We strongly support First Nations leadership and self determination. We strongly support the inclusion of the impacts of climate change on First Nations peoples health and wellbeing, taking a strengths based approach to the inclusion of First Nations cultural knowledge, and the coordination of goals and targets of the Strategy with other policy that impacts First Nations health and wellbeing. We strongly support the co-design of governance structures for the Strategy with First Nations peoples, drawing on best practice.

The Climate and Health Alliance supports recommendations from our First Nations members, allies and other First Nations peoples and organisations, contributing to this consultation process. We wish to acknowledge the First Nations organisations who contributed to the development of this submission. We seek to learn from First Nations peoples, and embed Aboriginal and Torres Strait Islander ways of knowing and being in our work.

To strengthen the Strategy, we recommend the following:

- **Commit to co-design.** The Strategy will only be effective for First Nations peoples if it is underpinned by genuine engagement and co-design principles. DHAC and NHSCU should seek to listen to and learn from First Nations Elders, Knowledge holders and communities about what the priorities are for tackling the health impacts of climate change(34).
- **Embed cultural knowledge.** The Strategy must ensure there is an ongoing process to embed First Nations cultural knowledge and practice into its goals, targets and actions.
- **Collaborate.** The Strategy should collaborate with First Nations peoples across Australia, including at the local, state and territory and national level.
- **Seek advice.** The Strategy should seek expertise from the National Aboriginal Community Controlled Health Organisation and its associated Aboriginal Community

Controlled Health Organisations across Australia, the Coalition of the Peaks, Closing the Gap and other existing coalitions and partners.

Proposed Objective 1: Measurement

6. Beyond the schemes already noted above, is your organisation involved in any existing or planned initiatives to measure and report on health system emissions and/or energy use in Australia?

Established by Health Care Without Harm (HCWH) in 2011, Global Green and Healthy Hospitals (GGHH)(83) is a collaborative international network of health institutions that are committed to reducing their ecological footprint and promoting public and environmental health. As of July 2023, the GGHH network includes 1,788 member organisations in 83 countries, representing over 70,000 hospitals and health services. The GGHH network aims to facilitate connection between people driving sustainable healthcare, provide tools and resources, and to document, promote and celebrate achievements. GGHH is based around a framework of 10 interconnected goals outlined in the GGHH Agenda, which includes leadership, chemicals, waste, energy, water, transportation, food, pharmaceuticals, buildings and purchasing.

As a strategic partner of Health Care Without Harm, the Climate and Health Alliance founded and has coordinated GGHH in the Pacific region for more than 10 years. As of July 2023, there are 152 GGHH members in Australia and New Zealand, representing 2,399 hospitals and health services. This community of practice showcases cutting edge examples of healthcare sector leadership in climate action. As part of this work, case studies examples of leadership and exemplary action are documented and shared – for example, the initiatives of health services which are reducing the use of nitrous oxide, reducing single use plastics, waste composting, developing tools to engage healthcare staff in sustainability initiatives, and sustainable menus.

Existing and planned initiatives:

- The GGHH Climate Impact Checkup Tool(35) is a free carbon footprint tool available to all health facilities who are members of the GGHH network. This tool measures greenhouse gas emissions from:
    - Scope 1: Stationary combustion; Mobile combustion; Fugitive emissions (cooling and medicinal/anaesthetic gases); Waste on site treatment.
    - Scope 2: Purchased electricity; Purchased steam, heat or cooling.
    - Scope 3: Extra supply chain; Business travel; Electricity transmission and distribution losses; Inhalers; Waste off site treatment; Employee commuting; Patient commuting.

  In coming months, a new online course will be available to help people effectively use the Climate Impact Checkup Tool. This is accompanied by six months free access to the tool for non-GGHH members, an offline Excel version, and user guides.

- A number of states and territories have existing or planned environmental reporting systems for public health services. The Strategy should build on these existing data sources to include bottom up data and reduce duplication of effort. For example:
    - Public health services in Victoria report data on energy, water, waste, paper, vehicle fleet and medical gases through the Victorian Department of Health Environmental Data Management System(36).
    - The public healthcare system in NSW reports data on energy, waste and water in alignment with the NSW Government Resource Efficiency Policy(37).

The Climate and Health Alliance strongly urges an evidence-based approach to setting the priorities for decarbonisation of the healthcare system, covering scope 1, 2 and 3 emissions. The schemes outlined in the Consultation Paper are sound, and we support the commitment to Commonwealth leadership that ensures coordination across our federated system of government.

To strengthen the Strategy, we recommend the following:

- **Fully equip the NHSCU.** The NHSCU should be fully equipped to establish a dedicated team that can collate and report on carbon emissions of the public and private health systems. Public annual reporting of progress on emissions reduction should be available to the Board (outlined above). The team should include an epidemiology unit to assemble, monitor and share information on climate impacts on health to guide decision-making.
- **Develop a national healthcare decarbonisation plan.** This should draw on the HCWH Global Healthcare Decarbonisation Roadmap(84), be led by the Commonwealth in conjunction with the states and territories, and build on existing efforts among the Australian network of the Global Green and Healthy Hospitals and others.
- **Define health systems.** A clear definition of what 'health system' means is required to ensure emissions from across the healthcare value chain are accounted for. For example, clarify if 'health system' includes aged care, and Australian healthcare suppliers and manufacturers.
- **Make Objective 1 an enabler.** The purpose of the Strategy is to clearly define how the Department is going to act on the impacts of climate and health. This goal must be underpinned by a HiAP approach and centred on the lived experience of consumers. As such, while Objective 1 is crucial to the decarbonisation of the health system, it should be understood as an enabler to mitigation, and not emphasised as a standalone objective.
- **Commit to evidence-based actions.** This section should reflect the need to establish emissions reduction targets based on current evidence and be as ambitious as possible in the face of the climate crisis.

7. What additional data and information is required to support targeted emissions reduction efforts within health and aged care?

The Climate and Health Alliance strongly urges the inclusion of scope 3 emissions in the mitigation remit of the Strategy.

To strengthen the Strategy, we recommend the following:

- **Incorporate the lived experience.** While it is crucial that the Strategy take an ambitious approach to climate action, this action should not compromise consumer experience or patient outcomes. As such, the Strategy should include data and information of the lived experience of consumers and, where possible, enable consumer-led solutions.
- **Include all emissions.** All emissions that occur as a consequence of the Australian health and aged care system should be measured, including emissions from imported products and medications, and emissions from patient and visitor travel.
- **Take a broad approach to measurement.** Measurement of the health system's carbon footprint should be informed by both top down data and bottom up data (where available and feasible). Measurement must not rely solely on data available through Australia's Greenhouse Gas Accounts, as emissions from entities that are below the National Greenhouse and Energy Reporting Scheme reporting threshold will not be captured.
- **Support and scale-up existing work.** The Strategy should take into account the emissions reduction targets and actions already being undertaken to ensure the

Strategy is aligned with best practice, e.g. Hunter New England Local Health Service has committed to be carbon and waste neutral by 2030(38).

- **Develop models for measuring emissions.** The Strategy should provide guidance on establishing the carbon footprint of different models of care to help inform decision making.

Proposed Objective 2: Mitigation

8. What do you think of these proposed focus areas for emissions reduction? Should anything else be included?

The Climate and Health Alliance is generally supportive of the proposed focus areas for emissions reduction. Recognising the urgency of the climate crisis, we believe these focus areas are a good starting point for emissions reduction within the Australian health and aged care system. We strongly support the inclusion of prevention and models of care, supply chains, and medicines and gases as high emissions sources.

To strengthen the Strategy, we recommend the following:

- **Take a whole of government approach.** Mitigation should include strategies outside the health system that will reduce risks to health and protect health and wellbeing. The NHSCU should be resourced appropriately to ensure this can occur. This will require advocacy and leadership by the DHAC for the Commonwealth Government to create the necessary authorising environment to support the application and implementation of a HiAP approach.
- **Look at prevention as mitigation**. Mitigation and adaptation to the climate crisis is a preventive health measure, as well as a moral responsibility. The Strategy should clearly outline how it will safeguard health and aged care, by doing its part to contribute to the Nationally Determined Contribution under the Paris Agreement.
- **Do no harm.** The purpose of a mitigation objective is fundamentally to ensure that the sector is doing all that is possible to fulfil the 'do no harm' principle, and this should be highlighted from the start of the Strategy.
- **Amend Objective 2.** The purpose of the Strategy is to ensure the co-benefits of action on climate and health are fully realised. As such, Objective 2 should include how DHAC is going to support emissions reductions that benefit health outcomes across all sectors. This should include supporting the implementation of decarbonisation strategies across sectors for the betterment of intergenerational health and wellbeing. Objective 2 should clearly outline strategies to support the reduction of emissions across all sectors. Objective 2 should clearly set out an emissions reduction target for decarbonisation of the health and aged care sector. Objective 2 should include energy as a standalone focus area considering its large contribution on the health system's carbon footprint(39). Objective 2 should include food as a standalone focus area considering its' significant contribution to the health system's carbon footprint, and the opportunities to deliver health and wellbeing co-benefits—for example, foodservice models designed to produce minimal food waste and increase patient nutrition and satisfaction (such as order on demand/room service models), local food procurement, and plant-forward menus(40-52). Objective 2 should include a goal to establish a pathway for ensuring the health sector achieves its emissions reduction target. This pathway should:
    - Include strategies for communicating emission reduction targets and progress
    - Identify carbon hotspots
    - Include targets to reduce chemical footprint and waste
    - Prioritise mitigation actions
    - Establish effective governance structures
    - Facilitate appropriate resource allocation and policy development
    - Prevent duplication of effort and set a common pathway for the decarbonisation of Australia's health and aged care system (inclusive of public, private, tertiary, and primary care, supply chains and services)
- **Coordinate across the health system.** Mitigation and adaptation targets should be included in the National Healthcare Reform Agreements and National Safety and Quality Health Service Standards.

- **Fund education and knowledge transfer.** Funding should be allocated as part of the Strategy's implementation to provide for education, capacity building and knowledge transfer opportunities in the sector.
- **Support applied research.** Applied research programs should be established for health institutions and organisations to develop mitigation measures along the model of the Australian Research Council Industry Partnership research grants. This program encourages development of applied research proposals by research institutions in collaboration with 'industry'. Industry is required to contribute direction or 'in kind'.
- **Expand the focus areas.** To provide fulsome feedback on the proposed focus areas, the Strategy should clearly outline the justification for the selection of the current six priorities.
- **Amend the waste priority.** Waste should be renamed to 'Sustainable resource use, circular health care and sustainable healthcare waste management'(39) in keeping with a health paradigm for sustainability.

9. Which specific action areas should be considered relating to the **built environment and facilities (including energy and water)**, over and above any existing policies or initiatives in this area?

The Climate and Health Alliance strongly supports the inclusion of actions to improve the built environment on, around and near health facilities, the consideration of reducing emissions from both building design and construction, and building operation, and the transition to renewable energy sources and electrification.

To strengthen the Strategy, we recommend the following:

- **Decarbonise for health and wellbeing.** Beyond the health system, the Strategy should outline how it will encourage electrification and energy efficiency in all buildings(53) to improve health and wellbeing.
- **Promote active transport.** The Strategy should emphasise that built environment design and urban planning must also promote active transport, which benefits health through reduction of transport emissions (as detailed in section 2.2) as well as physica activity pathways. Adequate housing density, well-connected streets, mixed land uses to create nearby destinations, and proximate public transport are key determinants of walkability (54-56), especially in outer suburban areas.
- **Include urban greening.** There needs to be targets and actions to increase urban greening and tree canopy cover in the built environment, as this can reduce health impacts of extreme heat and air pollution(57).
- **Commit to gas-free hospitals.** The Strategy should support all hospitals and health facilities to be gas-free and powered by renewable energy.
- **Set transition targets and actions.** The Strategy should set an ambitious target date for transitioning existing hospitals, health facilities and aged care facilities to be gas-free and powered by renewable energy. The Strategy should also outline how it will enable public health services to purchase renewable energy from the grid, e.g. via Power Purchase Agreements. The Strategy should outline how it will actually support healthcare suppliers and manufacturers to transition to net zero buildings and facilities
- **Prioritise 'necessary' development.** The Strategy should set out how it will support action to reduce demand for large, resource-intensive health care facilities and ensure only absolutely necessary buildings are constructed, e.g. by scaling up telehealth, health promotion and care closer to home, without compromising patient outcomes.
- **Address ventilation.** The COVID-19 pandemic has prompted healthcare settings to address their indoor air ventilation. Whilst efficacy in reducing risk of airborne disease transmission is the primary concern, it is important to recognise energy requirements differ contingent on selected strategy(58). It is recommended the approach to ventilation also takes into consideration the associated energy requirements and

electronic waste that may be generated, and takes a precautionary approach by avoiding air purifiers that generate free radical gases as a byproduct(59).

10. Which specific action areas should be considered relating to **travel and transport**, over and above any existing policies or initiatives in this area?

The Climate and Health Alliance strongly supports building on existing work relating to the decarbonisation of travel and transport, including improvements to fuel quality and reductions in air pollutants from vehicles.

To strengthen the Strategy, we recommend the following:

- **Include specific targets.** The Strategy must include specific targets for the adoption of electric and zero emissions transport, and an ambitious fuel efficiency standard. There needs to be greater emphasis on improving urban design and infrastructure provision for active transport (e.g. walking, cycling) and public transport in Australian cities. The NHSCU should be resourced and supported to secure the necessary authorising environment to advance this in relevant portfolios. This will have multiple health co-benefits through emissions reduction, improved air quality and physical activity pathways (54, 60-62). The Strategy must outline how it will respond to identified infrastructure challenges.
- **Ensure Commonwealth support for local solutions.** The Strategy should support collaboration between state and territory government, local government and health services to improve active and public transport access and incentives for patients, staff and visitors at existing and new facilities(39), as well as to other essential services for health and wellbeing.
- **Develop low-carbon models of care.** The Strategy should include improvements to models of care that produce less emissions, e.g. telehealth services for rural and remote communities. This should be in the context of ensuring communities experience tailored care and that commuting can occur where needed.

11. Which specific action areas should be considered relating to **supply chain**, over and above any existing policies or initiatives in this area?

The Climate and Health Alliance supports the inclusion of emissions reductions within the supply chain, and leveraging joint purchasing power.

To strengthen the Strategy, we recommend the following:

- **Include specific targets.** The Strategy must include specific targets for reducing emissions from the health system's supply chain. Targets should align with the UK National Health Service Net Zero Supplier Roadmap(25). This will provide direction and certainty for health services, manufacturers and suppliers. While the focus of actions 2.3.1 and 2.3.2 are positive, defined targets for each action must be included. For example, a target to establish nationally consistent procurement standards(63) that include criteria for greenhouse gas emissions, resource depletion (water, energy and material consumption), chemical and toxic impact on human and environmental health, human rights, labour rights and gender equality, are all important areas for consideration.
- **Foster collaboration.** The Strategy should facilitate collaboration between states and territories, and the public and private sectors, in order to share knowledge and build collaborative networks with a shared interest in reducing carbon footprints associated with supply chains.The Strategy should also convene a supply chain group made up of state and territory health purchasing bodies, public and private health and aged care

providers, healthcare suppliers and manufacturers, civil society and experts, to work collaboratively to reduce the carbon footprint of the health system supply chain.
- **Develop consistent measurement methodologies.** The Strategy should support the development of a universal methodology to measure and report on health system supply chain emissions consistently.

12. Which specific action areas should be considered relating to **medicines and gases**, over and above any existing policies or initiatives in this area?

The Climate and Health Alliance supports the inclusion of emissions reduction related to medicine and gases.

To strengthen the Strategy, we recommend the following:

- **Target elimination of desflurane.** Action 2.4.1 should include a target for eliminating the use of desflurane.
- **Target nitrous oxide leakage.** Action 2.4.2 should include a target for reducing leakage from piped nitrous oxide.
- **Target all harmful chemicals.** It is crucial the Strategy broadly targets all harmful chemicals that contain known carcinogens and 'forever chemicals'(85).
- **Develop actions related to medications emissions.** The Strategy should outline actions for emissions reduction of medications, including:
    - Investment in emerging technology platforms designed to improve pharmaceutical stock management and reduce waste.
    - Supporting research to determine environmental impacts of medications to establish environmentally preferred options, and communicate this to clinicians.
    - Support and scale up Choosing Wisely(64) to ensure preventive health is the cornerstone of mitigation actions.
    - Work with the Therapeutic Goods Administration to review packaging and information requirements for medicines to reduce waste and carbon emissions.

13. Which specific action areas should be considered relating to **waste**, over and above any existing policies or initiatives in this area?

The Climate and Health Alliance supports the inclusion of emissions reduction related to waste.

To strengthen the Strategy, we recommend the following:

- **Embed prevention as mitigation.** The Strategy should centre preventive health as the mechanism through which waste is minimised in the health system.
- **Encourage circularity.** The Strategy should focus on minimising waste and encouraging circularity across all waste streams including plastics(65). Actions and targets to prevent food and medical waste must be included, as both contribute significantly to healthcare's carbon footprint.
- **Set targets.** The Strategy should set a target to establish nationally consistent procurement standards (outlined in Q11). Actions 2.5.1–2.5.4 need to go further than 'encouraging' and 'promoting' action and set targets for each action.
- **Foster collaboration.** The Strategy should outline how it will convene a supply chain group made up of state and territory health purchasing bodies departments, public and private healthcare providers, and healthcare suppliers and manufacturers to work collaboratively in reducing the health and aged care system's carbon footprint.

- **Meet best practice standards.** The Strategy should meet the world's best practice standards by reviewing pollution reduction technology used in healthcare waste treatment facilities.
- **Support the healthcare workforce.** The Strategy must set out how it will engage and support the healthcare workforce in sustainable resources use, waste management and segregation.
- **Conduct education campaigns.** The Strategy should establish a goal for conducting an education campaign on best disposal options for unused medications for healthcare workers.
- **Target consumables.** The Strategy should establish a goal to reduce the vast array of consumables throughout the healthcare system, e.g. packaging and personal protective equipment.
- **Reframe the 'problem'.** The diversion of food waste from landfill incorporates more opportunities than what is already discussed in the Strategy, specifically in Action 2.5.4 where compost is mentioned. The Strategy should seek to classify food waste as a reusable resource to address mitigation(66-67).

14. Which specific action areas should be considered relating to **prevention and optimising models of care**, over and above any existing policies or initiatives in this area?

The Climate and Health Alliance strongly supports the inclusion of preventive health as a core function of the Strategy. One of the best ways to reduce emissions associated with the healthcare sector is to keep people as healthy as possible for as long as possible. We strongly support the inclusion of optimising models of care, as it reduces emissions, improves consumer experience and patient outcomes and reduces wastage of resources.

To strengthen the Strategy, we recommend the following:

- **Commit funding.** The Commonwealth should commit to funding:
    - the NHSC Unit $1,000,000 per annum.
    - other funding as outlined in the CAHA Pre-Budget submission(86)
    - the commitment of the National Preventive Health Strategy to spend 5% of the health budget on prevention.
- **Embed prevention as mitigation.** Promoting health and preventing illness are major ways to reduce emissions by reducing illness and so demand for health care services while improving wellbeing. This can be done by:
    - Increasing funding for primary prevention via the National Preventive Health Strategy, the National Strategy for Injury Prevention, the National Obesity Strategy and the Australian CDC (among others).
    - Increasing funding for beneficial screening and health promotion, while regulating adverse influences from commercial entities (primordial prevention).
    - Reform primary care organisation and funding to support non-communicable disease and injury management (secondary and tertiary prevention) and high value primary care.
    - Review and reform hospital care practices to optimise high value care and prevent low value and harmful care.
    - Supporting policy monitoring and evaluating through funding research.
- **Include NCDs.** Non-communicable diseases (NCDs) and injury are the biggest burden of disease in the world. The Strategy should explicitly articulate how NCDs are exacerbated by climate change and how prevention will support reductions in disease and injury burden.
- **Act on social determinants.** Primary prevention is crucial to addressing health inequity in Australia. This includes supporting and enacting policy that addresses the social

determinants of health and underlying systems of power that have led to the climate crisis.

- **Address colonisation.** Climate change impacts are the intensification of a sustained colonial process(68). The Strategy should recognise colonisation as a driver of climate and health outcomes, and that redressing this system is crucial to a healthier, sustainable and more just Australia.
- **Set targets.** While actions 2.6.1–2.6.4 are all positive, they need to include defined targets.
- **Coordinate action.** The Strategy should explicitly include how it will coordinate action across the existing and new national strategies. The Strategy should explicitly include how it will support key aspects of policy in other portfolios that have an impact on health outcomes. The Strategy should explicitly include how it will support state and territory governments in preventive health measures, e.g. active transport.
- **Support funding reform.** The Strategy should explore opportunities for health system funding reform(39) (Medicare, private health insurance) to support health promotion, strengthen primary care, optimise high value care and prevent low value and harmful care.

15. What can be done to involve private providers within the health system in the Strategy's emissions reduction efforts?

The Climate and Health Alliance supports the inclusion of all healthcare service providers, including private healthcare providers, in emissions reduction efforts.

To strengthen the Strategy, we recommend the following:

- **Establish goals.** The Strategy should set a goal to establish mandatory climate change mitigation and adaptation requirements in healthcare accreditation standards. There is much more to do in increasing understanding among health executives and boards in relation to their fiduciary responsibility ('duty of care') and potential for personal liability if they fail to account for climate risks in strategic and operational plans. The Strategy should set a goal that requires all health services and other relevant services to conduct climate change risk assessments as a core risk management strategy.
- **Demonstrate leadership.** The Strategy should demonstrate leadership by developing a clear, ambitious decarbonisation plan that sets out responsibilities and opportunities for the private sector. This will provide certainty and help guide decisions and investment.

16. Where should the Strategy prioritise its emissions reduction efforts?
    a. How should the Strategy strike a balance between prioritising emissions reduction areas over which the health system has the most direct control and prioritising the areas where emissions are highest, even if it is harder to reduce emissions in these areas?
    b. Which of the six sources of emissions discussed above (on pages 13 to 18 of the Consultation Paper) are the highest priorities for action?

The Climate and Health Alliance strongly supports immediate action to ambitiously reduce carbon emissions, both in the health sector and across the whole of Australian society. The Strategy should seek to provide an emissions reduction strategy for the health sector that is

informed by best practice and based on best 'bang for buck' with consideration of emissions reductions, financial costs and savings, efforts, health benefits and cost of inaction. The Strategy should also reflect a broader remit under the NHSCU to support health outcomes in climate planning across all sectors and portfolios. By siloing action on health and climate to the Department of Health, the factors that undermine health and climate outcomes will continue. Once the Strategy is developed, an implementation plan coupled with funding should be urgently rolled out and acted upon. The Commonwealth Government should join the global initiative led by the World Health Organization: the Alliance for Transformative Action on Climate and Health (ATACH) to work together with other nations on climate adaptation and resilience and low carbon and sustainable healthcare initiatives.
17. What 'quick wins' in relation to emissions reduction should be prioritised for delivery in the twelve months following publication of the Strategy?
As above.

Proposed Objective 3: Adaptation

18. What health impacts, risks and vulnerabilities should be prioritised for adaptation action through the Strategy? What process or methodology should be adopted to prioritise impacts, risks and vulnerabilities for adaptation action?

The Climate and Health Alliance strongly supports the inclusion of health systems resilience as a priority objective within the Strategy. We strongly support the emphasis on support for communities experiencing vulnerability and welcome acknowledgement of the irreversible and harmful impacts of climate change already with us, even under ambitious mitigation scenarios.

To strengthen the Strategy, we recommend the following:

- **Support community adaptation.** While there is support for the inclusion of adaptation within the Strategy, the content within this section appears out of order with the previous objectives. It is recommended that objectives are re-organised to better reflect the purpose of the Strategy as follows:
    - Objective 1. Promoting and protecting health and wellbeing: This Strategy will inform and guide the development of policy and initiatives that embed health and climate considerations across all portfolios at both national, state and territory and local government level.
    - Objective 2. Build a climate resilient community and health system: This Strategy will support the development of initiatives to build community, health and aged care system resilience and capacity to respond to the health impacts of climate change.
    - Objective 3. Establish a net zero health and aged care system: This Strategy will guide the development of a national net zero plan for health and aged care, informed by a comprehensive assessment of the Australian health and aged care system's carbon footprint and reflecting best scientific evidence.
- **Address harms of incremental climate change.** While there is strong support for the inclusion of health harms associated with acute disasters or crises, it is also crucial the Strategy seeks to address health harms associated with incremental climate change, including heat, sea level rise and biodiversity loss.
- **Adopt First Nations knowledge.** First Nations knowledge and engagement is fundamental to assessing health impacts, risks and vulnerabilities in adaptation planning(69-71). This should include adopting well-established models of excellence for the preservation of Country.
- **Fund an adaptation workforce.** It is recommended the Strategy fund a climate change adaptation worker program akin to the existing environmental health worker program. Experience from similar programs indicate that success is dependent on support and training at the jurisdictional level. This could be applied from remote Indigenous communities to multicultural metropolitan settings. The Strategy should account for the health and aged care workforce facing challenges in accessing healthcare facilities during extreme weather events, and prioritising their own patients or immediate families and communities during extreme weather events.
- **Implement awareness campaigns.** Adaptation will only be effective if the wider community understands the risks to health from climate change, and are empowered to take action to protect their own health. As such, the Strategy should include a public education campaign that highlights the risks to health and the health benefits of adaptation as a critical factor to the success of any adaptation action.
- **Support thriving ecosystems.** Adaptation, including the protection of Australia's biodiversity, should include thriving ecosystems.
- **Foster cross-portfolio, cross-sectoral collaboration.** 'Policy responses to ameliorate impacts' (page 27) should include responses across sectors and government departments including housing and education.

- **Act on mental health.** The Strategy should explicitly outline the mental health impacts of climate change, including (but not limited to) climate anxiety, limited access to services during acute weather events, and limited access to open, safe spaces(72-75).
- **Develop targets.** The Strategy should recognise the overall increase in burden of disease because of climate change and include goals and targets as part of resilience planning. The Strategy should recognise that health and aged care facilities can be damaged during extreme weather events and incremental changes due to climate change, and develop goals and targets to reduce these impacts.
- **Build resilient communities.** The Strategy must focus on planning for building resilient communities—not just developing emergency event response plans.
- **Develop plans for continuity of care.** The Strategy should outline how it will support continuity of care for the community during extreme weather events. We support the Consumers Health Forum in their recommendations.
- **Foster health system adaptation.** There needs to be a systemic analysis by all health services of the likely impacts of climate change. The Strategy should require (and support) all health services to develop a climate change adaptation plan that outlines the steps they need to take to prepare for the challenges ahead. This would include such matters as emergency preparedness, infrastructure assessment, workforce skill in managing climate-related health risks in their patients. Heat waves are one example, e.g. there is limited information in the community on how patients with chronic conditions need to manage excessive heat other than drinking more water. Adaptation plans would need to encompass this kind of advice.
- **Mandate standards.** The production of health service adaptation plans could be mandated in the Australian Council of Healthcare Standards, and included as a performance measure in the National Healthcare Reform Agreement. Targets should be included in the National Healthcare Reform Agreement and National Safety and Quality Health Service to cover both community and health service adaptation.
- **Minimise supply chain disruption.** The Strategy should account for supply chain disruption from climate-related events that impact both facilities and delivery of health services.

19. Should the Australian government develop a National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan? If yes:
    a. What are the key considerations in developing a methodology?
    b. How should their development draw on work already undertaken, for example at the state and territory level, or internationally?
    c. What are the key areas where a national approach will support local/jurisdictional vulnerability assessment and adaptation planning?

The Climate and Health Alliance supports the development of a National Health Vulnerability and Adaptation Assessment and a National Health Adaptation Plan.

To strengthen the Strategy, we recommend the following:

- **Streamline processes.** The development of a National Health Vulnerability and Adaptation Assessment and a National Health Adaptation Plan should be conducted as part of the National Climate and Risk Assessment processes and not as a duplication of efforts. This should be executed as a whole of government assessment, and not siloed within DHAC.
- **Account for lived experience.** The Strategy should account for the lived experience of consumers, and all people living in Australia, as part of vulnerability and adaptation planning.

- **Identify gaps and opportunities.** The methodology used needs to identify policy gaps and opportunities for improving population resilience across government portfolios.
- **Support adoption of climate and health assessments.** The Strategy should support the adoption of climate and health assessments as a tool through which to assess vulnerability, risk and adaptation.

20. Would there be value in the Australian government promoting a nationally consistent approach to vulnerability assessment and adaptation planning for the health system specifically, for instance by issuing guidance and associated implementation support tools for states, territories and local health systems? If yes, what topics should be covered to promote a nationally consistent approach? What examples of existing guidance (either from states/territories or internationally) should be drawn from?

The Climate and Health Alliance supports a nationally consistent approach to vulnerability assessment and adaptation planning for the health system.

To strengthen the Strategy, we recommend the following:

- **Recognise diversity.** The assessment should take into account the extensive range of vulnerabilities across different communities and regions, the variety of ecosystems and natural habitats and climates across Australia, the variety of health and wellbeing considerations, and how these are being impacted by climate change. It is recommended that guidance is provided for a broad range of health and aged care services, and is adaptable to different service settings.
- **Leverage existing work.** It is recommended that guidance for the assessments take into account policies and tools that have already been developed (e.g. at the state and territory level), and action that has already occurred (e.g. at the health service level) to avoid duplication of effort. Guidance and support should be provided for assisting health services to assess and plan for climate risks to healthcare infrastructure, service provision (including surges in service demands and changing burdens of disease and injury), the health workforce, and supply chains. Relevant tools include:
    - Queensland Climate Risk Strategy and Adaptation guides
    - Human Health and Wellbeing Climate Change Adaptation Plan for Queensland
    - NSW Climate Risk Ready program
    - Victorian Health and Human Services Climate Adaptation plan
    - Resources from the World Health Organization(76)
    - Sydney North Health Network Climate and Health Strategy
- **Build capacity.** Implementation support in the form of tools, knowledge and capacity building, and finance is essential. This work takes considerable time and resources, requires input from multiple internal and external stakeholders, and is new territory for many people in the healthcare workforce.
- **Resource the NHSCU.** The NHSCU must be resourced to provide ongoing implementation support for health services to assess and plan for climate risks.

21. What immediate high-priority health system adaptation actions are required in the next 12 to 24 months?

The Climate and Health Alliance supports the development of high-priority health system adaptation actions that are ambitious and evidence based. We strongly support the inclusion

of a nationally coordinated surge health and medical workforce for deployment in response to climate change-related emergencies.

The Strategy should support:

- Education and capacity building among policymakers, community members, the health workforce, and within emergency and disaster preparedness services and agencies.
- Resourcing for emergency services.
- Food and housing systems, including food security (encompassing caloric and nutrition intake).
- Transport system.
- Support and resources for rural and remote health services to improve resilience.
- Preparedness for disruption to health system supply chains.
- Responding to escalating inequity, increasing poverty and homelessness.
- Preparedness for health threats resulting from human influence on natural ecosystems.
- Consider the full societal costs of climate inaction over short and long time-frames, and the implications of health-relevant policies in all sectors, to prevent the hidden transfer of costs to the health sector and the undermining of environmental sustainability.
- Consumer consultation.

Proposed Objective 4: Health in All Policies

22. What are the key areas in which a Health in All Policies approach might assist in addressing the health and wellbeing impacts of climate change and reducing emissions?

The Climate and Health Alliance strongly supports the adoption of a Health in All Policies approach to the Strategy. As outlined above, all dimensions of climate change are interlinked with human health. Therefore action to reduce the health risks from climate change requires working across all sectors and all levels of government. The current structure of the Strategy, as implied by the Consultation Paper, needs revision in order to fully address the health risks posed by climate change. Furthermore, it is crucial to health outcomes that DHAC lead as a key agency in the national response to the climate crisis. The NHSCU should be funded and equipped to execute a whole of government approach to climate and health.

The overall focus of the Strategy needs to be strongly directed towards reducing the current risks to population health from climate change, and to maximise the health co-benefits of carefully designed climate mitigation and adaptation actions. This can be achieved through a Health in All Policies approach and the many recommendations outlined in *Healthy, Regenerative and Just*, as endorsed by 70+ health and environment stakeholders.

We strongly support the utilisation of health impact assessments in climate mitigation and adaptation planning.

To strengthen the Strategy, we recommend the following:

- **Commit to equity.** The Strategy should explicitly acknowledge its commitment to not exacerbate existing inequity.
- **Evaluate the costs.** The Strategy should require the Productivity Commission to produce an evaluation of the economic costs of climate change under current emissions reduction scenarios, along with modelling the economic savings associated with emissions reductions across a range of sectors, including health benefits. For example, this should evaluate the economic savings associated with the avoided ill health and productivity gains from strategies to reduce emissions in the transport sector.
- **Maximise health co-benefits.** Greater benefits for health could be achieved through actively planning to maximise health co-benefits associated with climate adaptation and mitigation strategies when developing policies, e.g. ensuring energy and transport transitions are guided by health evidence. This requires building institutional capacity and skills in other portfolios to implement a Health in All Policies approach, and for DHAC and stakeholders to provide evidence on the determinants of health and inequity, as well as effective responses and solutions.
- **Leverage expertise.** Health experts should provide guidance and establish regulatory frameworks for the assessment of health risks and impacts, advise on the implementation of appropriate solutions and on monitoring progress across sectors. To ensure transparency and 'the right person for the right job', identification of appropriate health experts to assist in this process should be undertaken as a joint exercise between government and independent bodies including academic institutions, not-for-profit organisations, consumers and communities across geographical settings.
- **Act.**
    - The Commonwealth Government should ensure Australia's Nationally Determined Contribution includes recognition of climate-health risks and opportunities for health co-benefits from climate action, and that these are reflected in mitigation and adaptation plans.

- The Commonwealth Government should ensure Australia's representation at international climate change forums includes Australian health ministers and health department officials.
- The Commonwealth Government should establish a national Ministerial Committee on Health and Climate Change to facilitate cooperative leadership across portfolios and levels of government.
- The Commonwealth Government should establish a 'Climate Change and Health' standing committee of the Australian Health Protection Principal Committee.
- The Commonwealth Government should include consideration of climate change and health in other significant national health plans, such as the Long Term National Health Plan and the National Preventive Health Strategy, and align the Strategy with these plans.

23. What are the most effective ways to facilitate collaboration and partnerships between stakeholders to maximise the synergies between climate policy and public health policy? What are some successful examples of collaboration in this area?

The Climate and Health Alliance strongly supports a collaborative approach to policy development, cross-sectoral engagement and collaboration and alignment with international policy, including the Sustainable Development Goals.

To strengthen the Strategy, we recommend the following:

- **Improve governance.** The Strategy should seek to establish an overarching working group or National Committee that consists of experts representing the most relevant facets of health, climate science, implementation science, and Commonwealth, state and territory Ministers with portfolio responsibility for Health, Environment, Climate Change and Energy. There should also be regular engagement and consultation with Ministers with responsibility for related portfolios, such as Mental Health, Resources, Emergency Services, Planning, and Infrastructure with respect to policies, programs and initiatives in these portfolios that align with the Strategy. The Ministerial Committee should have responsibility for overseeing the development of the Strategy, including setting the overall policy direction and providing final approval for the Strategy's policies, programs and initiatives. An appropriate national agency should be tasked with leading the coordination and implementation of policies, programs and initiatives to deliver the Strategy. The Strategy itself must be integrated with other significant national health strategies, including the Long Term National Health Plan, and the National Preventive Health Strategy. The Ministerial Committee should be responsible for monitoring and reporting to the National Cabinet (or any subsequent body) on the progress and outcomes from the implementation of the Strategy, which should be outlined in detail in a publicly available annual report by the nominated national agency.
- **Engage with First Nations.** The Strategy should engage early and often with First Nations groups including Elders, local land councils, community controlled health organisations and the Coalition of the Peaks.

Enablers

24. How could these enablers be improved to better inform the objectives of the Strategy? Should any enablers be added or removed?

The Climate and Health Alliance supports the enablers outlined in the Consultation Paper. However, there are a numbers of areas where these enablers could be strengthened:

- **Workforce, leadership and training:** The Strategy must include adequate support for workforce involvement in the change process beyond training, and provide detail about the change theory and process. As well as retraining and managing change, the Strategy needs to recognise that in emergencies and disasters, healthcare workers are often supporting immediate family and friends. There must be contingency for workforce shortages in extreme weather events. There is also a lack of support for workforce capacity building and training. There is a need for a national cross-disciplinary continuing professional development program on climate change and health for the health and social sector, and for people in other sectors. Current training opportunities are either discipline-specific (which doesn't encourage or support collaboration) or ad hoc (therefore reaches too few people) or expensive (not everyone can afford for profit education courses). There is also a need to support and scale up existing communities of practice for sustainable healthcare to allow achievements and learnings to be shared, and common challenges to be raised. The Strategy should reflect respect for First Nations Knowledges in this enabler, and its inclusion.
- **Research:** There is a high priority need for better data on climate-related health and wellbeing outcomes. Data can guide better investment, and disinvestment, in programs and interventions. It is crucial that First Nations peoples are tasked with conducting relevant research and that data sovereignty is an underpinning principle(77-79).
- **Collaboration:** There is limited support for collaboration on climate change and health. The health sector has self-organised to collaborate on responding to climate change and health and health care decarbonisation, but these efforts require government investment in order to scale up effectively.It should be a priority of DHAC to address the barriers and foster enablers to ensure better outcomes for climate and health.
- **Monitoring and reporting:** Regular assessment and forecasting of climate-related health impacts across the country is vital. Monitoring over long time periods with robust indicators would help governments and services understand climate change risk, identify specific vulnerabilities, highlight region-specific climate mitigation and adaptation challenges, and track how communities and organisations are responding. Monitoring of the implementation of solutions is also required, in terms of implementation progress, impact, and within the principle of data sovereignty.
- Governance, finance and planning**.** It is recommended the enablers be expanded to include 'governance, finance and planning'. All of these are crucial aspects in the successful implementation of any national strategy. Governance should include the establishment of a Board to oversee implementation and advise Ministers on the Strategy. There should be representatives from public and private hospitals, general practitioners, allied health professionals, public health specialists, consumers, climate and health experts and national climate agencies. The Board should be supported by a committee of senior officials from all jurisdictions. The Board should produce an annua report on Strategy progress.
- **Make 'measurement' an enabler.** It is recommended that Objective 1, 'Measurement' should become an enabler, and should be supported through a dedicated team that collates and reports on carbon emissions from the health sector. These should be reported through the proposed Board and should include epidemiologists who can explore the health impacts of emissions loads.
- **Commit to adequate funding.**

• **Include the commercial determinants of health.** The Strategy lacks the inclusion of the commercial determinants of health and climate that exacerbate inequality and impact outcomes. It is crucial that conflicts of interest are recognised, and that the Strategy describes how it is going to manage conflicts of interest in the policy making process.
25. For each of these enablers: a. What is currently working well? b. What actions should the Strategy consider to support delivery?
Areas of support and improvements and highlighted above.

References

(1) Department of Health and Aged Care. (2023, June 15). National health and climate strategy. Australian Government. https://www.health.gov.au/our-work/national-health-and-climate-strategy

(2) Department of Health and Aged Care. (2023, June 2). National health and climate strategy - consultation. Australian Government. https://consultations.health.gov.au/ohp-2013-environmental-health-and-health-protection-policy-branch/national-health-and-climate-strategy-consultation/

(3) Climate and Health Alliance. (2021). Healthy, Regenerative and Just: Framework for a national strategy on climate, health and wellbeing. https://d3n8a8pro7vhmx.cloudfront.net/caha/pages/1947/attachments/original/1639623234/caha-framework-2.0-FA.pdf?1639623234

(4) World Health Organisation. (n.d). Constitution of the World Health Organisation. https://www.who.int/about/governance/constitution

(5) SA Health. (2022). Health in all policies. Government of South Australia. https://www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health+internet/about+us/about+sa+health/health+in+all+policies/health+in+all+policies

(6) Climate and Health Alliance. (2023). The fuel efficiency standard: Cleaner, cheaper to run cars for Australia. https://assets.nationbuilder.com/caha/pages/3103/attachments/original/1686105038/CAHA_submission_-_FES_Consultation_31052023.pdf?1686105038

(7) Zosky, G.R., Vander Hoorn, S., Abramson, M.J., Dwyer, S., Green, D., Heyworth, J., Jalaludin, B. B., McCrindle-Fuchs, J., Tham, R & Marks, G. B. (2021). Principles for setting air quality guidelines to protect human health in Australia. MJA. 214(6), 254-256.e1. https://doi.org/10.5694/mja2.50964

(8) Health Effects Institute. (2022). HEI Panel on the Health Effects of Long-Term Exposure to Traffic-Related Air Pollution. Systematic Review and Meta-analysis of Selected Health Effects of Long-Term Exposure to Traffic-Related Air Pollution. Special Report 23. Boston.

(9) Walter, C.M., Schneider-Futschik, E.K., Lansbury, N.L., Sly, P.D., Head, B.W. & Knibbs, L.D. (2021). The health impacts of ambient air pollution in Australia: A systematic literature review. Internal Medicine Journal, 51(10), 1567-1579.

(10) Knibbs, L.D., De Waterman, A.M.C., Toelle, B.G., Guo, Y., Denison, L., Jalaludin, B., Marks, G.B. & Williams, G.M. (2018). The Australian Child Health and Air Pollution Study (ACHAPS): A national population-based cross-sectional study of long-term exposure to outdoor air pollution, asthma, and lung function. Environment International, 120, 394-403.

(11) Gauderman, W.J., Urman, R., Avol, E., Berhane, K., McConnell, R., Rappaport, E., Chang, R., Lurmann, F. & Gilliland, F. (2015). Association of improved air quality with lung development in children. N Engl J Med, 372, 905-913.

(12) Climate Council. (n.d). What does net zero emissions mean?. https://www.climatecouncil.org.au/resources/what-does-net-zero-emissions-mean/

(13) Aldunce, P., Armour, K., Blanco, G., Calvin, K., Cheung, W., Dasgupta, D., Denton, F., Diongue-Niang, A., Dodman, D., Garschagen, M., Geden, O., Hayward, B., Jones, C., Jotzo, F., Krinner, G., Lasco, R., Lee, J., Meinshausen, M., Mukherji, A., Otto, F., ... Zommers, Z. (2023). AR6 synthesis report: Climate change 2023. Intergovernmental Panel on Climate Change. https://www.ipcc.ch/report/sixth-assessment-report-cycle/

(14) Rights of Future Generations. (2023). Maastricht Principles on the human rights of future generations. https://www.rightsoffuturegenerations.org/the-principles

(15) Australian Human Rights Commission. (2008, September 1). Climate change and human rights. https://humanrights.gov.au/our-work/rights-and-freedoms/projects/climate-change-and-human-rights

(16) United Nations Framework Convention on Climate Change. (n.d). The Paris Agreement. United Nations. https://unfccc.int/process-and-meetings/the-paris-agreement

(17) World Health Organization. (2022). WHO policy brief: Climate change, health, & intergenerational equity. Geneva, Switzerland: WHO Climate Change and Health Unit. https://cdn.who.int/media/docs/default-source/climate-change/who-unfccc-cop27_cchie_11122_lc.pdf?sfvrsn=f93abe44_7&download=true
(18) Intergovernmental Panel on Climate Change. (2022). Climate change 2022: Impacts, adaptation, and vulnerability. Contribution of working group II to the sixth assessment report of the intergovernmental panel on climate change. Cambridge University Press, Cambridge, UK and New York, NY, USA,: Cambridge University Press.
(19) Kassam, N., Leser, H. (2021). Lowy Climate Poll. Lowy Institute. https://www.lowyinstitute.org/publications/climate-poll-2021
(20) Climate Council and Beyond Blue. (2023). Summary of results from national study of the impact of climate-fuelled disasters on the mental health of Australians. https://www.climatecouncil.org.au/resources/survey-results-climate-disasters-mental-health/
(21) Bradley, G., Deshpande, S., Foxwell-Norton, K., Hennessey, N., Jackson, M. (2022). Climate action survey: Summary for policy and decision making. Griffith University. https://www.griffith.edu.au/__data/assets/pdf_file/0024/1538304/Climate-Action-Survey-Summary-for-Policy-and-Decision-Making.pdf
(22) Boluda-Verdu, I., Senent-Valero, M., Casas-Escolano, M., Matijasevich, A., Pastor-Valero, M. (2022). Fear for the future: Eco-anxiety and health implications, a systematic review. Journal of Environmental Psychology. (101904). https://doi.org/10.1016/j.jenvp.2022.101904
(23) Gao, C. X., Teo, S. M., Brennan, N., Fava, N., Freeburn, T., Filia, K. (2023). Climate concerns and young people's mental health: Findings from the 2022 Mission Australia youth survey. Orygen. https://www.missionaustralia.com.au/publications/youth-survey/2591-climate-concerns-and-young-people-s-mental-health-findings-from-the-2022-mission-australia-youth-survey/file#:~:text=Upon%20deeper%20analysis%2C%20the%20data,one%20in%20five%20(23%25)
(24) Department of Health and Aged Care. (2023, June 27). National health and climate strategy: Consultation Paper. Australian Government. https://consultations.health.gov.au/ohp-2013-environmental-health-and-health-protection-policy-branch/national-health-and-climate-strategy-consultation/user_uploads/nationa-health-and-climate-strategy-consultation-paper-4.pdf
(25) National Health Service. (2023). Suppliers. https://www.england.nhs.uk/greenernhs/get-involved/suppliers/
(26) Department of Health. (2021). National preventive health strategy. Australian Government. https://www.health.gov.au/sites/default/files/documents/2021/12/national-preventive-heath-strategy-2021-2030_1.pdf
(27) National Aboriginal Community Controlled Health Organisation. (n.d). Aboriginal community controlled health organisations (ACCHOs). https://www.naccho.org.au/acchos/#:~:text=%27%E2%80%9DAboriginal%20health%E2%80%9D%20means%20not,well%2Dbeing%20of%20their%20Community
(28) Whitmee, S., Haines, A., Beyrer, C., Boltz, F., Capon, A. G., Ferreira de Souza Diaz, B., Ezeh, A., Frumkin, H., Gong, P., Head, P., Horton, R., Mace, G. M., Marten, R., Myers, S. S., Nishtar, S., Osofsky, S. A., Pattanayak, S. K., Pongsiri, M. J., Romanelli, C., ... Yach, D. (2015). Safeguarding human health in the Anthropocene epoch: Report of The Rockefeller Foundation–Lancet Commission on planetary health. The Lancet, 386, 1973-2028. http://dx.doi.org/10.1016/S0140-6736(15)60901-1
(29) Salas, R. N., Maibach, E., Pencheon, D., Watts, N. & Frumkin, H. (2020). A pathway to net zero emissions for healthcare. Bmj. 1:371.
(30) National Health Service. (2022, July). Delivering a 'Net Zero' National Health Service. https://www.england.nhs.uk/greenernhs/wp-content/uploads/sites/51/2022/07/B1728-delivering-a-net-zero-nhs-july-2022.pdf

(31) Australian Human Rights Commission. (n.d). UN declaration on the rights of Indigenous Peoples. https://humanrights.gov.au/our-work/un-declaration-rights-indigenous-peoples-1#:~:text=The%20United%20Nations%20Declaration%20on,the%20rights%20of%20Indigenous%20peoples
(32) Stanley, F., Langton, M., Ward, J., McAullay, D., & Eades, S. (2021). Australian First Nations response to the pandemic: A dramatic reversal of the 'Gap.' *Journal of Paediatrics and Child Health*, *57*(12), 1853–1856. doi:10.1111/jpc.15701
(33) Eades, S., Eades, F., McCaullay, D., Nelson, L., Phelan, P. & Stanley, F. (2020). Australia's First Nations' response to the COVID-19 pandemic. The Lancet, 396(10246), 237-238. https://doi.org/10.1016/S0140-6736(20)31545-2
(34) Hunt, J. (2013). Engaging with Indigenous Australia - exploring the conditions for effective relationships with Aboriginal and Torres Strait Islander communities. Australian Institute of Health and Welfare. https://www.aihw.gov.au/getmedia/7d54eac8-4c95-4de1-91bb-0d6b1cf348e2/ctgc-ip05.pdf.aspx?inline=true
(35) Global Green and Healthy Hospitals. (n.d). Climate impact checkup: Health care's GHG emissions calculator. https://greenhospitals.org/checkup#:~:text=Climate%20Impact%20Checkup%20is%20a,where%20your%20facility%20is%20located.
(36) Department of Health. (2022, October). Environmental data management tools. Victorian Government. https://www.health.vic.gov.au/planning-infrastructure/environmental-data-management-tools
(37) NSW Climate and Energy Action. (n.d). Government Resource Efficiency Policy. New South Wales Government. https://www.energy.nsw.gov.au/nsw-plans-and-progress/regulation-and-policy/sustainability-government/government-resource
(38) Hunter New England Local Health District. (n.d). About us: Sustainable healthcare. New South Wales Government. https://www.hnehealth.nsw.gov.au/about-us/sustainable_healthcare/about_us
(39) Health Care Without Harm. (n.d). Global road map for health care decarbonization (Green paper number 2). https://healthcareclimateaction.org/sites/default/files/2021-09/Road%20Map%20for%20Health%20Care%20Decarbonization%20Executive%20Summary.pdf
(40) Cook, N., Goodwin, D., Porter, J. & Collins, J. (2023) Food and food-related waste management strategies in hospital food services: A systematic review. Nutrition & Dietetics. 80(2), 116-42.
(41) ReFED. (2023). Impact calculator. https://insights-engine.refed.org/impact-calculator?inputs=%7B%22sector%22%3Anull%2C%22type%22%3A%22standard-mix%22%2C%22unit%22%3A%22tons%22%2C%22alternative%22%3Afalse%2C%22destinations%22%3A%5B%5D%7D
(42) Practice Greenhealth. (2023). Healthcare emissions impact calculator. https://practicegreenhealth.org/topics/climate-and-health/health-care-emissions-impact-calculator?token=piDg8ldgDwZ4T5nz_t_Da2ZBJYpXaZUGRvFMkzOvtIw
(43) Health Care Without Harm. (n.d). Global road map for health care decarbonization (Green paper number 2). https://healthcareclimateaction.org/sites/default/files/2021-09/Road%20Map%20for%20Health%20Care%20Decarbonization%20Executive%20Summary.pdf
(44) Carino, S., Porter, J., Malekpour, S. & Collins, J. (2020). Environmental sustainability of hospital food services across the food supply chain: A systematic review. Journal of the Academy of Nutrition and Dietetics. 1:120(5), 825-73.
(45) Goonan, S., Mirosa, M. & Spence, H. (2014). Getting a taste for food waste: A mixed methods ethnographic study into hospital food waste before patient consumption conducted at three New Zealand foodservice facilities. Journal of the Academy of Nutrition and Dietetics. 1:114(1), 63-71.

(46) Alam, M. M., Sujauddin, M., Iqbal, G. M. & Huda, S. M. (2008). Report: Healthcare waste characterization in Chittagong Medical College Hospital, Bangladesh. Waste Management & Research. 26(3), 291-6.
(47) Anari, R., Nikooyeh, B., Ghodsi, D., Amini, M. & Neyestani, T. R. (2023). An in-depth analysis of hospital food waste in terms of magnitude, nutritional value, and environmental and financial perspectives: A cross-sectional study. Waste Management & Research. doi:0734242X231176733.
(48) Cook, N., Collins, J., Goodwin, D. & Porter, J. (2022). A systematic review of food waste audit methods in hospital foodservices: Development of a consensus pathway food waste audit tool. Journal of Human Nutrition and Dietetics. 35(1), 68-80.
(49) Waste and Resource Action Programme [WRAP]. (2021). Food Waste Reduction Roadmap. Banbury: Waste and resource action programme. https://wrap.org.uk/taking-action/food-drink/initiatives/food-waste-reduction-roadmap
(50) Food Innovation Australia Limited [FIAL]. (2021). National Food Waste Strategy Feasibility Study - Can We Halve Australia's Food Waste by 2030? Macquarie Park, NSW: Food Innovation Australia Limited. https://www.fial.com.au/sharing-knowledge/food-waste
(51) ReFED. (2023). Insights Engine. https://insights.refed.org/
(52) Victorian Department of Health. (2022) Nutrition and quality food standards for health services. Australian Government. https://www.health.vic.gov.au/quality-safety-service/nutrition-and-food-quality-standards-for-health-services
(53) Bambrick, H., Charlesworth, K., Bradshaw, S. & Baxter, T. (2021). Kicking the gas habit: How gas is harming our health. Climate Council. https://www.climatecouncil.org.au/resources/gas-habit-how-gas-harming-health/
(54) Arundel, J., Lowe, M., Hooper, P., Roberts, R., Rozek, J., Higgs, C., & Giles-Corti, B. (2017). Creating liveable cities in Australia: Mapping urban policy implementation and evidence-based national liveability indicators. Healthy Liveable Cities Group RMIT University.
(55) Lowe, M., Arundel, J., Hooper, P., Rozek, J., Higgs, C., Roberts, R., & Giles-Corti, B. (2020). Liveability aspirations and realities: Implementation of urban policies designed to create healthy cities in Australia [Article]. Social Science and Medicine, 245, Article 112713. https://doi.org/10.1016/j.socscimed.2019.112713
(56) Boeing, G., Higgs, C., Liu, S., Giles-Corti, B., Sallis, J. F., Cerin, E., Lowe, M., Adlakha, D., Hinckson, E., Moudon, A. V., Salvo, D., Adams, M. A., Barrozo, L. V., Bozovic, T., Callejo, G. V., Delclòs-Alió, X., Dygrýn, J., Ferguson, S., Gebel, K., Ho, T. P., Lai, P., Martori, J. C., Nitvimol, K., Queralt, A., Roberts, J. D., Sambo, G. H., Schipperijn, J., Vale, D., Van de Weghe, N., & Arundel, J. (2022). Using open data and open-source software to develop spatial indicators of urban design and transport features for achieving healthy and sustainable cities. The Lancet Global Health, 10(6), e907 - e918.
(57) Giles-Corti, B., Moudon, A. V., Lowe, M., Cerin, E., Boeing, G., Frumkin, H., Salvo, D., Foster, S., Kleeman, A., Bekessy, S., Hérick de Sá, T., Nieuwenhuijsen, M., Higgs, C., Hinckson, E., Adlakha, D., Arundel, J., Liu, S., Oyeyemi, A. L., Nitvimol, K., & Sallis, J. F. (2022). What next? Expanding our view of city planning and global health, and implementing and monitoring evidence-informed policy. The Lancet Global Health, 10 (6), e919 - e926.
(58) Hes, D., Monty, J., Skidmore, G. & Mcgregor, L. (2022). Impact of existing building air-conditioning retrofit on cost, COVID-19 transmission and energy. ASA 2022, 339
(59) Schofield, R. (2022). Guide to air cleaners. University of Melbourne. https://sgeas.unimelb.edu.au/engage/air-cleaner-guide
(60) Lowe, M. (2022). Australian cities failing on walkability. University of Melbourne. https://research.unimelb.edu.au/strengths/updates/news/australian-cities-failing-on-walkability#:~:text=Relative%20to%20the%20other%20cities,across%20these%20three%20Australian%20cities
(61) Lowe, M., Arundel, J., Hooper, P., Rozek, J., Higgs, C., Roberts, R., & Giles-Corti, B. (2020). Liveability aspirations and realities: Implementation of urban policies designed to

create healthy cities in Australia [Article]. Social Science and Medicine, 245, Article 112713. https://doi.org/10.1016/j.socscimed.2019.112713
(62) Boeing, G., Higgs, C., Liu, S., Giles-Corti, B., Sallis, J. F., Cerin, E., Lowe, M., Adlakha, D., Hinckson, E., Moudon, A. V., Salvo, D., Adams, M. A., Barrozo, L. V., Bozovic, T., Callejo, G. V., Delclòs-Alió, X., Dygrýn, J., Ferguson, S., Gebel, K., Ho, T. P., Lai, P., Martori, J. C., Nitvimol, K., Queralt, A., Roberts, J. D., Sambo, G. H., Schipperijn, J., Vale, D., Van de Weghe, N., & Arundel, J. (2022). Using open data and open-source software to develop spatial indicators of urban design and transport features for achieving healthy and sustainable cities. The Lancet Global Health, 10(6), 907-918.
(63) United Nations Development Programme. (2021, October). Sustainable procurement index for health (SPIH): User guidance. https://api.savinglivesustainably.org/documents/file/764e233134ffe62af43550927d10c2eb/full/hash
(64) Choosing Wisely. (n.d). More is not always better when it comes to healthcare. https://www.choosingwisely.org.au/
(65) O'Farrell, K. & Pickin, J. (2023). Carbon emissions assessment of Australian plastics consumption – Project report. Australian Marine Conservation Society and World Wide Fund for Nature Australia. https://www.marineconservation.org.au/wp-content/uploads/2023/07/Carbon-emissions-of-Australian-plastics-Blue-Environment-July-2023.pdf?utm_source=sfmc&utm_medium=email&utm_campaign=23+07+ACT+Plastics+Emissions+Report+Launch+PLA+ALL&utm_term=Button+1&utm_id=19013&sfmc_id=10103009&utm_source=sfmc&utm_term=Button+1&utm_content=19495&utm_id=23bcb2ce-1bbe-45e9-bc23-db6ac8281529&sfmc_activityid=e56b717a-d415-4b37-89ab-96ced1c20ab6&utm_medium=email
(66) Cook, N., Goodwin, D., Porter, J. & Collins, J. (2023). Food and food-related waste management strategies in hospital food services: A systematic review. Nutrition & Dietetics. 80(2), 116-42.
(67) Environmental Protection Agency. (2023). Food recovery hierarchy. United States Government. https://www.epa.gov/sustainable-management-food/food-recovery-hierarchy
(68) HEAL Network & CRE-STRIDE. (2021). Climate Change and Aboriginal and Torres Strait Islander Health. Lowitja Institute. DOI: 10.48455/bthg-aj15
(69) Jones, A. & Hunnisett, C. (2022). A toolkit to progress wellbeing economy approaches in Australia. The Victorian Health Promotion Foundation. https://cdn.georgeinstitute.org/sites/default/files/2022-10/Wellbeing%20economy%20toolkit%201.pdf
(70) The National Study of Aboriginal and Torres Strait Islander Wellbeing. (n.d). The Mayi Kuwayu Study. https://mkstudy.com.au/
(71) National Health and Medical Research Council. (2018). Ethical conduct in research with Aboriginal and Torres Strait Islander Peoples and communities. Australian Government. https://www.nhmrc.gov.au/about-us/resources/ethical-conduct-research-aboriginal-and-torres-strait-islander-peoples-and-communities
(72) Gao, C. X., Teo, S. M., Brennan, N., Fava, N., Freeburn, T. & Filia, K. (2023). Climate concerns and young people's mental health: Findings from the 2022 Mission Australia Youth Survey. Orygen: Melbourne, VIC and Mission Australia: Sydney, NSW.
(73) Climate and Health Alliance. (2021). Real, urgent & now: Insights from health professionals on climate and health in Australia.
(74) Macleod, E., Curll, S., Walker, I., Reynolds, J., Lane, J., Galati, C., Greenwood, L., Christenson, B. & Calear, A. L. (2023). Australian psychologists in the context of disasters: Preliminary report on workforce impacts and needs. Canberra: Australian National University.
(75) World Health Organization. (2021). WHO health and climate change global survey report. Geneva: World Health Organization.
(76) World Health Organization. (2021). Checklists to assess vulnerabilities in health care facilities in the context of climate change. https://www.who.int/publications/i/item/9789240022904

(77) Walter, M., Kukutai, T., Carroll, S. R. & Rodriguez-Lonebar, D. (2022). Indigenous Data Sovereignty and Policy. Routledge
(78) Bodkin-Andrews, G., Walter, M., Lee, V., Kukutai, T. & Lovett, R. (2019, July 2). Delivering Indigenous Data Sovereignty [Video]. Australian Institute of Aboriginal and Torres Strait Islanders Studies. https://aiatsis.gov.au/publication/116530
(79) Maiam Nayri Wingara. (2018). Indigenous Data Sovereignty Communique Indigenous Data Sovereignty Summit. https://www.maiamnayriwingara.org/definitions
(80) Chemical Footprint Project. (n.d.). Retrieved from https://chemicalfootprint.org/about/overview
(81) OHCHR. (n.d.). Retrieved from https://www.ohchr.org/en/special-procedures/sr-environment/clean-air-and-human-rights
(82) International Association for Public Participation. (2018). (rep.). *IAP2 Spectrum of Public Participation*. Retrieved from https://iap2.org.au/wp-content/uploads/2020/01/2018_IAP2_Spectrum.pdf
(83) Global Green and Healthy Hospitals. (n.d.). Retrieved from https://greenhospitals.org/about
(84) Health Care Without Harm. (n.d.). *The road map*. Health Care Climate Action. https://healthcareclimateaction.org/roadmap
(85) European Commission. (n.d.). *Chemicals strategy*. Environment. https://environment.ec.europa.eu/strategy/chemicals-strategy_en
(86) Climate and Health Alliance. (2023). Pre-Budget Submission . https://assets.nationbuilder.com/caha/pages/2991/attachments/original/1681694881/Pre-Budget_Submission_FINAL_27_January_2023.pdf?1681694881

Appendix

CAHA membership as of July 2023.



Thank you for taking the time to complete this survey – your feedback is greatly appreciated!

Please submit this form in Word format to Health.Climate.Consultation@health.gov.au.

Australian Government
Department of Health and Aged Care

NATIONAL HEALTH AND CLIMATE STRATEGY

Detailed submission form

This form allows you to provide responses to the full set of questions in the Consultation Paper available here.

Alternatively, you may wish to complete the briefer online survey available here.

Please submit this form in Word format to Health.Climate.Consultation@health.gov.au.

Respondent details

What is your name?
[redacted]
What is your email address?
[redacted]
What is your organisation?
Croakey Health Media
Have you read and agreed to the Privacy Statement? (NB we will not be able to use your submission unless you tick this box)
☒ I have read and agreed to the Privacy Statement
Do you identify as Aboriginal and/or Torres Strait Islander? (Yes/No/Prefer not to say)
[redacted]
Please select which applies to you: **None of the below provides an appropriate category. Further, the categories on offer present a narrow range of options that fails to recognise the breadth of organisations and expertise that could contribute to this consultation.** ☐ Individual citizen ☐ Health Service Provider ☐ Industry and Life Sciences Organisation or Representative ☐ Academic or Researcher ☐ Primary and/or Allied Health Peak or Advocacy Organisation or Representative ☐ Aged Care Service Provider ☐ First Nations Health Service Provider ☐ First Nations Community Group ☐ First Nations Peak or Advocacy ☐ Medical College or Peak professional body

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Questions for feedback from the Consultation Paper

Introduction

1. How could these objectives be improved to better support the vision of the Strategy?
The four objectives suggested for the strategy omit an important objective, which is central for achieving all other objectives: informed and engaged communities. **Objective 5: Informed and engaged communities** Communities need to be informed and engaged in mitigation and adaptation efforts, and especially in relation to their health and wellbeing. When communities are informed and engaged, policy development and implementation is more likely to be relevant, equitable, effective and useful. This is particularly relevant for health and aged care services and providers that are trying to engage with climate mitigation and adaptation. The news and information ecosystem currently does not support communities to be informed about and engaged with climate mitigation and adaptation. The prevalence of climate misinformation and disinformation, the dominance of corporate interests with a vested interest in undermining climate literacy and climate action (including fossil fuel companies and corporate media organisations such as News Corp), the power of digital platforms such as Meta and Google (which are major vectors of climate misinformation and disinformation) and a weakening of the public interest journalism sector (leaving many communities without access to reliable local news) all have contributed to harmful delays in the implementation of effective climate action. As a result of these delays, communities will increasingly bear the burden of climate disruption affecting wide-ranging determinants of health, including access to food, housing, and safe living conditions. Communities will have less capacity for responding to the increasing intensity and prevalence of extreme weather events if they are not supported by reliable, relevant and safe news and information systems.
2. How could these principles be improved to better inform the objectives of the Strategy?
The six proposed principles all are relevant for the proposed additional objective. 1. **First Nations leadership.** This principle is also important for developing and supporting reliable, relevant and safe information and news systems. We note also

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the leadership of the Koori Mail newspaper in supporting communities in the aftermath of flooding in 2022.

2. **Tackling health inequities.** Privileging the voices, knowledge and experiences of those most likely to experience adverse outcomes from climate disruption is foundational to preventing and addressing health inequities. Equitable access to reliable, relevant and safe information and news systems supports this principle.
3. **Population health and prevention.** This means ensuring communities have reliable, relevant news and information for preventing and addressing health concerns during an era of escalating climate disruption.
4. **One Health.** The dominant understanding of health in the community is very individualistic. It does not generally encompass planetary health or One Health concepts. Again, this illustrates the importance of ensuring communities have access to reliable, relevant news and information so they are empowered to contribute to mitigation and adaptation within these more holistic concepts.
5. **Evidence-informed policy making.** Governments are often reluctant to implement evidence-informed policies, especially in the areas of climate mitigation and adaptation, if they do not perceive strong community support for such policies. This underscores the importance of ensuring reliable, relevant and safe news and information systems that will help inform and engage communities in supportive, effective, equitable policies.
6. **Partnership-based working across all levels of government and beyond.** This principle underscores the importance of collaboration across sectors, silos and jurisdictions. Reliable, relevant and safe news and information systems are vital to enable this way of working, by sharing news and connections and helping to break down traditional silos and vested interests seeking to maintain the status quo and oppose climate action.

3. Which of the various types of greenhouse gas emissions discussed above should be in scope of the Strategy's emission reduction efforts?

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4. What existing First Nations policies, initiatives, expertise, knowledge and practices should the Strategy align with or draw upon to address climate change and protect First Nations country, culture and wellbeing?
5. What types of governance forums should be utilised to facilitate co-design of the Strategy with First Nations people to ensure First Nations voices, decision-making and leadership are embedded in the Strategy?

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Proposed Objective 1: Measurement

6. Beyond the schemes already noted above, is your organisation involved in any existing or planned initiatives to measure and report on health system emissions and/or energy use in Australia?
7. What additional data and information is required to support targeted emissions reduction efforts within health and aged care?

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Proposed Objective 2: Mitigation

8. What do you think of these proposed focus areas for emissions reduction? Should anything else be included?
9. Which specific action areas should be considered relating to the **built environment and facilities (including energy and water)**, over and above any existing policies or initiatives in this area?
10. Which specific action areas should be considered relating to **travel and transport**, over and above any existing policies or initiatives in this area?
11. Which specific action areas should be considered relating to **supply chain**, over and above any existing policies or initiatives in this area?
12. Which specific action areas should be considered relating to **medicines and gases**, over and above any existing policies or initiatives in this area?
13. Which specific action areas should be considered relating to **waste**, over and above any existing policies or initiatives in this area?
14. Which specific action areas should be considered relating to **prevention and optimising models of care**, over and above any existing policies or initiatives in this area?

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15. What can be done to involve private providers within the health system in the Strategy's emissions reduction efforts?
16. Where should the Strategy prioritise its emissions reduction efforts? a. How should the Strategy strike a balance between prioritising emissions reduction areas over which the health system has the most direct control and prioritising the areas where emissions are highest, even if it is harder to reduce emissions in these areas? b. Which of the six sources of emissions discussed above (on pages 13 to 18 of the Consultation Paper) are the highest priorities for action?
17. What 'quick wins' in relation to emissions reduction should be prioritised for delivery in the twelve months following publication of the Strategy?

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Proposed Objective 3: Adaptation

18. What health impacts, risks and vulnerabilities should be prioritised for adaptation action through the Strategy? What process or methodology should be adopted to prioritise impacts, risks and vulnerabilities for adaptation action?
19. Should the Australian government develop a National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan? If yes: a. What are the key considerations in developing a methodology? b. How should their development draw on work already undertaken, for example at the state and territory level, or internationally? c. What are the key areas where a national approach will support local/jurisdictional vulnerability assessment and adaptation planning?

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20. Would there be value in the Australian government promoting a nationally consistent approach to vulnerability assessment and adaptation planning for the health system specifically, for instance by issuing guidance and associated implementation support tools for states, territories and local health systems? If yes, what topics should be covered to promote a nationally consistent approach? What examples of existing guidance (either from states/territories or internationally) should be drawn from?
21. What immediate high-priority health system adaptation actions are required in the next 12 to 24 months?

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Proposed Objective 4: Health in All Policies

22. What are the key areas in which a Health in All Policies approach might assist in addressing the health and wellbeing impacts of climate change and reducing emissions?
A whole-of-government approach is required to enable policies that support development of a news and information ecosystem that is reliable, relevant and safe for communities engaging with climate mitigation and adaptation. It requires policies to tackle misinformation, disinformation, racism, and polarisation, as well as the market dominance of digital platforms such as Meta and Google. It also requires policies that support social cohesion, equity, digital inclusion, media literacy, health literacy and climate literacy. It means developing media policies that support a more diverse and sustainable news and information ecosystem, including through the development of philanthropy and reforms to support the growth and development of not for profit media organisations. It also involves concerted efforts to tackle the problem of 'news deserts' – communities (whether geographic or other forms) that currently do not have access to reliable, local news and information. Many more communities are under-served in this respect; they may have a local newspaper or a local Facebook group, for example, but these news and information sources are under-resourced and ill-equipped to cope with communities' needs for reliable news and information during an era of escalating climate disruption.
23. What are the most effective ways to facilitate collaboration and partnerships between stakeholders to maximise the synergies between climate policy and public health policy? What are some successful examples of collaboration in this area?

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Enablers

24. How could these enablers be improved to better inform the objectives of the Strategy? Should any enablers be added or removed?
Communications is critically important. However, this should be understood as a structural issue, rather than as being about having a 'communications strategy'. Developing a reliable, relevant and safe news and information system requires structural change and a whole-of-government effort as outlined in previous sections.
25. For each of these enablers: a. What is currently working well? b. What actions should the Strategy consider to support delivery?

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Thank you for taking the time to complete this survey – your feedback is greatly appreciated!

Please submit this form in Word format to Health.Climate.Consultation@health.gov.au.

ENVIRONMENTAL
HEALTH AUSTRALIA

24 July 2023

Department of Health and Aged Care
Health.Climate.Consultation@health.gov.au

Re: National Health and Climate Strategy

Please find attached comments from Environmental Health Australia on the National Health and Climate Strategy.

Environmental Health Australia Ltd. (EHA) is a not-for profit organisation and founding member of the International Federation of Environmental Health. EHA is the peak environmental health professional organisation in Australia advocating environmental health issues and has been representing the professional interests of all environmental health practitioners since 1920.

EHA supports our industry in preventative health, regulation, policy and education of all environmental health matters. Our members are professionals working within local, state and federal government as well as private industry and academia in areas of environmental health education, policy, scientific research and law enforcement.

Thank you for the opportunity to provide input into the national strategy.

Yours faithfully,



Phil Swain LFEHA
President
Environmental Health Australia

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NATIONAL HEALTH AND CLIMATE STRATEGY

What is your name?	
[redacted]	
What is your email address?	
[redacted]	
What is your organisation?	
This is a joint submission of the following Professional Nursing Organisations: - **The Australian College of Nursing** - **Australian Primary Healthcare Nursing Association** - **Climate Action Nurses Organisation**	-
Have you read and agreed to the Privacy Statement? (NB we will not be able to use your submission unless you tick this box)	
☒ I have read and agreed to the Privacy Statement	
Do you identify as Aboriginal and/or Torres Strait Islander? (Yes/No/Prefer not to say)	
[redacted]	
Please select which applies to you: ☐ Individual citizen ☐ Health Service Provider ☐ Industry and Life Sciences Organisation or Representative ☐ Academic or Researcher ☒ Primary and/or Allied Health Peak or Advocacy Organisation or Representative ☐ Aged Care Service Provider ☐ First Nations Health Service Provider ☐ First Nations Community Group ☐ First Nations Peak or Advocacy ☒ Medical College or Peak professional body	

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About the individual contributors to the submission

Australian College of Nursing

The Australian College of Nursing (ACN)

The Australian College of Nursing is the professional body and leader of the nursing profession. We are a for-purpose organisation committed to our mission of Shaping Health, Advancing Nursing.

We support nurses to uphold the highest possible standards of integrity, clinical expertise, ethical conduct, and professionalism through our six pillars of Education, Leadership, Community, Social Impact, Advocacy and Policy. Our membership comprises clinical nurse experts, organisational leaders, academics, educators, researchers, and early and mid-career nurses seeking leadership roles.

The Australian College of Nursing is a national body that drives change to enhance the delivery of health services to the Australian community. We are an organisation fearless in addressing the issues affecting the nursing profession or Australia's health care systems.

apna

Australian Primary Care Nurses Association (APNA)

The Australian Primary Health Care Nurses Association (APNA) is the peak body and professional membership association for all nurses working outside a hospital setting in Australia. APNA champions the role of primary health care nurses; to advance professional recognition, ensure workforce sustainability, nurture health leadership, and optimise nurses' role in patient-centred care.

CLIMATE ACTION NURSES | Empower • Educate • Activate

Climate Action Nurses (CAN)

Climate Action Nurses is a dedicated collective of Australian nurses whose mission is to empower, educate, and activate climate action among fellow nursing professionals. We achieve this through the implementation of four strategic pillars:

1) policy advancement,
2) advocacy efforts,
3) educational initiatives, and
4) research endeavours.

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Questions for feedback from the Consultation Paper

Introduction

1. How could these objectives be improved to better support the vision of the Strategy?

Areas of support:

- Strong support for a Health in All Policies approach.
- Strong support for the Commonwealth in seeking to minimise health systems' contribution to carbon emissions.
- Strong support for recognition of the importance of health systems' resilience.

Areas of improvement:

- The most effective strategies are those where a clear vision and purpose underpin tangible actions. The Consultation Paper does not yet contain a Vision Statement to underpin the objectives and activities of the Strategy. A Vision Statement should be created as a priority so that the goals can be reviewed thoroughly. The recommended Vision should be: 'A climate resilient community and regenerative healthcare system'.
- The objectives currently lack detail to provide a fulsome review. The Strategy should clearly outline the goals and what they will do.
- Any strategy to reduce the health sector's impact on the planet and improve community resilience to the health impacts of climate change cannot be successful if we do not first prioritise the development of evidence-based measurement approaches.
- The intent of the Strategy - as articulated by the health and environment sector - is to secure the health of current and future generations in the context of the climate crisis. Therefore, it is recommended that the current approach of the Consultation Paper be amended to reflect a health systems paradigm. It is recommended that the order and emphasis be as follows:

Objective 1. Promoting and protecting health and wellbeing — this Strategy will inform and guide the development of policy and initiatives that embed health and climate founded on First Nations knowledges[1] across all portfolios at both national, state and territory and local government levels.

Objective 2. A climate resilient community — this Strategy will support the development of initiatives to build community, health and aged care system resilience and capacity to respond to the health impacts of climate change.

Objective 3. A regenerative health and aged care system — this Strategy will guide the development of a national regenerative plan for health and aged care, informed by a comprehensive assessment of the Australian health and aged care system's carbon footprint and reflecting the best scientific evidence. This regenerative plan for health and aged care is about achieving sustainable healthcare regeneration, not just net zero.

- The Strategy should articulate specific emissions reduction targets, including:
  - An updated Nationally Determined Contribution that reflects the current health-climate emergency. Health and environment sector stakeholders are proposing a reduction in national greenhouse gas emissions of 75% below 2005 levels by 2030 and net zero

[1] Advice from ACN's First Nations Faculty has determined how we will use knowledge and/or knowledges in different contexts.

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emissions by 2035 for all sectors, including healthcare and export emissions. However, the healthcare sector must also strive for regenerative sustainability goals.

- Objective 1 should accompany a list of specific elements to be measured. Measures need to be both ambitious measurable, and transparent.
- Objective 1 should be considered an enabler and moved into revised Objective 3 (outlined above).

2. How could these principles be improved to better inform the objectives of the Strategy?

- The purpose of **Principles** within the Strategy is to provide a lens through which the objectives and actions are evaluated. As such, it is recommended that the fundamental human right to health and a safe planet primarily underpins the principles of the Strategy. It should be noted that the recently declared resolution by the UN states that everyone has a right to a clean, healthy, and sustainable environment.[2]
- The principles should be expanded to include intra- and inter-generational justice.
- The principles should be expanded to include trauma-informed care, recognising that healthcare professionals and the community experience significant rates of trauma from the increasing severity and frequency of climate-related natural disasters.[3]
- The inclusion of Principle 1 – First Nations Leadership is essential, including integrating First Nations consultation and knowledge as the foundation for the strategy.
- While the inclusion of Principle 4 - **One Health** - is welcomed, it is crucial that the Strategy take a broad approach to the impacts of global environmental change on human health. Therefore, the Strategy is recommended to adopt a Planetary Health approach, which fully captures the intersection of broader environmental impacts on human health outcomes in the context of planetary boundaries and sustainable development.
- Principle 5, Evidence-informed policymaking: This Principle could be enhanced through recognition of the importance of life cycle assessments, along with the principles of cost-effectiveness analysis when considering where resources can be allocated to maximise population health gains.
- Principle 6 should be expanded to include the role of the healthcare workforce across all settings, including primary, tertiary and community care.
- Principle six should expand to include collaboration with consumers. If the principle of Partnership is realised, the Strategy must establish governance mechanisms, programs and initiatives that enable and facilitate partnership across all relevant stakeholders.

3. Which of the various types of greenhouse gas emissions discussed above should be in the scope of the Strategy's emission reduction efforts?

Areas of support:

Unequivocal support for including scope 1, 2 and 3 emissions. The health and aged care system must do its part and be as ambitious as possible in mitigating its emissions without compromising

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[2] UN Environment Program (2022) In a historic move, UN declares healthy environment a human right.

[3] Australian College of Nursing (ACN) & Health Professionals Bank (HBP) (2022) 'Nurse leadership during disruptive events – A report by the Australian College of Nursing and Health Professionals Bank 2022', ACN, Canberra

quality patient care.[4] This includes thoroughly assessing all associated emissions and how to reduce them best.

Areas for improvement:

- To best provide fulsome feedback on the inclusion of certain types of emissions in the Strategy, it is essential that a clear definition of 'health system' is provided. Without a clear purpose, there may be critical sources of emissions that are omitted from the Strategy.
- The Strategy should include all health and aged care system emissions, including patient and visitor transport.
- The Strategy should promote nurse leadership to help reduce and manage emissions associated with aged care facilities.[5]
- To ensure Australia, as a developed nation, does its fair share in reducing emissions, the Strategy should support an updated Nationally Determined Contribution that reflects the current health-climate emergency. Health and environment sector stakeholders are proposing a reduction in national greenhouse gas emissions of 75% below 2005 levels by 2030 and net zero emissions by 2035 for all sectors, including healthcare and export emissions. To reach these targets, it will be important that the health sector includes all emissions and develops strategies to reduce them. Additionally, emission reduction targets should be based on the principles of a regenerative healthcare sector.
- Regenerative healthcare encompasses establishing a healthcare system that actively contributes to a healthier and more sustainable future. It focuses on reducing the ecological footprint generated by healthcare activities and actively participating in the restoration of environmental degradation caused by the impact of healthcare on the planet through sustainable practices.
- While it is recognised that under the Paris Agreement, Australia is responsible for Australian emissions, scope three emissions in the context of the Strategy should include healthcare products manufactured overseas. Many healthcare products are imported, so the health system must be responsible for their associated emissions.
- The excessive dependence on non-plant-derived foods in the healthcare industry contributes significantly to the sector's high emissions. Implementing a comprehensive integration of plant-based diets in healthcare within this strategy will reduce emissions.

4. What existing First Nations policies, initiatives, expertise, knowledges,[6] and practices should the Strategy align with or draw upon to address climate change and protect First Nations country, culture, and social and emotional well-being?

The Strategy MUST align with and draw upon First Nations expertise, knowledge, and practices. Some key aspects to consider include:

1. **Traditional Ecological Knowledge (TEK):** First Nations communities have accumulated generations of knowledge about their lands, are at the forefront of the climate emergency impacts and are holders of ecosystems, knowledge, and sustainable practices. The Strategy

[4] Australian College of Nursing (ACN) (2022) 'Position Statement: Reimagining the role of nursing in emissions reduction' - A Position Statement by ACN, ACN, Canberra

[5] Australian College of Nursing (ACN). 2021, 'Ethical leadership in emissions reduction – Position Statement', ACN, Canberra.

[6] Advice from ACN's First Nations Faculty has determined the use of knowledge and/or knowledges in different contexts.

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should recognise and integrate TEK into decision-making processes, as it provides valuable insights on climate change adaptation, resource management, and ecological restoration.

2. **Land Stewardship and Resource Management:** Many First Nations have implemented successful land stewardship practices to preserve biodiversity, restore ecosystems, and sustainably manage natural resources. The Strategy should learn from and support these initiatives, which often prioritise long-term sustainability and the intersectionality of land, water, sky, and knowledges. This is linked to the vital principle recommended in Section 3 of this document of Regenerative Healthcare.
3. **Indigenous-led Climate Action:** Numerous First Nations communities have proactively addressed climate change. The Strategy should collaborate with and support these Indigenous-led climate action initiatives, recognising the expertise and unique knowledges they bring.
4. **Indigenous Rights and Self-Determination:** Upholding Indigenous rights and self-determination is essential to protecting First Nations country, culture, and social and emotional well-being in the face of climate change. The Strategy should align with existing policies and frameworks that support Indigenous governance, decision-making, and the recognition of land rights, ensuring meaningful participation and partnerships with First Nations throughout the process. This strategy must outline HOW the health and social and emotional well-being of First Nations peoples will be advanced through this strategy.
5. **Collaborative Partnerships:** Building strong, respectful, collaborative partnerships with First Nations organisations, communities, Elders, and knowledge holders is crucial. The Strategy should actively engage with Indigenous stakeholders, respecting their autonomy, protocols, and knowledges.[7] Aboriginal Community Controlled Healthcare Organisations should be consulted to drive local context, response, and ownership of the strategy. By fostering inclusive and equitable partnerships, the Strategy can ensure that it reflects First Nations peoples' diverse needs and priorities. This strategy must clearly outline HOW engagement will be achieved.
6. **Strengths-based Approach:** The Strategy should adopt a strength-based approach that recognises and builds upon First Nations communities' inherent strengths and resilience. This approach acknowledges the rich cultural heritage, diverse knowledge systems, and community cohesion within First Nations. By focusing on strengths rather than solely on challenges, the Strategy can empower communities and support their efforts in climate change mitigation and adaptation. This involves nurturing community-led solutions, fostering cultural revitalisation, and promoting self-determination. The strength-based approach acknowledges the contributions and expertise of First Nations. It enhances First Nation's capacity to address climate change while preserving their country, culture, and overall social and emotional well-being.

5. What types of governance forums should be utilised to facilitate the co-design of the Strategy with First Nations people to ensure First Nations voices, decision-making and leadership are embedded in the Strategy?

Areas of support:

[7] Advice from ACN's First Nations Faculty has determined how we will use knowledge and/or knowledges in different contexts.

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- We strongly support co-designing governance structures for the Strategy with First Nations peoples.

Areas for improvement:

The Strategy will only be effective for First Nations peoples if it is underpinned by genuine engagement and co-design principles. The Department should seek to listen to and learn from First Nations Elders and communities and lead organisations about the priorities for tackling climate change's health impacts.

- The Strategy must ensure there is an ongoing process to embed First Nations cultural knowledge and practice into its goals, targets, and actions.
- The Strategy should seek to integrate objectives and actions being developed through the Measuring What Matters Framework community consultation processes and the Australian Centre for Disease Control objectives related to First Nations communities.

Proposed Objective 1: Measurement

6. Beyond the schemes already noted above, is your organisation involved in any existing or planned initiatives to measure and report on health system emissions and energy use in Australia?

Areas of support:

- General support for an evidence-based approach to setting priorities related to the decarbonisation of the healthcare system.
- General support for Commonwealth schemes outlined in the Consultation Paper.
- General support for Commonwealth leadership that ensures coordination and collaboration across the federated system.

Areas for improvement:

- A clear definition of what 'health system' means is required to ensure emissions across the healthcare value chain are accounted for. For example, clarify if the 'health system' includes aged care and Australian healthcare suppliers and manufacturers.
- The purpose of the Strategy is to clearly define HOW the Department will act on the impacts of climate and health. This goal must be underpinned by a Health in all Policies (HiAP) approach and centred on the lived experience of consumers. As such, while Objective 1 is crucial to the decarbonisation of the health system, it should be understood as an enabler to mitigation and not emphasised as a standalone objective.
- This section must reflect the need to establish emissions reduction targets based on current evidence and be as ambitious as possible based on the principles of a regenerative healthcare system. [8]

[8] Australian College of Nursing (ACN) 2023. The Nursing Response to the Climate Emergency - White Paper. Canberra, ACN

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Existing and planned initiatives:

- The Global Green and Healthy Hospitals (GGHH) Climate Impact Check-up Tool[9] is a free carbon footprint tool available to all health facilities members of the international GGHH network. This tool measures GHG emissions from:

  Scope 1: Stationary combustion; Mobile combustion; Fugitive emissions (cooling and medicinal/anaesthetic gases); Waste on-site treatment.

  Scope 2: Purchased electricity; Purchased steam, heat, or cooling.

  Scope 3: Extra supply chain; Business travel; Electricity transmission and distribution losses; Inhalers; Waste off-site treatment; Employee commuting; Patient commuting.
- Several states and territories have existing or planned environmental reporting systems for public health services. The Strategy should build on these existing data sources to include bottom-up data and reduce duplication of effort. For example:

  1. The public health service in Victoria reports data on energy, water, waste, paper, vehicle fleet and medical gases through the Victorian Department of Health Environmental Data Management System.
  2. The public health service in NSW reports data on energy, waste, and water in alignment with the NSW Government Resource Efficiency Policy.[10]

7. What additional data and information is required to support targeted emissions reduction efforts within health and aged care?

Areas of support:

- Strong support for the inclusion of scope three emissions.

Areas for improvement:

- While the Strategy must take an ambitious approach to climate action, this action should not compromise consumer experience or patient outcomes. As such, the Strategy should include data and information on the lived experience of consumers and, where possible, enable consumer-led solutions.
- All emissions due to the Australian health and aged care system should be measured, including emissions from products sourced, medications from overseas, food, and patient and visitor travel.
- The health system's carbon footprint measurement should be informed by both top-down and bottom-up data (where available). Measurement must not rely solely on data available through Australia's Greenhouse Gas Accounts, as emissions from entities below the National Greenhouse and Energy Reporting Scheme reporting threshold will not be captured.
- The Strategy must consider the emissions reduction targets and actions already being undertaken to ensure the Strategy is aligned with best practices. For example, Hunter New England Local Health Service has committed to carbon neutrality by 2030.
- The Strategy should guide establishing the carbon footprint of different models of care to help inform decision-making.
- Measuring the impact of food on emission reduction, in conjunction with increasing access to planetary health diets (plant-based diets), would directly impact emissions. Food production

[9] GGHH (n.d.) Global Green and Healthy Hospitals

[10] State of NSW and Office of Environment and Heritage (2014) NSW Government Resource Efficiency Policy

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contributes an estimated 30% of Global greenhouse gas emissions. New Zealand has made advancements in defining the policy objectives for promoting 'Sustainable Kaipara'.[11] A summary of sustainable food consumption was performed to assess the impact of various dietary influences on greenhouse gas emissions. This research found that a Western standard meat-based diet produces about 7.2kg of Co2 equivalent daily, while a vegetarian diet produces 3.8 kilograms and a vegan diet 2.9kg. Measuring shifts of emission reduction strategies within the healthcare system, such as the proposed strategy to move towards a planetary health diet, would be beneficial in understanding the impact of strategic initiatives.

Proposed Objective 2: Mitigation

8. What do you think of these proposed focus areas for emissions reduction? Should anything else be included?

Areas of support:

- Recognising the urgency with which we must act, the proposed focus areas are a good starting point for emissions reduction within the Australian health and aged care system. [12]
- Including prevention and models of care, supply chains, medicines, and gases is positive but not comprehensive.

Areas for improvement:

- To provide fulsome feedback on the proposed focus areas, the Strategy should clearly outline the justification for selecting these six priorities.
- While the health and aged care system has an existential responsibility to do its part to contribute to the Nationally Determined Contribution under the Paris Agreement, the mitigation of carbon emissions is also a preventive health measure. A mitigation objective aims to ensure that the sector is doing all possible to fulfil the 'do not harm' principle, which should be highlighted from the start of the Strategy.
- The purpose of the Strategy is to ensure the co-benefit of action on climate and health is fully realised. As such, objective two should include HOW the Department will support emissions reductions that benefit health outcomes across all sectors. This should consist of supporting the implementation of decarbonisation strategies across industries to improve intergenerational health and well-being.

Objective 2 should clearly outline strategies to support the reduction of emissions across all sectors.

Objective 2 should set a target for decarbonising the health and aged care sector. It should include:

- Strategies for communicating emission reduction targets
- Identifying carbon hotspots
- Prioritising mitigation actions
- Establishing effective governance structures

[11] Sustainable Kaipara (n.d) Sustainable Kaipara

[12] Australian College of Nursing (ACN) (2022). 'Position Statement: Reimagining the role of nursing in emissions reduction' - A Position Statement by ACN, ACN, Canberra.

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- Facilitating appropriate resource allocation and policy development
- Prevent duplication of effort and set a common pathway for decarbonising Australia's health and aged care system (including public, private, tertiary, and primary care, supply chains and services).

Objective 2 should include energy as a standalone focus area considering its significant contribution to the health system's carbon footprint.

Objective 2 should include food as a focus area as it significantly contributes to the health system's carbon footprint. Research indicates that food production contributes an estimated 30% of Global greenhouse gas emissions. New Zealand has made advancements in defining the policy objectives for promoting 'Sustainable Kaipara'.[13] A summary of sustainable food consumption was performed to assess the impact of various dietary influences on greenhouse gas emissions. This research found that a Western standard meat-based diet produces about 7.2kg of Co2 equivalent daily, while a vegetarian diet produces 3.8 kilograms and a vegan diet 2.9kg.[14] By shifting towards plant-based diets in healthcare, we can enhance patient outcomes, mitigate the environmental impact of food production, and promote a healthier and more sustainable future.[15] The National Strategy on Climate and Health must revisit, incorporate, and adapt the policy recommendations outlined by the EAT-Lancet Commission.[16] Specifically, that:

1. Funding the research efforts of organisations developing guidelines based on the planetary health diet adapted to the Australian context.
2. Supporting the implementation of these guidelines through regulatory efforts.
3. Enabling access to planetary health diets by increasing the affordability of healthy and sustainably produced foods through the alignment of subsidies, taxes, and incentives[17]
4. Waste should be renamed to sustainable resource use in keeping with a health paradigm for sustainability. This is aligned with the principles of creating a regenerative healthcare system.

9. Which specific action areas should be considered relating to the built environment and facilities (including energy and water), over and above any existing policies or initiatives in this area?

Areas of support:

- Strong support for reducing emissions from building design, construction, and building operation.
- Strong support for transitioning to renewable energy sources and electrification.

[13] Sustainable Kaipara (n.d) Sustainable Kaipara

[14] Scarborough, P., Appleby, P. N., Mizdrak, A., Briggs, A. D. M., Travis, R. C., Bradbury, K. E., & Key, T. J. (2014). Dietary greenhouse gas emissions of meat-eaters, fish-eaters, vegetarians and vegans in the UK. *Climatic Change*, *125*(2), 179-192. https://doi.org/10.1007/s10584-014-1169-1

[15] Willett, W., Rockström, J., Loken, B., Springmann, M., Lang, T., Vermeulen, S., Garnett, T., Tilman, D., DeClerck, F., & Wood, A. (2019). Food in the Anthropocene: the EAT–Lancet Commission on healthy diets from sustainable food systems. *The lancet*, *393*(10170), 447-492.

[16] The EAT-Lancet Commission on Food, Planet, Health (n.d.) The EAT-Lancet Commission

[17] Garnett, T. (2013). Food sustainability: problems, perspectives and solutions. *Proceedings of the nutrition society*, *72*(1), 29-39.

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Areas for improvement:

- Beyond the health system, the Strategy should outline HOW it will support the electrification and improved energy efficiency in all buildings to improve health and well-being.
- The COVID-19 pandemic highlighted the need to develop an evidence-based approach to indoor air ventilation that responds to infection control and decarbonisation needs. Effective indoor air ventilation must be included as a specific action area.
- The Strategy should set a target date for ensuring all hospitals and facilities yet to be built gas free and renewably powered by 2030.
- The Strategy should set a target date for transitioning existing hospitals, health, and aged care facilities to be gas free and renewably powered.
- The Strategy should outline how it will enable public health services to purchase renewable energy from the grid, for example, via Power Purchase Agreements.
- The Strategy should set a target for establishing nationally consistent guidelines for hospitals, health, and aged care facilities to be designed and constructed to be net zero emissions.
- The Strategy should outline how it will support healthcare suppliers and manufacturers to transition to net zero buildings and facilities.
- The Strategy should set out how it will support action to reduce demand for extensive, resource-intensive healthcare facilities and ensure only necessary buildings are constructed, e.g., by scaling up telehealth, health promotion, and care closer to home, without compromising patient outcomes. This can be achieved by leveraging all healthcare professionals, particularly Registered Nurses and Nurse Practitioners, to work to their full scope of practice and be viewed as leaders in emissions reduction.[18]

10. Which specific action areas should be considered relating to travel and transport, over and above any existing policies or initiatives in this area?

Areas of support:

- Strong support for building on existing work to improve fuel quality and reduce noxious vehicle emissions.

Areas for improvement:

- The Strategy must include specific targets and timeframes for adopting electric and zero emissions transport and an ambitious fuel efficiency standard.
- The Strategy must outline HOW it will respond to identified infrastructure challenges.
- The Strategy must support collaboration between state and territory government, local government, and health services to improve active and public transport access and incentives for patients, staff, and visitors at existing and new facilities.
- Including an action within the travel and transport focus area highlights the importance of redesigning models of care to reduce the need for transport. (e.g., through virtual models of care, remote monitoring, and telehealth). Fostering integrated team-based care supported by shared data systems can also reduce transport emissions while reducing the need for patients to travel to multiple appointments across diverse locations.

[18] Australian College of Nursing (ACN) (2021) '[Ethical leadership in emissions reduction – Position Statement]', ACN, Canberra

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11. Which specific action areas should be considered relating to the supply chain, over and above any existing policies or initiatives in this area?

Areas of support:

- General support for reducing emissions within supply chains and leveraging joint purchasing power.[19]

Areas for improvement:

- The Strategy must include specific targets for reducing emissions from the health system's supply chain. Targets should align with the UK National Health Service Net Zero Supplier Roadmap. This will provide direction and certainty for health services, manufacturers, and suppliers.
- While the focus of actions 2.3.1 and 2.3.2. are optimistic, defined targets for each action must be included. For example, a target to establish nationally consistent procurement standards that include criteria for greenhouse gas emissions, resource depletion (water, energy, and material consumption), chemical and toxic impact on human and environmental health, and human rights, labour rights and gender equality, are all important areas for consideration. All targets must be specific, ambitious, and measurable.
- The Strategy should set about convening a supply chain group of state and territory health purchasing bodies, public and private healthcare providers, and healthcare suppliers and manufacturers to work collaboratively in reducing the health systems' carbon footprint associated with the supply chain.
- The Strategy should support the development of a universal methodology for healthcare's supply chain to measure and report on their emissions consistently.
- The Strategy must consider food supply chains from local, planetary, diet-friendly sources.

12. Which specific action areas should be considered relating to medicines and gases, over and above any existing policies or initiatives in this area?

Areas of support:

- General support for including emissions reduction related to medicines and gases.

Areas for improvement:

- Action 2.4.1 should include a target for eliminating the use of desflurane.
- Action 2.4.2 should include a target for reducing leakage from piped nitrous oxide.
- The Strategy should outline actions for emissions reduction of medications, including but not limited to:
  - Investment in emerging technology platforms designed to improve pharmaceutical stock management and reduce waste.
  - Supporting research to determine the environmental impacts of medications to establish environmentally preferred options and communicate this to clinicians.
  - Support and scale up Choosing Wisely.

[19] Australian College of Nursing (ACN) (2021) '[Nursing Leadership in Emissions Reduction – Guiding Principles]', ACN, Canberra

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- Work with the Therapeutic Goods Administration to review packaging and information requirements for medicines to reduce waste and carbon emissions.

13. Which specific action areas should be considered relating to waste, over and above any existing policies or initiatives in this area?

Areas of support:

- General support for the inclusion of emissions reduction related to waste.

Areas for improvement:

- The Strategy should minimise waste and encourage circularity across all waste streams. Actions and targets to prevent food and medical waste must be included, as both contribute significantly to healthcare's carbon footprint. [20]
- The Strategy should set an ambitious, specific, and measurable target to establish nationally consistent procurement standards (outlined above).
- The Strategy should outline HOW it will convene a supply chain group of state and territory health purchasing bodies departments, public and private healthcare providers, and healthcare suppliers and manufacturers to work collaboratively in reducing the health systems' carbon footprint.
- The Strategy should adopt global best practice standards by reviewing pollution reduction technology used in healthcare waste treatment facilities.
- The Strategy must set out how to engage and support the healthcare workforce in sustainable resource use, waste management and segregation.
- The Strategy should establish a goal for conducting an education campaign on the best disposal options for unused medications for healthcare workers.
- The Strategy should aim to reduce the vast array of consumables throughout the healthcare system, including dressings, equipment, packaging, and personal protective equipment.
- Actions 2.5.1 - 2.5.4 need to go beyond 'encouraging' and 'promoting' action. Ambitious, specific, and measurable targets for each action are required.

14. Which specific action areas should be considered relating to prevention and optimising models of care, over and above any existing policies or initiatives in this area?

Areas of support:

- Strong support for the inclusion of preventive health. One of the best ways to reduce emissions from the healthcare sector is to keep people as healthy as possible for as long as possible, and preventive health should be a core function of the Strategy.[21]
- Strong support for the inclusion of optimising models of care. This improves consumer experience and patient outcomes and reduces resource waste exacerbating the climate crisis. Nurses, the largest healthcare workforce in Australia, must be able to work within their full scope of practice, particularly within the primary healthcare context. Providing Medicare

[20] Australian College of Nursing (ACN) (2023) The Nursing Response to the Climate Emergency - White Paper. Canberra, ACN.
[21] International Council of Nurses (2018) Nurses, climate change and health

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Benefits Schedule (MBS) items to nurses would increase access to healthcare whilst reducing transport and emissions per healthcare service provision.

Areas for improvement:

- Non-communicable diseases (NCDs) are the world's most significant disease burden. The Strategy should explicitly articulate how NCDs are exacerbated by climate change and how prevention will support reductions in disease burden.
- While actions 2.6.1 - 2.6.4 are positive, they must include specific and measurable targets.
- The Strategy should explicitly support the commitment of the National Preventive Health Strategy to 5% of health spending for prevention.
- The Strategy should explicitly include actions on coordinating activity across the existing and new national strategies.
- The Strategy should explicitly include how it will support critical policy aspects in other portfolios that impact health outcomes.
- The Strategy should explicitly include actions for supporting state and territory governments in preventive health measures, for example, active transport.
- The Strategy should explore opportunities for health system funding reform (Medicare, private health insurance) to support health promotion, primary solid care, optimise high-value care, and prevent low-value and harmful care.
- Prevention and optimising models of care should be separate areas of focus within the Strategy, as the actions that would need to be developed to address each of these areas are distinct yet equally important. Prevention necessitates population health in all policy approaches that target health determinants to keep people healthy and reduce their need to access health services. Optimising models of care requires a value-based healthcare approach that considers outcomes that matter to people and communities for the cost of achieving those outcomes across the entire care pathway.
- By prioritising health promotion and illness prevention, significant reductions in emissions can be achieved through decreased illness rates and subsequent lower demand for healthcare services whilst enhancing overall well-being. This can be done by:
  - Increasing funding for primary prevention, including the National Preventive Health Strategy, the National Strategy for Injury Prevention, the National Obesity Strategy, and the Australian Centre for Disease Control.
  - Increasing funding for beneficial screening and health promotion while regulating adverse influences from commercial entities (primordial prevention).
  - Reform primary care organisations and funding to support non-communicable disease management (secondary and tertiary prevention) and high-value primary care.
  - Review and reform hospital care practices to optimise high-value care and prevent low-value and harmful care.
  - Supporting policy monitoring and evaluating through funding research.

15. What can be done to involve private providers within the health system in the Strategy's emissions reduction efforts?

Areas of support:

- General support for including private providers within the health system - pending management of conflicts of interest where appropriate.

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Areas for improvement:

- The Strategy should set a goal to include climate change mitigation and adaptation requirements in healthcare accreditation standards.
- The Strategy should demonstrate leadership by developing a clear, ambitious decarbonisation plan that sets out responsibilities and opportunities for the private sector, provide certainty, and helps guide decisions and investment.
- There is much more to do in increasing understanding among health executives and boards about their fiduciary responsibility ('duty of care') and the potential for personal liability if they fail to account for climate risks in strategic and operational plans. The Strategy should set a goal that requires all health services and other relevant services to conduct climate change risk assessments as a core risk management strategy.

16. Where should the Strategy prioritise its emissions reduction efforts?

a. **How should the Strategy strike a balance between prioritising emissions reduction areas over which the health system has the most direct control and the places where emissions are highest, even if it is harder to reduce emissions in these areas?**

b. **Which of the six sources of emissions discussed above (on pages 16 to 21 of the Consultation Paper) are the highest priorities for action?**

The strategy must aim to mitigate against all six sources of emissions: built environment; travel and transport; supply chain; medicine and gases; waste, prevention and optimising models of care. But there must be a balance, and priorities may shift due to funding, staffing and timelines for capital projects.

What is certain is the need for each priority area to have specific and measurable goals – both in the short term and longer term.[22] For example:

1. Energy Efficiency in Buildings:
   - By 2030, all new builds and renovations must meet a five-star energy rating.
   - By 2040, all existing healthcare facilities must meet a five-star energy rating.

2. Sustainable Supply Chains:
   - All new supply contracts should align with sustainable supply chains.
   - Existing contracts should be transitioned to sustainable supply chains by 2030.

3. Transition to Electric Vehicles:
   - By 2030, all new vehicle purchases must be electric.
   - The existing vehicle fleet should gradually shift to electric as they are renewed.

4. Investing in Nurses and Nurse Practitioners:

[22] Australian College of Nursing (ACN) (2020) 'ACN Emissions Reduction Charter – Position Statement', ACN, Canberra.

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- Urgently fund MBS items for nurses and nurse practitioners to work within their full scope of practice.
- Provide funding support to upskill nurses to work within their full scope of practice, given that nurses represent the largest and most geographically diverse workforce.

To illustrate the impact of investing in nurse-led primary health models, consider the example of wound care.[23] Research shows that the uptake of clinical practice guidelines (CPG) for wound-related care, such as venous leg ulcers (VLU), is suboptimal in Australian General Practice. One of the barriers identified is that nurses are often relied upon by GPs to assess and deliver wound care. However, they are not recognised for fulfilling this crucial role and require financial support to undergo further education in wound management. Patients not receiving adequate advice or guidance for caring for their ulcers may lead to suboptimal VLU care. Poor patient outcomes may require hospitalisation and contribute to a higher carbon footprint.[24] By adequately investing in primary healthcare interventions, including support for nurse-led models of care, significant progress can be made in decarbonising the healthcare system. These initiatives have positive environmental impacts and lead to improved patient outcomes and more efficient healthcare practices.

17. What 'quick wins' about emissions reduction should be prioritised for delivery in the twelve months following the publication of the Strategy?

The following quick wins must be founded on a fully funded and extensive communication strategy with healthcare professionals and administrators to communicate the intent and extent of the strategy with easily actionable items identified. Furthermore, within the following 12 months, it is recommended that the next should be prioritised for delivery:

- Due to nurses being the largest and most geographically diverse workforce within the healthcare system, immediate funding of MBS items is required for nurses and nurse practitioners to work within their full scope of practice.
- Develop a National health vulnerability and adaptation assessment and National health adaptation plan.
- Set ambitious targets and commit to a target date to achieve health system net zero emissions.
- Support the education of healthcare professionals in the intersection between climate and health and strategies for sustainability within healthcare. Explicitly, funding is identified to support health professionals undertaking postgraduate study and research in Climate and Health related fields.

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Proposed Objective 3: Adaptation

[23] Weller, C., Team, V., Probst, S., Gethin, G., Richards, C., Sixsmith, J., Turnour, L., & Bouguettaya, A. (2021). Health literacy in people with venous leg ulcers: a protocol for scoping review. *BMJ open*, *11*(5), e044604. https://doi.org/10.1136/bmjopen-2020-044604

[24] Ibid.

18. What health impacts, risks and vulnerabilities should be prioritised for adaptation action through the Strategy? What process or methodology should be adopted to prioritise impacts, risks, and vulnerabilities for adaptation action?

Areas of support:

- Strong support for the inclusion of health systems resilience in the Strategy.
- Strong support for the inclusion of communities experiencing vulnerability.
- Welcome acknowledgement that the impacts of climate change are here now, even if mitigation by 2030 is achieved.

Areas for improvement:

- While there is support for including adaptation within the Strategy, the content within this section appears out of order with the previous objectives. It is recommended that objectives are re-organised to reflect the purpose of the strategy better as follows:
  - **Objective 1**. Promoting and protecting health and wellbeing — this Strategy will inform and guide the development of policy and initiatives that embed health and climate considerations across all portfolios at national, state and territory and local government levels.
  - **Objective 2**. A climate resilient community — this Strategy will support the development of initiatives to build community, health and aged care system resilience and capacity to respond to the health impacts of climate change. This must also be rationalised within the context of trauma-informed care, including the recommendation that health services embed trauma-informed work practices, organisational structures, and leadership to prevent the re-traumatisation of healthcare professionals, individuals, and communities.
  - **Objective 3.** A net zero health and aged care system — this Strategy will guide the development of a national net zero plan for health and aged care, informed by a comprehensive assessment of the Australian health and aged care system's carbon footprint and reflecting the best scientific evidence. However, this should be based on the principles of a regenerative healthcare system.
- While there is strong support for the inclusion of harms for communities experiencing vulnerability in times of crisis, it is also crucial that the Strategy seeks to address health harms associated with incremental climate change, including heat and sea level rise. This should be based on the principles of trauma-informed care.
- Adaptation will only be effective if the wider community understands the risks to health from climate change and is empowered to take health-protective actions. As such, the Strategy should include a fully funded public education campaign highlighting the risks to health and the health benefits of adaptation as critical to the success of any adaptation action.
- Adaptation should include thriving ecosystems.
- ' Policy responses to ameliorate impacts' should include responses across sectors and government departments, including housing and education.
- The Strategy should explicitly outline the mental health impacts of climate change, for example, climate anxiety, limited access to services during acute weather events, and limited access to open, safe spaces. This strategy should be based on trauma-informed care and work practices.
- The Strategy should recognise that health and aged care facilities can be damaged during extreme weather events and incremental changes due to climate change. Goals and targets must be set to reduce these impacts. Training and education for all healthcare professionals

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must be included in undergraduate degrees to prepare the workforce for these future challenges. Further learning will give healthcare professionals the skills and knowledge to set achievable targets and to make effective changes to help mitigate extreme weather events and incremental climate change.

- The Strategy should recognise the growing number, frequency and severity of disasters becoming a part of our world. Preparing and skilling healthcare workers for working within or leading a disaster response team is critical. Ensuring workplaces know how to respond to emergencies with crisis prevention and management is essential for dealing with future disasters. During the Australian bushfires and COVID, moral and emotional support for all healthcare workers was necessary to maintain the well-being of healthcare workers.[25] The learnings from these recent disasters should not be forgotten.
- The Strategy should recognise the overall increase in the disease burden because of climate change and include goals and specific and measurable targets as part of resilience planning.
- The Strategy should account for supply chain disruption from climate change-related events that impact both facilities and the delivery of health services.
- The Strategy should account for the health and aged care workforce facing challenges accessing healthcare facilities during extreme weather events.
- The Strategy must focus on planning for building resilient communities — not just developing emergency event response plans. This is of paramount importance.
- The mental health impacts of young people in response to climate change must also be a priority area of adaptive action.

19. Should the Australian government develop a National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan? If yes:

a. What are the key considerations in developing a methodology?

b. How should their development draw on work already undertaken, for example, at the state and territory level or internationally?

c. What are the key areas where a national approach will support local/jurisdictional vulnerability assessment and adaptation planning?

Areas of support:

- Strong support for developing a National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan.

Areas for improvement:

- Developing a National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan should be conducted as part of the National Climate and Risk Assessment processes and not as a duplication of efforts. This should be executed as a whole of government assessment and not siloed within the Department and as the Department's sole responsibility.

[25] Australian College of Nursing (ACN) & Health Professionals Bank (HBP) (2022) 'Nurse leadership during disruptive events – A report by the Australian College of Nursing and Health Professionals Bank 2022', ACN, Canberra

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- The Strategy should account for the lived experience of consumers, and all people living in Australia, as part of vulnerability and adaptation planning.
- The methodology used needs to identify policy gaps and opportunities for improving population resilience across government portfolios.

20. Would there be value in the Australian government promoting a nationally consistent approach to vulnerability assessment and adaptation planning for the health system specifically, for instance, by issuing guidance and associated implementation support tools for states, territories, and local health systems? If yes, what topics should be covered to promote a nationally consistent approach? What examples of existing guidance (either from states/territories or internationally) should be drawn from?

Areas of support:

- General support for a nationally consistent approach to vulnerability assessment and adaptation planning for the health system.

Areas for improvement:

- The assessment must consider the extensive range of vulnerabilities across different communities and regions, the wide variety of ecosystems and natural habitats and climates across Australia, the wide variety of health and wellbeing considerations, and how these are being impacted by climate change.
- It is recommended that guidance for the assessments consider policies and tools that have already been developed (e.g., at the state and territory level) and action that has already occurred (e.g., at the health service level) to avoid duplication of effort.
- It is recommended that guidance for a broad range of health and aged care services is needed, including aged care and primary care services, and adaptable to different service settings.
- It is recommended that Implementation support in tools, knowledge and capacity building, and finance is recommended. This work takes considerable time and resources, requires input from multiple internal and external stakeholders, and is new territory for many healthcare workers.
- The National Health and Climate Strategy must be resourced to provide ongoing implementation support for health services to assess and plan for climate risks.
- The Strategy should seek to adopt existing tools. Guidance and support should be provided for assisting health services to assess and plan for climate risks to healthcare infrastructure, service provision (including surges in service demands and changing burdens of disease), the health workforce, and supply chains. Relevant tools include:
  - Global Green and Healthy Hospitals frameworks
  - Queensland Climate Risk Strategy and Adaptation guides
  - Human Health and Wellbeing Climate Change Adaptation Plan for Queensland
  - NSW Climate Risk Ready program
  - Victorian Health and Human Services Climate Adaptation Plan
  - Resources from the World Health Organization
  - Sydney North Health Network Climate and Health Strategy

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21. What immediate high-priority health system adaptation actions are required in the next 12 to 24 months?

Areas of support:

- General support for prioritisation of high-priority health system adaptation actions.

Areas of improvement:

The Strategy should support:

- Education and capacity building among policymakers, community members, the health workforce, and within emergency and disaster preparedness services and agencies
- Resourcing for emergency services
- Food and housing systems, including food security (encompassing caloric and nutrition intake)
- Transport system
- Support and resources for rural and remote health services to improve resilience
- Preparedness for disruption to health system supply chains
- Responding to escalating inequity, increasing poverty, homelessness
- Preparedness for health threats resulting from human influence on natural ecosystems
- The total societal costs of climate inaction over short and long timeframes, and the implications of health-relevant policies in all sectors, must be thoroughly and systematically considered to prevent the hidden transfer of costs to the health sector and the undermining of environmental sustainability.
- Consumer consultation is required throughout this process, as many communities have already been devastated by extreme weather events, have started the preparedness planning process, and have valuable lived experience contextualised to their region.

Immediate high-priority health system adaptation actions are necessary to address the anticipated impacts of more intense El Niño and La Niña events, such as hot fire-prone summers or increased rain and flooding. Areas of priority include: Establishing surge capacity in emergency departments to handle increased patient volumes during heatwaves and enhancing public health unit resources to support emergency responses effectively.
Health Services should develop adaptation action plans based on vulnerability, and community needs assessments. In these adaptation plans, particular attention should be given to prioritising aged care facilities, as they are particularly vulnerable to extreme weather and disaster events. Providing support to primary care in affected areas, including surge capacity to bolster local services and implementing protective measures, and support for staff trained in emergency response plans, ensuring engagement with local primary care health networks. Adaptation plans for workers exposed to high heat should also be prioritised for development and implementation.

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Proposed Objective 4: Health in All Policies

22. What are the key areas in which a Health in All Policies approach might assist in addressing the health and well-being impacts of climate change and reducing emissions?

Areas of support:

- Strong support for adopting a Health in All Policies approach to the Strategy. All dimensions of climate change are interlinked with human health within the determinants of health approach. Therefore, action to reduce the health risks from climate change requires working across all sectors and all levels of government.

Areas for improvement:

- As implied by the Consultation Paper, the strategy's current structure needs revision to fully address the health risks posed by climate change, particularly for vulnerable populations. Furthermore, it is crucial to health outcomes that DHAC lead from the front in the climate response and be a key agency in the national response to the climate crisis. The overall focus of the Strategy needs to be strongly directed towards reducing the current risks to population health from climate change and maximise the health co-benefits of carefully designed climate mitigation and adaptation actions. This can be achieved through a Health in All Policies approach and the many recommendations outlined in Healthy, Regenerative and Just, endorsed by Climate and Health Alliance (CAHA) members and health and environment stakeholders.
- Women are identified as a vulnerable group within the Strategy. However, children are not mentioned at all. Given the increased vulnerability of children to the impacts of extreme climate events, prolonged flooding, and increased bushfires, children should be included as a vulnerable group. In turn, this means further investigating the specific harms children face in this era of climate change. Highlighting the impacts on children will bring climate change into closer focus.
- A priority for the Strategy must be to require the Productivity Commission to produce an evaluation of the economic costs of climate change under current emissions reduction scenarios, along with modelling the financial savings associated with the health benefits of emissions reductions across a range of sectors. For example, this should evaluate the budgetary savings associated with avoided ill-health and productivity gains from strategies to reduce emissions in the electricity and transport sector related to air quality improvements and adopting more active public transport options.
- Much more significant benefits for health could be achieved through actively planning to maximise health co-benefits associated with climate adaptation and mitigation strategies at the outset when defining policies. An example is ensuring energy and transport transitions are guided by health evidence. This requires building institutional capacity and skills in other portfolios to implement a Health in All Policies approach and for the Department and stakeholders to provide evidence on the determinants of health and inequity and effective responses and solutions.
- Health experts should provide guidance and establish regulatory frameworks for assessing health risks and impacts, advise on implementing appropriate solutions, and monitor progress across sectors. To ensure transparency and 'the right person for the right job', identifying fit health experts to assist in this process should be undertaken as a joint exercise between government and independent bodies, including academic institutions, not-for-profit organisations, consumers, and communities across geographical settings.
- The Commonwealth Government should:
  - Ensure Australia's Nationally Determined Contributions include recognition of climate-health risks and opportunities for health co-benefits from climate action and that these are reflected in mitigation and adaptation plans.

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  - Ensure Australia's representation at international climate change forums includes Australian health ministers and health department officials.
  - Establish a national Ministerial Committee on Health and Climate Change to facilitate cooperative leadership across portfolios and levels of government.
  - Establish a 'Climate Change and Health' standing committee of the Australian Health Protection Principal Committee.
  - Include consideration of climate change and health in other significant national health plans, such as the Long-Term National Health Plan and the National Preventive Health Strategy and align the national health and climate strategy with these plans.
- Include projected health costs for fossil fuel project submissions.
- Value-based Healthcare (VBPH) builds upon a health-informed conceptualisation of value. It provides a framework to define and measure the value of health and well-being interventions at population and societal levels. A VBPH Framework would provide a structure for defining key enablers of high-value public health in shared governance, community engagement, costing and evaluation that could be shared across all sectors to enable a health in all policies approach. It would provide a mechanism to establish governance, leadership and accountability mechanisms that allow government agencies to recognise and understand their policies and health equity impacts and support collaborative approaches to designing and implementing joint policies that improve health and wellbeing outcomes.

23. What are the most effective ways to facilitate stakeholder collaboration and partnerships to maximise the synergies between climate and public health policy? What are some successful examples of collaboration in this area?

Areas of support:

- Strong support for a collaborative approach to policy development.
- Strong support for cross-sectoral engagement and collaboration.
- Strong support for alignment with international policy, including the Sustainable Development Goals.

Areas for improvement:

- The Strategy should seek to establish an overarching working group or National Committee of experts representing the most relevant facets of health, climate science and implementation science and Commonwealth, state, and territory Ministers with portfolio responsibility for Health, Environment, Climate Change and Energy. There should also be regular engagement and Consultation with Ministers responsible for related portfolios, such as Mental Health, Resources, Emergency Services, Planning, and Infrastructure, concerning policies, programs and initiatives in these portfolios that align with the Strategy.
- The Ministerial Committee should oversee the strategy's development, including setting the overall policy direction and providing final approval for the Strategy's policies, programs, and initiatives. A 'Climate Change and Health' standing committee of the Australian Health Protection Principal Committee should be established to advise the Ministerial Committee. An appropriate national agency should coordinate and implement policies, programs, and initiatives to deliver the Strategy. The Strategy must be integrated with other significant national health strategies, including the Long-Term National Health Plan and the National Preventive Health Strategy.
- The Ministerial Committee should be responsible for monitoring and reporting to the National Cabinet (or any subsequent body) on the progress and outcomes from the

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Implementation of the Strategy, which should be outlined in detail in a publicly available annual report by the nominated national agency.

Proposed Objective 5: Impact on Australia's Health with a Focus on Children

24. What are the key areas in which an Impact on Australia's children's health approach might assist in tackling the health and wellbeing impacts of climate change on Australia's community with the result of reducing emissions?

Areas of support:

- Strong support for adopting an Impact on Australia's Health approach to the Strategy. All dimensions of climate change are interlinked with human health within the determinants of health approach. By focusing on the health of Australians, communities can measure the deleterious impacts of climate change, urging more direct action to reduce the health risks from climate change. This requires working across all sectors and all levels of government.

Areas for improvement:

- The background to the Strategy includes women as a vulnerable group. However, the impact on children and child health is not mentioned. The health of children within Australia requires a focus. Air pollution toxicants can disproportionately impact children based on body mass and dose-response principles.
- As climate change may adversely impact children's health in Australia, there is potential for causing increased demands for primary healthcare and paediatric care services in future (increased bushfire prevalence, for example, causing increased exposure to incomplete combustion particles in children). Childhood issues can lead to chronic adulthood diseases.
- Government must invest in creating a comprehensive evidence base detailing the impact of climate change on mental health in children and young people.
- Create targeted mental health programs for children and young people. Data collection and analysis should support co-design with children and young people, engaging a systems-dynamics approach to program development.
- Upskilling is needed for mental health professionals to recognise and respond to climate-related mental health issues. This is vital to make the mental health system more responsive to children's and young people's needs and encourage access to mental health services.
- Funding to investigate the impacts of adverse climate events on the health of Australians, with particular attention to children. In particular, potential harms are caused by long-term smoke inhalation, inhalation of moulds and fungus, psychosocial impacts of homelessness due to flood/fire damage, impacts of extreme heat, and weather events such as thunderstorms, ultraviolet intensity, etc.
- Provide children and young people the capacity to cope with climate change by equipping them with accurate information about it and helping them develop their resilience.
- Establish a focus on climate resilience and active citizenship in the education curriculum and develop community-based safe spaces for climate-related concerns. These should be priorities to help children and young people reach their potential.
- Develop national guidelines on managing fake news broadcast on social media to minimise the harm of misinformation.

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Enablers

25. How could these enablers be improved to better inform the objectives of the Strategy? Should any enablers be added or removed?

Areas of support:

- General support for the enablers is outlined in the Strategy; however, further enablers must be added.

Areas of improvement:

- While there is general support for the enablers outlined in the Strategy, there are several areas where these enablers could be strengthened:
  - Workforce communication, leadership, education and skills development[26] - the Strategy must include funded support for workforce involvement in the change process beyond upskilling and provide detail about the change theory and method. As well as retraining and managing change, the Strategy needs to recognise that healthcare workers often support immediate family and friends in emergencies and disasters. There must be a contingency for workforce shortages in extreme weather events. There is also a lack of support for workforce capacity-building and training. There is a need for a national cross-disciplinary continuing professional development program on climate change and health, specifically for the health and social sector and for people in other sectors. Education and training are either discipline-specific (which does not encourage or support collaboration) or ad hoc (and therefore reaches too few people), or expensive (not everyone can afford for-profit education courses). There is also a need for supporting and scaling up existing communities of practice for sustainable healthcare to allow achievements and learnings to be shared and everyday challenges to be raised.
  - Research - there is a high-priority need for better data on climate-related health and well-being outcomes and how healthcare professionals can best provide care in extreme weather events. Data can guide better investment – and disinvestment - where programs and interventions are needed or less effective.
  - Collaboration - there is limited support for mechanisms for collaboration on climate change and health. The health sector has self-organised to collaborate on responding to climate change and health and healthcare decarbonisation. However, these efforts require government investment to scale up and be more effective. This reflects the interdisciplinary nature of climate and health, and it should be a priority of the Department to address the barriers and foster enablers to ensure better outcomes for the environment and health.
  - Monitoring and reporting: Regular assessment and forecasting of climate-related health impacts across the country is vital. Monitoring over long periods with robust indicators would help governments and services understand climate change risk, identify specific vulnerabilities, highlight region-specific climate mitigation and adaptation challenges, and track how communities and organisations respond. Monitoring solutions, implementation is also required – regarding implementation progress, impact, and cost-benefit analyses.

[26] Australian College of Nursing (ACN). 2021, 'Ethical leadership in emissions reduction – Position Statement', ACN, Canberra.

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• It is recommended that the enablers be expanded to include governance and funded implementation programs for healthcare professionals. All of these are crucial aspects in successfully implementing any national strategy. • It is recommended that 'measurement' become an enabler instead of a standalone objective.
26. For each of these enablers: a. **What is currently working well?** b. **What actions should the Strategy consider to support delivery?**
As outlined above. We recommend that the National Health and Climate Strategy aligns with the Measuring What Matters Framework.[27]

Thank you for taking the time to complete this survey – your feedback is greatly appreciated!

Please submit this form in Word format to Health.Climate.Consultation@health.gov.au.

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[27] The Treasury (2023) Measuring What Matters Framework

Private Healthcare Australia
Better Cover. Better Access. Better Care.



National Health and Climate Strategy

July 2023

Contact:

[redacted]

About Private Healthcare Australia

Private Healthcare Australia (PHA) is the Australian private health insurance industry's peak representative body. We have 24 registered health funds throughout Australia as members and collectively represent 98% of people covered by private health insurance. PHA member funds provide healthcare benefits for over 14 million Australians.

Introduction

PHA welcomes the Australian Government's commitment to a National Health and Climate Strategy.

The health risks of climate change are both obvious and uncertain. It is clear that a warmer climate will adversely affect health, but it is unclear whether obesity, transmissible disease, respiratory diseases, changes to food and water supply, mental health or stress will cause the greatest issues.

Health funds have a limited role in delivering health care, but a primary role in funding care for millions of Australians. Uncertainty is an enemy to insurance, and thus to premiums. Climate change is going to affect health funders, both through an increased need for health care and the uncertainty that climate change brings.

Health funds have been leaders in businesses' response to climate change. Many health funds are publicly committed to net zero emissions, or are on the pathway to do so. Many funds have already achieved carbon neutrality for their own operations. Several have responsible investment strategies to take into account environmental, social and governance factors such as climate change, such as not investing in fossil fuel extraction industries.

However, current regulations prohibit health funds from using their members' purchasing power to influence environmentally friendly health care from providers. Australia's regulatory framework prioritises hospital-based care over home-based care, and the high prices paid for medical devices favours devices over medicines, and encourages the import of devices rather than domestic production.

In addition to the leadership from health funds, Australia's private health sector has many providers taking climate change action, including Australia's largest hospital provider, Ramsay, making the commitment to net zero emissions. Many Catholic Health Australia members have already made net zero emissions pledges with more to follow.[1] (Australia's other major hospital provider, Healthscope, owned by Brookfield, has not made a net zero commitment.) The Australian Medical Association has declared climate change a health emergency. Learned Colleges, including the Royal Australasian College of Surgeons, have signed up to initiatives such as the green College guidelines.

Our response to the consultation paper, below, will highlight areas where PHA has particular input, and not include nil responses. For example, PHA will defer to scientific experts on issues such as types of greenhouse gas emissions and the built environment.

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[1] The Pope's second encyclical, *Laudato Si,* calls upon all Catholic organisations to set an example of environmental responsibility and stewardship. The Australian Catholic Bishops Conference has recognised this, launching their *Cry for the Earth, Cry for the Poor* which makes the case for action on climate change as a social justice concern. Australian Catholic hospitals will be implementing these directives.

Response

Objective 1: measuring health system greenhouse gas emissions

PHA supports the four objectives of the Strategy (**question 1**).

The principles are sound. However, they lack accountability. PHA recommends that a principle be added that highlights that all players in the health system, including (but not limited to) providers, suppliers, consumers, funders and researchers are responsible for influencing practice where they can (**question 2**). For example, several funds have a responsible investment strategy (see example in box).

PHA supports the need for First Nations voices in health and climate policy (**questions 4, 5**). Many health funds have Reconciliation Action Plans to guide their internal processes (see example in box on following page).

Several funds already measure their output and have taken measures to reduce emissions. Work has been ongoing for many years across the industry; for example, HIF became Australia's first carbon neutral health fund as certified by the Carbon Reduction Institute back in 2008 and has been recertified every year since.

Responsible investment

HCF's Responsible Investment Policy, takes into account environmental, social and governance factors such as climate change. Within the international equities portfolio, there are a range of threshold exclusions as part of the investment mandate which include for example businesses engaged in Thermal Coal Extraction, Oil Sands Extraction and Oil & Gas Exploration & Production. In 2022, HCF invested $30 million in an impact bond strategy. The proceeds of the strategy are not only used to help mitigate and adapt to the impact of climate change but also to create a positive social and sustainable impact.

View HCF's Responsible Investment Policy.

Objective 2: mitigation

PHA supports the six areas of focus for the Australian health system to reduce emissions (**question 8**). However, we recommend an additional area of focus, to fit between waste and optimising models of care:

- Built environment
- Travel and transport
- Supply chain
- Medicines and gases
- Waste,
- Low value care, and
- Prevention and optimising models of care

Health funds are acting on the build environment for their own operations. For example, HCF has transitioned to 100% renewable energy for HCF occupied floors at offices located in Sydney CBD, St Leonards and Parramatta, as well as dental, eyecare and retail locations; and Bupa uses 100% Renewable electricity in directly controlled sites in Australia saving approximately 25,000 tonnes of CO_2 from the atmosphere each year.

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PHA supports better measurement to support health funds' demonstrated commitment to improved design, construction and operation (**question 9**).

The supply chain issues identified in the report (**questions 11, 15**) highlight the need to improve procurement practices. For medical devices, Australian Government's regulation reinforces poor environmental practices. The Prescribed List of Medical Devices and Human Tissue Products (the PL) concentrates supply to incumbent international manufacturers, who have sought to further control the supply chain through a range of measures, including a large network of salespeople and providing incentives to hospitals and health practitioners. The lack of competitive neutrality in regulation between medical devices and pharmaceuticals also results in Australia tending towards a higher rate of medical device use rather than pharmaceutical intervention, at a greater cost to the environment.

The recent Mandala report Australia's Surgical Surcharge: How Australians are paying too much for medical devices through the Prescribed List of Medical Devices, highlights the concentration of international supply and proposes changes to encourage more local manufacturing.



nib Reconciliation Action Plan

Health funds are committed to working with First Nations peoples. For example, nib's commitment to reconciliation is reflected and embedded in their broader approach to business, including sustainability; diversity, equity and inclusion; and community investment

Artwork: 'the beginning' by Michelle Kerrin, a proud Arrernte and Luritja woman and artist of nib's Innovate RAP

Furthermore, the fee-per-item structure of the PL, together with the inflated benefits health funds are required to pay, creates a strong incentive for wasteful use, which is fuelled by sales-based commissions common in the medical device sector. The practice of upselling additional products into surgical cases, like glues, haemostatic substances and tissue substitutes is widespread. When the excess is inevitably discarded it is highly toxic to the environment, even when protocols for the disposal of medical waste are followed. The packaging for these items is mostly single-use plastics which are all discarded. We have long campaigned for a major overhaul of this system to remove the perverse incentives leading directly to wasteful overconsumption of surgical implants and supplies.

We understand significant work is taking place in the anaesthetics and pain clinical community to reduce the usage of anaesthetic gases which cause harmful emissions. PHA supports these initiatives, even if the alternatives are more costly.

We do, however, believe the most effective mechanism to address this is to remove low value care from the health system as much as possible. This means having a clear process in place to identify and disinvest in health interventions which are ineffective, which is independent from powerful vested interests.

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PHA recommends adding low value care as a priority area (**question 8**). Reducing or eliminating low value care is likely to be the single most effective method of reducing carbon emissions in our health system. Low value care is any intervention where the costs of providing the service are higher than the benefits. Australia's health system is prone to low value care, as the direct financial costs of care are not borne by the patient directly nor the provider. The Australian Government, through Medicare, and individuals, through private health funds, provide the vast bulk of private health funding.

While low value care is mentioned briefly as part of prevention and optimising models of care, a specific focus on low value care would provide a strong return on investment for the environment. Braithwaite et al (2020) notes, "While change is everywhere, performance has flatlined: 60% of care on average is in line with evidence- or consensus-based guidelines, 30% is some form of waste or of low value, and 10% is harm."[2] Reducing low value care has the potential to reduce emissions significantly. Some areas of identified low value care have a disproportionate impact on the environment. For example, imaging for lower back pain, is identified as being poor value care and having a significant impact on the environment.

PHA supports a focus on prevention and reducing hospitalisation as a pathway to fewer harmful emissions (**questions 14, 15**). PHA has recently highlighted that over 10% of hospitalisations in Australia could be moved to lower burdensome options such as out of hospital care or reduced length of stay, with no decrease in quality or outcomes, and in many cases, improved outcomes. Our report, There's no place like home – reforming out-of-hospital care highlights key areas where the private sector can improve models of care. Reducing the burden of treatment for consumers will also reduce the burden on the environment.

As noted previously, many in the private sector, including health funds, many private hospital groups and other providers have made substantial commitments to reduce emissions (**question 15**). Other organisations have not. Transparency is key, and PHA will encourage all of our member funds to consider highlighting to customer organisations that have (or have not) made commitments. Some level of public reporting by government may also be considered, as funds, hospitals and other providers are subject to regulation by the Australian Government.

The 'quick wins' for emissions reduction strategies in health (**question 17**) will occur where policy levers, such as improving medical device pricing and access and promoting out of hospital care, consider environmental factors rather than focusing on funding reform options. As highlighted in the

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[2] At https://bmcmedicine.biomedcentral.com/articles/10.1186/s12916-020-01563-4

principles, all actors need to consider the environment with each decision. This includes policy decisions from government.

Objective 3: adaptation

PHA notes the selection of negative health outcomes related to climate change outlined in the consultation paper. These and other risks are of significant concern to health funds, both for the health of their customers and the impact on their businesses supporting fund members.

Some funds have already worked to quantify the anticipated impact (see the Medibank example in the box). Developing simple, cost-effective tools to assist all businesses to assess their vulnerability would be welcomed (**question 20**).

The volatile nature of climate change makes it hard to predict the priority areas. All health services will need to be ready to adapt quickly, particularly with a projected increase in natural disasters. Health funds are well practised at helping members with emergency assistance, including natural disasters. Recent examples include support for people affected by floods, fires and pandemics. Funds have provided practical assistance, financial assistance and charitable support for those affected. For example, nib has supported communities affected by flooding (see "responding to disasters" in the nib Community Report). Many funds have provided premium relief and other assistance to their customers (**question 21**).

Objective 4: health in all policies

PHA supports an approach of health in all policies. As articulated in the consultation paper, health is affected by a range of policy levers, including housing, shelter and safety; inclusion, respect and connection; wealth and access to services; and several other influences and determinants.

A good place to start would be to ask all policy areas within the Department of Health and Aged Care to consider the environmental impact of their policies and regulatory decisions (**question 22**). Current government private health policy favours in-hospital treatment; supports the import of medical devices; and subsidises

Medibank Climate Scenario Analysis

From the Medibank Sustainability Report

In 2021, we worked with independent specialists to undertake our first climate scenario analysis against two scenarios: a 2°C scenario aligned to the Paris Agreement (RCP 2.6) and a high emissions future (RCP 8.5) to align with the recommendations of the Climate Measurements Standards Initiative (CMSI). We reviewed more than 50 pieces of external research relating to the health impacts of climate change to identify the key health issues relevant in Australia and to our business. We then explored climate-related risks and opportunities aligned to our current operations as well as future strategic planning. To better understand our exposure to chronic and acute physical risks, we analysed historical data during periods of bushfire and heatwaves, reviewing our claims data and telehealth call volume information. We examined this by state and territory and overlaid regional climate projections. This enabled us to forecast a projected financial impact of $6.3 million by 2050 for the low emissions scenario (RCP 2.6) and $15.5 million for the high emissions scenario (RCP 8.5). The analysis found we have a number of climate resilience measures already in place, such as business continuity through flexible and remote working. Potential transition risks identified include increased regulation, emerging disclosure requirements and increased external pressure to transition to a zero carbon investment portfolio.

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and encourages low value care. Assessing the environmental costs of these policies is likely to tip the balance towards removing these harmful regulatory practices.

Enablers

The consultation paper identifies a range of enablers for greater action on climate change within the health system.

The consultation paper clearly identifies the issues and has a strong focus on action. However, it is less clear on responsibility and accountability. This may result in significant goodwill and strong policy parameters failing to be implemented.

PHA recommends that the strategy add two enablers. The first is accountability, where specific actors are identified as having accountability for actions (**question 24**). This could include greater levels of transparency and reporting requirements, or specific incentives and penalties for performance.

PHA also recommends implementation be identified as an enabler. A strong policy implementation approach is needed to reduce the impact of health care on our environment (**question 24**).

Conclusion

PHA commends the Australian Government for their improved focus on environmental issues. Climate change will significantly affect our planet, our country and the lands, waters and skies with which we live.

The proposed National Health and Climate Strategy is an important step towards all Australians understanding and taking responsibility for the actions we take, and those we do not, to reduce emissions.

We look forward to working with the Australian Government, our member health funds, their 14 million customers, and others across the health system to improve our environment.

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Australian Government
Department of Health and Aged Care

NATIONAL HEALTH AND CLIMATE STRATEGY

Detailed submission form

This form allows you to provide responses to the full set of questions in the Consultation Paper available here.

Alternatively, you may wish to complete the briefer online survey available here.

Please submit this form in Word format to Health.Climate.Consultation@health.gov.au.

Respondent details

What is your name?
[redacted]
What is your email address?
[redacted]
What is your organisation?
Bushfire Survivors for Climate Action. As a community of bushfire survivors we amplify the voices of people affected by climate - fueled bushfires so that personal impacts of climate change are fully accounted for across all decision making in order to shift the political and planning systems into a race to the top for urgent climate action and restoration.
Have you read and agreed to the Privacy Statement? (NB we will not be able to use your submission unless you tick this box)
☒ I have read and agreed to the Privacy Statement
Do you identify as Aboriginal and/or Torres Strait Islander? (Yes/No/Prefer not to say)
[redacted]
Please select which applies to you: ☐ Individual citizen ☐ Health Service Provider ☐ Industry and Life Sciences Organisation or Representative ☒ Academic or Researcher ☐ Primary and/or Allied Health Peak or Advocacy Organisation or Representative ☐ Aged Care Service Provider ☐ First Nations Health Service Provider ☐ First Nations Community Group

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☐ First Nations Peak or Advocacy ☐ Medical College or Peak professional body

Questions for feedback from the Consultation Paper

Introduction

1. How could these objectives be improved to better support the vision of the Strategy?
BSCA is a volunteer organisation of bushfire survivors who have been motivated through lived experience to take action to reduce, and as far as possible reverse, the impacts of climate change. Our vision is to see Australia's political, legal and planning systems prioritise the safety and future of all Australian communities through urgent climate action and restoration. By working together towards this goal, we have been able to turn our own trauma into resilience and built a sense of community support and wellbeing. BSCA supports the vision statement recommended by the Climate and Health Alliance (CAHA) for 'A climate resilient community and net zero healthcare system'. BSCA also supports CAHA's overarching advice recommendations for the strategy, namely: 1. Make the protection of population health and wellbeing the primary focus of the Strategy 2. Establish a Board to advise the Minister on the Strategy 3.Establish an interdepartmental committee on climate change and health 4. Have a clearly articulated vision and purpose 5. Set targets and timeframes for actions and implementation 6. Establish targets and measures for climate-related injury and disease prevention 7. Include Mitigation targets in the Strategy 8. Expand Adaptation beyond the health system 9. Include the human right to health and intergenerational justice as principles of the Strategy 10. Conduct genuine engagement with First Nations Elders and communities 11. Consult with affected communities 12. Undertake expert consultation 13. Outline how the Strategy will support ongoing collaboration to contribute to the coordination and implementation of initiatives 15. Maximise current activities to reduce carbon emissions 16. Align with and inform national health and environment strategies 17. Make terminology consistent When reviewing the consultation paper, we were pleased to see acknowledgement of the importance of addressing health impacts of climate change; however, we felt it lacked a sense of urgency in relation to the magnitude of change necessary to avert the worst impacts. Accordingly, we found the objectives proposed in the paper incommensurate with the scale of issues that need to be addressed. Although the consultation paper seeks to make the case for a National Health and Climate Strategy, we were unable to identify a clear vision leading to the objectives outlined. The introduction proposes to focus on health impacts relating to climate change but then shifts

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the focus to listing the sectors that should be involved. The objectives that follow are consequently unanchored and unconvincing.

Measurement, in particular, is not an objective but a method. It is highly unlikely that measurement could deliver any significant outcome without a clearly articulated strategic objective to underpin and inform it.

We endorse CAHA's reframing of the objectives as follows:
Objective 1:Promoting and protecting health and wellbeing: This Strategy will inform and guide the development of policy and initiatives that embed health and climate considerations across all portfolios at national, state and territory and local government levels.
Objective 2. Build a climate resilient community and health system: This Strategy will support the development of initiatives to build community, health and aged care system resilience and capacity to respond to the health impacts of climate change.
Objective 3. Establish a net zero health and aged care system: This Strategy will guide the development of a national net zero plan for health and aged care, informed by a comprehensive assessment of the Australian health and aged care system's carbon footprint and reflecting best scientific evidence.

The current Objective 1 should be considered an enabler, moved into revised Objective 3 (outlined above) and should be accompanied by a list of specific elements that are to be measured.

As bushfire survivors who have directly and personally encountered the catastrophic effects of the climate crisis, we believe that it is essential that the Strategy should articulate specific emissions reduction targets, including an updated Nationally Determined Contribution that reflects the current climate crisis.
We agree with proposals put forward by health and environment sector stakeholders for a reduction in national greenhouse gas emissions of 75% below 2005 levels by 2030 and net zero emissions by 2035 for all sectors, including healthcare, and including emissions from exports. We also view it as essential to keep global heating to 1.5 degrees, particularly in light of the devastating health consequences that failing to do this will have on younger generations

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2. How could these principles be improved to better inform the objectives of the Strategy?

While the six principles are all highly relevant to what is needed in a national climate and health policy, further articulation and clarification is required. This should proceed from a reframing of the objectives as indicated in our response to Q1. BSCA strongly endorses the recommendation made by CAHA that the principles should be underpinned and informed by the fundamental human right to health and a safe planet.

We further note that the right to health and a safe planet requires a primary emphasis on mitigation of climate change and on efforts to restore the ecological wellbeing of the planet. We therefore suggest that mitigation and restoration are primary principles needed to guide all actions under a climate and health strategy.

Principle 4: The concept of 'One Health' is advanced as an important underpinning principle, but it is under theorised. An overarching Planetary Health(1) approach would better reflect the intersections between environmental impacts and human health outcomes in the context of planetary boundaries and sustainable development. Planetary health recognises that the connection between people, animals and environments is one of profound interdependence. Human health cannot be separated from the health of the natural systems on which we depend. A planetary health approach advocates the need to rethink the values and assumptions that have led to over-exploitation of natural resources and over-production of pollutants, thus putting the health of the planet at risk. Restoration of planetary health will require a shift in societies' appreciation of humanity's deep embeddedness in and responsibility for the living Earth, and our duty of care to safeguard it for current and future generations.

Principle 1: A holistic understanding of health recognises the wisdom of First Nations knowledges and perspectives on the health and wellbeing of people, planet and all life. In order to advance First Nations leadership it is essential that non-Indigenous people and systems decolonise their knowledge systems and approaches. First Nations knowledge and experience should be central to decision-making, but it can only become so when those holding positions of power undertake to listen, learn and follow through with recommended changes.

Principle 2: In order to tackle health inequities in relation specifically to climate change, those who are vulnerable and at greatest risk of adverse impacts must have greater agency for articulating their concerns and taking meaningful actions. Their interests must be heard and meaningfully addressed with necessary urgency. An emphasis on equity must take particular account of intersectional and intergenerational concerns. Since young people's current and future wellbeing are more impacted by the climate crisis, their interests warrant a specific focus in policy development and implementation.
The impacts on social cohesion of growing social inequity must also be recognised as impacting on health and wellbeing in multiple ways, including for example in rising mental health impacts and growing rates of domestic violence. The impacts of growing social inequities risk reducing the capacity for collective action to tackle climate and environmental issues, with the potential thereby to limit community resilience.

Principle 3: As clearly stated in principle 3, a population health approach lays emphasis on the importance of prevention as well as treatment. Given the scale of climate change impacts on health, there is a need to recalibrate the approach to 'prevention of disease and maintenance of good health across the lifespan'. Leading researchers argue for a paradigm shift in health promotion education, research and practice, with priorities on planetary health, Indigenous people's knowledge systems, ecological economics, health co-benefits and climate-resilient development. This requires developing and applying approaches based on complex systems analysis, which recognise the central importance of relational interactions for building and maintaining resilience in interconnected ecological and social systems.

●Principle 5: BSCA supports the principle of evidence-informed policy-making, while also emphasising that there are many forms of evidence, as there are different ways to approach analysis of evidence. In alignment with a focus on planetary health, and with regard to the extent of ecological threat, it is important to promote transdisciplinary approaches to gathering and evaluating evidence. The unprecedented circumstances of

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the climate emergency have repeatedly shown how reliance on assumptions based in existing paradigms can fall short of rapidly changing needs.
To the extent that cost effectiveness analysis relies on established economic paradigms it is likely to oversimplify its focus and miss important considerations for understanding the effects of interventions and the impacts of prevention efforts. This risks neglecting opportunities to boost community and systems resilience.
BSCA recommends the central importance of lived experience as evidence provided directly by those on the frontlines of climate change. We further recommend that notions of 'cost-effectiveness' must be balanced with equity and justice principles so as to enable and support resilience within affected communities and ensure that support is directed to those who need it as they need it, with no one left behind.

Principle 6: BSCA notes that the scale of change needed to protect health will require interdisciplinary knowledge and efforts, and creative reimagining of systems of organisation and governance within health and between health and various other domains.
We support CAHA's observation that in order to realise the principle of Partnership the Strategy will need to establish governance mechanisms, programs and initiatives that enable and facilitate partnership across all relevant stakeholders. On this basis 'partnership-based working across all levels of government and beyond'
should be expanded to include the role of the healthcare workforce across all settings including primary, tertiary, community and aged care.
Similarly, 'partnership-based working across all levels of government and beyond' should be expanded to include collaboration with those they serve .

1.Whitmee, S., Haines, A., Beyrer, C., Boltz, F., Capon, A. G., Ferreira de Souza Diaz, B.,Ezeh, A., Frumkin, H., Gong, P., Head, P., Horton, R., Mace, G. M., Marten, R., Myers, S. S.,Nishtar, S., Osofsky, S. A., Pattanayak, S. K., Pongsiri, M. J., Romanelli, C., ... Yach, D. (2015). Safeguarding human health in the Anthropocene epoch: Report of The Rockefeller Foundation–Lancet Commission on planetary health. The Lancet, 386, 1973-2028.http://dx.doi.org/10.1016/S0140-6736(15)60901-1

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3. Which of the various types of greenhouse gas emissions discussed above should be in scope of the Strategy's emission reduction efforts?

   BSCA fully supports the inclusion of Scope 1,2 and 3 emissions.

Areas for improvement:
● To best provide fulsome feedback on the inclusion of certain types of emissions in the Strategy, it is important that a clear definition of 'health system' is provided. Without a clear definition, there may be key sources of emissions that are omitted from the

Strategy.
● To ensure Australia, as a developed nation, does its fair share in reducing emissions, the Strategy should support an updated Nationally Determined Contribution that reflects the current health-climate emergency. Health and environment sector stakeholders are proposing a reduction in national greenhouse gas emissions of 75% below 2005 levels by 2030 and net zero emissions by 2035 for all sectors, including healthcare, and including emissions from exports. To reach these targets, it will be important that the health sector includes all emissions and develops strategies to reduce them.
● While it is recognised that under the Paris Agreement Australia is only responsible for emissions that occur within Australia; scope 3 emissions in the context of the Strategy should include all emissions that arise as a consequence of the Australian health system. This includes healthcare products manufactured overseas. A high proportion of healthcare products are imported and, as such, the health system must be responsible for their associated emissions.
● The Strategy should include all emissions that arise as a result of the health and aged care system, including patient and visitor transport(30).

4. What existing First Nations policies, initiatives, expertise, knowledge and practices should the Strategy align with or draw upon to address climate change and protect First Nations country, culture and wellbeing?

BSCA endorses the strategy's acknowledgement of the history of colonisation and the current and likely impacts of climate change on First Nations peoples' health and wellbeing. We agree strongly with the need to centre First Nations' cultural knowledge and the importance of meaningful engagement through partnership and self-determination.

In supporting these statements we nonetheless draw attention to the failure of many previous policy initiatives to achieve substantive outcomes for Aboriginal and Torres Strait Islander Australians. This parallels the failure to comprehensively legislate and adopt the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) (1). We note that successive governments have counted the Closing the Gap strategy as markers of their support for the UNDRIP, and this too has failed.

There is consequently a need to go beyond policy and non-Indigenous led initiatives in order to do things differently. There must be genuine support and advocacy for First Nations peoples' self-determination and involvement in the all aspects of policy development and implementation. This should include how the Commonwealth will integrate governance mechanisms and processes for community leadership according to best-practice and with cultural safety principles.

The Strategy should clearly outline how genuine engagement with First Nations leaders, Elders and communities will occur, how leadership will be fostered, and how the health and wellbeing of First Nations peoples will be advanced through the Strategy. This should draw on the Cultural Respect Framework 2016-2026 for Aboriginal and Torres Strait Islander Health.

The Strategy should seek to integrate objectives and actions being developed through the Measuring What Matters Framework community consultation processes and the objectives of the Australian Centre for Disease Control related to First Nations communities.

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Important initiatives and expertise are regularly advanced by the office of the Aboriginal and Torres Strait Islander Social Justice Commissioner - particularly the Wiyi Yi Thanu Women's Voices initiative.

The Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS) provides leadership for the advancement of important cultural knowledge and ecological wisdom. It plays a key role in supporting and facilitating Aboriginal and Torres Strait Islander cultural resurgence opportunities and in connecting those involved in such initiatives. This work, and the expertise that AIATSIS brings to bear, has significant implications for the stated goals of addressing climate change and protecting First Nations country, culture and wellbeing.

1.June Oscar, Aboriginal and Torres Strait Islander Social Justice Commissioner (September 2021) Incorporating UNDRIP into Australian law would kickstart important progress. https://humanrights.gov.au/about/news/opinions/incorporating-undrip-australian-law-would-kickstart-important-progress. Law Council of Australia (24 June 2022) Inquiry into the Application of the United Nations Declaration on the Rights of Indigenous Peoples in Australia. https://lawcouncil.au/publicassets/fbfd761e-43fe-ec11-945c-005056be13b5/2022%2006%2024%20-%20S%20-%20Inquiry%20into%20the%20Application%20of%20the%20UNDRIP%20in%20Australia.pd

5. What types of governance forums should be utilised to facilitate co-design of the Strategy with First Nations people to ensure First Nations voices, decision-making and leadership are embedded in the Strategy?

As observed by CAHA, the Strategy will only be effective for First Nations peoples if it is underpinned by genuine engagement and co-design principles. The Department should seek to listen to and learn from First Nations Elders, Knowledge holders and communities about what the priorities are for tackling the health impacts of climate change(1).

- The Strategy must ensure there is an ongoing process to embed First Nations cultural knowledge and practice into its goals, targets and actions.
- The Strategy should collaborate with First Nations peoples across Australia, including at the local, state and territory and national levels.

Aboriginal and Torres Strait Islander professional and community organisations have considerable expertise to bring to bear and should be the first point of consultation. Many of the national and state based Aboriginal and Torres Strait Islander health bodies are members of the Coalition of Peaks, which now has carriage of the revised Closing the Gap agenda. It remains important to consult with member organisations at all levels and with local communities on specific aspects of the strategy. Examples of health-focused organisations to be consulted at the outset include:

- National Aboriginal Community Controlled Health Organisation

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- Aboriginal Community Controlled Health Organisations have particular expertise concerning their local contexts and needs
- Australian Indigenous Doctors' Association (AIDA)
- The Congress of Aboriginal and Torres Strait Islander Nurses and Midwives (CATSINaM)
- First Peoples Disability Network Australia (FPDN)
- Australian Indigenous Psychologists Association (AIPA)
- Gayaa Dhuwi (Proud Spirit) Australia
- Indigenous Allied Health Australia
- National Association of Aboriginal and Torres Strait Islander Health Workers and Practitioners
- The Healing Foundation

Consultation relating to climate and ecological issues will need to engage with the National Native Title Council as well as local Native Title Councils and Traditional Custodian bodies.
Principles and protocols for consultation and establishing effective and respectful partnerships with Aboriginal and Torres Strait Islander communities should be developed with key bodies and embedded in the strategy.

1. Hunt, J. (2013). Engaging with Indigenous Australia - exploring the conditions for effective relationships with Aboriginal and Torres Strait Islander communities. Australian Institute of Health and Welfare.https://www.aihw.gov.au/getmedia/7d54eac8-4c95-4de1-91bb-0d6b1cf348e2/ctgc-ip05.pdf.aspx?inline=true

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Proposed Objective 1: Measurement

6. Beyond the schemes already noted above, is your organisation involved in any existing or planned initiatives to measure and report on health system emissions and/or energy use in Australia?
No
7. What additional data and information is required to support targeted emissions reduction efforts within health and aged care?

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Proposed Objective 2: Mitigation

8. What do you think of these proposed focus areas for emissions reduction? Should anything else be included?
Mitigation should include strategies outside the health system that will reduce risks to health and protect health and wellbeing. Mitigation and adaptation to the climate crisis is a preventive health measure, as well as a moral responsibility. The Strategy should clearly outline how it will safeguard health and aged care, by doing its part to contribute to the Nationally Determined Contribution under the Paris Agreement. BSCA urges an added focus area of nature-based carbon reductions such as carbon sequestration through rewilding and greening of all areas owned or controlled by the health sector. In addition to emissions reduction, this focus will deliver improved air quality and soil health both of which will deliver health benefits, as will increased exposure to natural areas and wildlife. It is strongly recommended that this work be carried out in consultation with First Nations Custodians and wherever possible be led and undertaken by First Nations land managers. In addition: Objective 2 should clearly outline strategies to support the reduction of emissions across all sectors, along with an emissions reduction target for decarbonisation of the health and aged care sector. Objective 2 should include a goal to establish a pathway for ensuring the health sector achieves this emissions reduction target. This pathway should: ○ Include strategies for communicating emission reduction targets and progress ○ Identify carbon hotspots ○ Prioritise mitigation actions ○ Establish effective governance structures ○ Facilitate appropriate resource allocation and policy development ○ Prevent duplication of effort and set a common pathway for the decarbonisation of Australia's health and aged care system (inclusive of public, private, tertiary, and primary care, supply chains and services). ● Objective 2 should include energy as a standalone focus area considering the large contribution it has on the health system's carbon footprint. ● Objective 2 should include food as a focus area as it makes a significant contribution to the health system's carbon footprint, and there are opportunities to reduce these impacts that will have co-benefits for health and wellbeing. For example, foodservice model changes which reduce food waste and increasing patient nutrition and satisfaction, local food procurement, plant-based menus(1-13). ● Waste should be renamed to 'Sustainable resource use, circular health care and sustainable healthcare waste management' (14) in keeping with a health paradigm for sustainability. (1) Cook, N., Goodwin, D., Porter, J. & Collins, J. (2023) Food and food-related waste management strategies in hospital food services: A systematic review. Nutrition & Dietetics. 80(2), 116-42. (2) ReFED. (2023). Impact calculator. https://insights-engine.refed.org/impact-calculator?inputs=%7B%22sector%22%3Anull%2C%22type%22%3A%22standard-mix%22%2C%22unit%22%3A%22tons%22%2C%22alternative%22%3Afalse%2C%22destinations%22%3A%5B%5D%7D (3) Practice Greenhealth. (2023). Healthcare emissions impact calculator. https://practicegreenhealth.org/topics/climate-and-health/health-care-emissions-impact-c

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alculator?token=piDg8ldgDwZ4T5nz_t_Da2ZBJYpXaZUGRvFMkzOvtlw
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Final long-form submission guide
(4) Health Care Without Harm. (n.d). Global road map for health care decarbonization (Green paper number 2). https://healthcareclimateaction.org/sites/default/files/2021-09/Road%20Map%20for%20Health%20Care%20Decarbonization%20Executive%20Summary.pdf
(5) Carino, S., Porter, J., Malekpour, S. & Collins, J. (2020). Environmental sustainability of hospital food services across the food supply chain: A systematic review. Journal of the Academy of Nutrition and Dietetics. 1:120(5), 825-73.
(6) Goonan, S., Mirosa, M. & Spence, H. (2014). Getting a taste for food waste: A mixed methods ethnographic study into hospital food waste before patient consumption conducted at three New Zealand foodservice facilities. Journal of the Academy of Nutrition and Dietetics. 1:114(1), 63-71.
(7) Alam, M. M., Sujauddin, M., Iqbal, G. M. & Huda, S. M. (2008). Report: Healthcare waste characterization in Chittagong Medical College Hospital, Bangladesh. Waste Management & Research. 26(3), 291-6.
(8) Anari, R., Nikooyeh, B., Ghodsi, D., Amini, M. & Neyestani, T. R. (2023). An in-depth analysis of hospital food waste in terms of magnitude, nutritional value, and environmental and financial perspectives: A cross-sectional study. Waste Management & Research. doi:0734242X231176733.
(9) Cook, N., Collins, J., Goodwin, D. & Porter, J. (2022). A systematic review of food waste audit methods in hospital foodservices: Development of a consensus pathway food waste audit tool. Journal of Human Nutrition and Dietetics. 35(1), 68-80.
(10) Waste and Resource Action Programme [WRAP]. (2021). Food Waste Reduction Roadmap. Banbury: Waste and resource action programme. https://wrap.org.uk/taking-action/food-drink/initiatives/food-waste-reduction-roadmap
(11) Food Innovation Australia Limited [FIAL]. (2021). National Food Waste Strategy Feasibility Study - Can We Halve Australia's Food Waste by 2030? Macquarie Park, NSW:
Food Innovation Australia Limited. https://www.fial.com.au/sharing-knowledge/food-waste
(12) ReFED. (2023). Insights Engine. https://insights.refed.org/
(13) Victorian Department of Health. (2022) Nutrition and quality food standards for health services. Australian Government. https://www.health.vic.gov.au/quality-safety-service/nutrition-and-food-quality-standards-for-health-services
Health Care Without Harm. (n.d). Global road map for health care decarbonization (Green paper number 2).
(14) https://healthcareclimateaction.org/sites/default/files/2021-09/Road%20Map%20for%20Health%20Care%20Decarbonization%20Executive%20Summary.pdf

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9. Which specific action areas should be considered relating to the **built environment and facilities (including energy and water)**, over and above any existing policies or initiatives in this area?

Beyond the health system, the Strategy should outline how it is going to support electrification and energy efficiency in all buildings to improve health and wellbeing.

● The Strategy should emphasise that built environment design and urban planning must promote active transport, which benefits health through reduction of transport emissions (as detailed in section 2.2 as well as physical activity pathways. Adequate housing density, well-connected streets, mixed land uses to create nearby destinations, and proximate public transport are key determinants of walkability 5456, especially in outer suburban areas.
● There need to be targets and actions to increase urban greening and tree canopy cover in the built environment, as this can reduce health impacts of extreme heat and air pollution(1).
● The Strategy should support all hospitals and health facilities to be gas free and renewably powered.
● The Strategy should set an ambitious target date for transitioning existing hospitals, health facilities and aged care facilities to be gas free and renewably powered.
● The Strategy should outline how it will enable public health services to purchase renewable energy from the grid, e.g. via Power Purchase Agreements.
● The Strategy should set out how it will support action to reduce demand for large, resource-intensive health care facilities and ensure only absolutely necessary buildings are constructed, e.g. by scaling up telehealth, health promotion and care closer to home, without compromising patient outcomes.
● The Strategy does not sufficiently address how it will actually support healthcare suppliers and manufacturers to transition to net zero buildings and facilities
Final long-form submission guide
● The COVID19 pandemic has prompted healthcare settings to address their indoor air ventilation. Whilst efficacy in reducing risk of airborne disease transmission is the primary concern, it is important to recognise energy requirements differ contingent on selected strategy(2). It is recommended the approach to ventilation also takes into consideration the associated energy requirements, 'e' waste that may be generated and takes a precautionary approach by avoiding air purifiers that generate free radical gases as a byproduct(3).

(1) Giles-Corti, B., Moudon, A. V., Lowe, M., Cerin, E., Boeing, G., Frumkin, H., Salvo, D., Foster, S., Kleeman, A., Bekessy, S., Hérick de Sá, T., Nieuwenhuijsen, M., Higgs, C.,Hinckson, E., Adlakha, D., Arundel, J., Liu, S., Oyeyemi, A. L., Nitvimol, K., & Sallis, J. F.(2022). What next? Expanding our view of city planning and global health, and implementing and monitoring evidence-informed policy. The Lancet Global Health, 10 (6), e919 - e926.
(2) Hes, D., Monty, J., Skidmore, G. & Mcgregor, L. (2022). Impact of existing building air-conditioning retrofit on cost, COVID-19 transmission and energy. ASA 2022, 339
(3) Schofield, R. (2022). Guide to air cleaners. University of Melbourne. https://sgeas.unimelb.edu.au/engage/air-cleaner-guide

10. Which specific action areas should be considered relating to **travel and transport**, over and above any existing policies or initiatives in this area?

The Strategy must include specific targets for the adoption of electric and zero emissions transport, and an ambitious fuel efficiency standard. There needs to be greater emphasis on improving urban design and infrastructure provision for active transport (e.g. walking, cycling) and public transport in Australian cities. This will have multiple health co-benefits through emissions reduction, air quality and physical activity pathways. The Strategy must outline how it will respond to identified infrastructure challenges.
● The Strategy should support collaboration between state and territory government, local government and health services to improve active and public transport access and incentives for patients, staff and visitors at existing and new facilities(39), as well

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as to other essential services for health and wellbeing.
● The Strategy should include improvements to models of care that produce less emissions, e.g. telehealth services for rural and remote communities. This should be in the context of ensuring communities experience tailored care and that commuting can occur where needed.

11. Which specific action areas should be considered relating to **supply chain**, over and above any existing policies or initiatives in this area?

Considerations relating to supply chain issues need to be underpinned by a well-informed understanding of the materials cycle and the various impacts of activities involved in the extraction, production, distribution, use and disposal of health related products and activities.
BSCA endorses CAHA's recommendations relating to the health supply chain:
● The inclusion of specific targets for reducing emissions from the health system's supply chain. Alignment of targets with the UK National Health Service Net Zero Supplier Roadmap (1) will help to provide direction for health services, manufacturers and suppliers.
● The Strategy should identify where collaboration between states and territories, and both public and private sectors, can share knowledge and networks in the interest of reducing carbon footprints associated with supply chains. This should be reflected in the actions.
● Nationally consistent procurement standards that include criteria for greenhouse gas emissions, resource depletion (water, energy and material consumption), chemical and toxic impact on human and environmental health, as well as human rights, labour rights and gender equality should be developed and enabled.
● The Strategy should set about convening a supply chain group made up of state and territory health purchasing bodies, public and private health and aged care providers, and healthcare suppliers and manufacturers, to work collaboratively in reducing the health system's carbon footprint associated with supply chains. Support for local low carbon manufacture should be a key consideration for mitigating supply chain issues.
● The Strategy should also support the development of a universal methodology for healthcare's supply chain to measure and report on their emissions consistently.

(1) National Health Service. (2023). Suppliers. https://www.england.nhs.uk/greenernhs/get-involved/suppliers/

12. Which specific action areas should be considered relating to **medicines and gases**, over and above any existing policies or initiatives in this area?

13. Which specific action areas should be considered relating to **waste**, over and above any existing policies or initiatives in this area?

Food waste is a major global factor in creating greenhouse gases, therefore we call for minimisation practices in supply, cooking and delivery of meals, and closed system composting systems to be implemented.

The Strategy should focus on minimising waste and encouraging circularity across all waste streams including plastics. Actions and targets to prevent food and medical waste must be included, as both contribute significantly to healthcare's carbon footprint.

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14. Which specific action areas should be considered relating to **prevention and optimising models of care**, over and above any existing policies or initiatives in this area?
As Bushfire Survivors our families, communities and businesses have witnessed firsthand the catastrophic impacts of climate change including significant impacts on physical and mental health. Our experience has taught us that prevention must start with nationwide climate action focused on emissions reduction as every Australian is at risk of climate related health issues. We call for comprehensive training for all health caregivers in bushfire related health problems especially smoke induced respiratory disorders and PTSD. We also call for support for communities promoting and developing health education through community groups, hospitals, local medical centres and community health centres that anticipate community wide physical and mental health effects of bushfires such as that advocated by the International Transformational Resilience Coalition. The Strategy should recognise colonisation as a driver of climate and health outcomes, and that redressing this system is crucial to a healthier, sustainable and more just Australia. ● While actions 2.6.1–2.6.4 are all positive, they need to include defined targets ● The Strategy should explicitly support the commitment of the National Preventive Health Strategy to spend 5% of the health budget on prevention. ● The Strategy should explicitly include how it will coordinate action across the existing and new national strategies. ● The Strategy should explicitly include how it will support key aspects of policy in other portfolios that have an impact on health outcomes. ● The Strategy should explicitly include how it will support state and territory governments in preventive health measures, e.g. active transport. ● The Strategy should explore opportunities for health system funding reform.
15. What can be done to involve private providers within the health system in the Strategy's emissions reduction efforts?
The Strategy should set a goal to include climate change mitigation and adaptation requirements in healthcare accreditation standards. ● The Strategy should demonstrate leadership by developing a clear, ambitious decarbonisation plan that sets out responsibilities and opportunities for the private sector. This will provide certainty and help guide decisions and investment. ● There is much more to do in increasing understanding among health executives and boards in relation to their fiduciary responsibility (‘duty of care’) and potential for personal liability if they fail to account for climate risks in strategic and operational plans. The Strategy should set a goal that requires all health services and other relevant services to conduct climate change risk assessments as a core risk management strategy.

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16. Where should the Strategy prioritise its emissions reduction efforts? a. How should the Strategy strike a balance between prioritising emissions reduction areas over which the health system has the most direct control and prioritising the areas where emissions are highest, even if it is harder to reduce emissions in these areas? b. Which of the six sources of emissions discussed above (on pages 13 to 18 of the Consultation Paper) are the highest priorities for action?
It is important that the Strategy does not lose sight of the larger global and national efforts needed to mitigate climate change and clearly defines a role for Health agencies as advocates in this space. This means that while making every effort to reduce the sector's emissions, that a focus remains on advocating for whole system change which is needed for the transition to renewable energy, electrification of accessible transport etc
17. What 'quick wins' in relation to emissions reduction should be prioritised for delivery in the twelve months following publication of the Strategy?

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Proposed Objective 3: Adaptation

18. What health impacts, risks and vulnerabilities should be prioritised for adaptation action through the Strategy? What process or methodology should be adopted to prioritise impacts, risks and vulnerabilities for adaptation action?

● While there is support for the inclusion of adaptation within the Strategy, the content within this section appears out of order with the previous objectives. It is recommended that objectives are re-organised to better reflect the purpose of the Strategy as follows:
○ Objective 1. Promoting and protecting health and wellbeing: This Strategy will inform and guide the development of policy and initiatives that embed health and climate considerations across all portfolios at both national, state and territory and local government level.
○ Objective 2. A climate resilient community: This Strategy will support the development of initiatives to build community, health and aged care system resilience and capacity to respond to the health impacts of climate change.
○ Objective 3. A net zero health and aged care system: This Strategy will guide the development of a national net zero plan for health and aged care, informed by a comprehensive assessment of the Australian health and aged care system's carbon footprint and reflecting best scientific evidence.

● While there is strong support for the inclusion of health harms associated with acute disasters or crises, it is also crucial the Strategy seeks to address health harms associated with incremental climate change, including heat, sea level rise and biodiversity loss.
● First Nations knowledge and engagement is fundamental to assessing health impacts, risks and vulnerabilities in adaptation planning. This should include adopting well-established models of excellence for the preservation of Country.
● One option could be to fund climate change adaptation workers akin to the existing environmental health worker program. Experience from other similar programs indicate that success is dependent on support and training at the local / jurisdictional level. This could be applied from remote Indigenous communities to multicultural metropolitan settings.
● Adaptation will only be effective if the wider community understands the risks to health from climate change, and are empowered to take health protective actions. As such, the Strategy should include a public education campaign that highlights the risks to health and the health benefits of adaptation as critical to the success of any adaptation action.
● Adaptation, including the protection of Australia's biodiversity, should include thriving Ecosystems and First Nations traditional ecological knowledge about maintaining this.
● 'Policy responses to ameliorate impacts' (page 27) should include responses across sectors and government departments including housing and education.
The Strategy should explicitly outline the mental health impacts of climate change, including (but not limited to) climate anxiety, limited access to services during acute weather events, and limited access to open, safe spaces.

Public health and climate education with mental health support needs to be prioritised in order to promote a nationwide active engagement with the realities of dangerous climate change

At present, vulnerable communities are disproportionately bearing the knowledge and impacts of climate disasters, experienced and looming. For example:

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25% of people with direct experience of climate related events meet PTSD screening criteria, leading to the conclusion that Australia is facing an escalating mental health crisis. (1.).

Mental health education and training are needed for health professionals, educators and community leaders to validate climate emotions (grief, fear, anger) and manage pre- and post-traumatic stress symptoms in ways that empower communities to be climate engaged

Alongside this the Strategy must focus on planning for building resilient communities—not just developing emergency event response plans. We call for support for communities promoting and developing health education through community groups, hospitals, local medical centres and community health centres that anticipate community wide physical and mental health effects of bushfires such as that advocated by the International Transformational Resilience Coalition.

Health system adaptation

● There needs to be a systemic analysis by all health services of the likely impacts of climate change. The Strategy should require (and support) all health services to develop a climate change adaptation plan that outlines the steps they need to take to prepare for the challenges ahead. This would include such matters as emergency preparedness, infrastructure assessment, workforce skill in managing climate related health risks in their patients. Heat waves are one example, e.g. there is limited information in the community on how patients with chronic conditions need to manage excessive heat other than drinking more water. Adaptation plans would need to encompass this kind of advice.
● The production of health service adaptation plans could be mandated in the Australian Council of Healthcare Standards, and included as a performance measure in the National Healthcare Reform Agreement.
● The Strategy should recognise that health and aged care facilities can be damaged during extreme weather events and incremental changes due to climate change, and develop goals and targets to reduce these impacts.
● The Strategy should account for supply chain disruption from climate change- related events that impact both facilities and delivery of health services.
● The Strategy should account for the health and aged care workforce facing challenges both accessing healthcare facilities during extreme weather events, and the prioritisation of their own patients or immediate families and communities during extreme weather events.
● Targets should be included in the National Healthcare Reform Agreement and National Safety and Quality

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(1).Patrick R., Snell T., Gunasiri H., Garad R., Meadows G., Enticott J. Prevalence and determinants of mental health related to climate change in Australia. *Australian & New Zealand Journal of Psychiatry*. 2022;0(0). doi:10.1177/00048674221107872

19. Should the Australian government develop a National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan? If yes: a. What are the key considerations in developing a methodology? b. How should their development draw on work already undertaken, for example at the state and territory level, or internationally? c. What are the key areas where a national approach will support local/jurisdictional vulnerability assessment and adaptation planning?
Yes: as part of the National Climate and Risk Assessment processes and not as a duplication of efforts. This should be executed as a whole of government assessment, and not siloed within the DHAC Key areas for consideration are: The development of a National Health Vulnerability and Adaptation Assessment and a National Health Adaptation Plan should be conducted as part of the National Climate and Risk Assessment processes and not as a duplication of efforts. This should be executed as a whole of government assessment, and not siloed within the DHAC. ● The Strategy should account for the lived experience of consumers, and all people living in Australia, as part of vulnerability and adaptation planning. ● The methodology used needs to identify policy gaps and opportunities for improving population resilience across government portfolios. ● The Strategy should support the adoption of climate 'and' health assessments as a tool through which to assess vulnerability, risk and adaptation.

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20. Would there be value in the Australian government promoting a nationally consistent approach to vulnerability assessment and adaptation planning for the health system specifically, for instance by issuing guidance and associated implementation support tools for states, territories and local health systems? If yes, what topics should be covered to promote a nationally consistent approach? What examples of existing guidance (either from states/territories or internationally) should be drawn from?
YES This should take into account the extensive range of vulnerabilities across different communities and regions, the wide variety of ecosystems and natural habitats and climates across Australia, the wide variety of health and wellbeing considerations, and how these are being impacted by climate change. ● It is recommended that guidance for the assessments take into account policies and tools that have already been developed (e.g. at the state and territory level), and action that has already occurred (e.g. at the health service level) to avoid duplication of effort. ● It is recommended that guidance is provided for a broad range of health and aged care services, and is adaptable to different service settings. ● Implementation support in the form of tools, knowledge and capacity building, and finance, is essential. This work takes considerable time and resources, requires input from multiple internal and external stakeholders, and is new territory for many people in the healthcare workforce. ● The NHSCU must be resourced to provide ongoing implementation support for health services to assess and plan for climate risks. ● The Strategy should seek to adopt existing tools. Guidance and support should be provided for assisting health services to assess and plan for climate risks to healthcare infrastructure, service provision (including surges in service demands and changing burdens of disease and injury), the health workforce, and supply chains. Relevant tools include: ○ Queensland Climate Risk Strategy and Adaptation guides ○ Human Health and Wellbeing Climate Change Adaptation Plan for Queensland ○ NSW Climate Risk Ready program ○ Victorian Health and Human Services Climate Adaptation plan ○ Sydney North Health Network Climate and Health Strategy
21. What immediate high-priority health system adaptation actions are required in the next 12 to 24 months? The Strategy should support: ○ Transformative education and capacity building among policymakers, community members, the health workforce, and within emergency and disaster preparedness services and agencies. ○ Resourcing for emergency services. ○ Food and housing systems, including food security (encompassing caloric and nutrition intake).

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○ Transport system. ○ Support and resources for rural and remote health services to improve resilience. ○ Preparedness for disruption to health system supply chains. ○ Responding to escalating inequity, increasing poverty and homelessness. ○ Preparedness for health threats resulting from human influence on natural ecosystems. ○ Consider the full societal costs of climate inaction over short and long time-frames, and the implications of health-relevant policies in all sectors, to prevent the hidden transfer of costs to the health sector and the undermining of environmental sustainability.

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Proposed Objective 4: Health in All Policies

22. What are the key areas in which a Health in All Policies approach might assist in addressing the health and wellbeing impacts of climate change and reducing emissions?

All dimensions of climate change are interlinked with human health and wellbeing. Therefore, action to reduce the health risks from climate change requires working across all sectors and all levels of government.

The current structure of the Strategy, as implied by the Consultation Paper, needs revision in order to fully address the health risks posed by climate change. Furthermore, it is crucial to health outcomes that DHAC lead from the front in the climate response, and be a key agency in the national response to the climate crisis. The overall focus of the Strategy needs to be strongly directed towards reducing the current risks to population health from climate change, and to maximise the health co-benefits of carefully designed climate mitigation and adaptation actions. This can be achieved through a Health in All Policies approach and the outlined in Healthy, Regenerative and Just Framework, as endorsed by CAHA members and health and environment stakeholders.

The economic costs of climate change under current emissions reduction scenarios, along with modelling the economic savings associated with emissions reductions across a range of sectors, including health benefits. For example, this should evaluate the economic savings associated with the avoided ill health and productivity gains from strategies to reduce emissions in the transport sector.

Much greater benefits for health could be achieved through actively planning to maximise health co-benefits associated with climate adaptation and mitigation strategies at the outset when developing policies—for example, ensuring energy and transport transitions are guided by health evidence. This requires building institutional capacity and skills in other portfolios to implement a Health in All Policies approach, and for the DHAC and stakeholders to provide evidence on the determinants of health and inequity, as well as effective responses and solutions.

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23. What are the most effective ways to facilitate collaboration and partnerships between stakeholders to maximise the synergies between climate policy and public health policy? What are some successful examples of collaboration in this area?

The Strategy should seek to establish an overarching working group or National Committee that consists of experts representing the most relevant facets of health, climate science, implementation science, and Commonwealth, state and territory Ministers with portfolio responsibility for Health, Environment, Climate Change and Energy. There should also be regular engagement and Consultation with Ministers with responsibility for related portfolios, such as Mental Health, Resources, Emergency Services, Planning, and Infrastructure with respect to policies, programs and initiatives in these portfolios that align with the Strategy.

- The Ministerial Committee should have responsibility for overseeing the development of the Strategy, including setting the overall policy direction and providing final approval for the Strategy's policies, programs and initiatives. A 'Climate Change and Health' standing committee of the Australian Health Protection Principal Committee (AHPPC) should be established to provide advice to the Ministerial Committee. An appropriate national agency should be tasked with leading the coordination and implementation of policies, programs and initiatives to deliver the Strategy. The Strategy itself must be integrated with other significant national health strategies, including the Long Term National Health Plan, and the National Preventive Health Strategy.
- The Ministerial Committee should be responsible for monitoring and reporting to the National Cabinet (or any subsequent body) on the progress and outcomes from the Implementation of the Strategy, which should be outlined in detail in a publicly available annual report by the nominated national agency.
- The Strategy should engage early and often with First Nations groups including Elders, local land councils, community led health organisations and the Coalition of the Peaks.

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Enablers

24. How could these enablers be improved to better inform the objectives of the Strategy? Should any enablers be added or removed?
There are a numbers of areas where these enablers could be strengthened: ○ Workforce, leadership and training: The Strategy must include adequate support for workforce involvement in the change process beyond training, and provide detail about the change theory and process. As well as retraining and managing change, the Strategy needs to recognise that in emergencies and disasters, healthcare workers are often supporting immediate family and friends, and may themselves be suffering from post-traumatic stress. There must be contingency for workforce shortages in extreme weather events. There is also a lack of support for workforce capacity building and training. There is a need for a national cross discipline continuing professional development program on climate change and health for the health and social sector, and for people in other sectors. Current training opportunities are either discipline specific (which doesn't encourage or support collaboration) or ad hoc (therefore reaches too few people), or expensive (not everyone can afford for profit education courses). They also often fail to include climate specific mental health training, such as provided by Psychology for a Safe Climate in Australia. There is also a need to support and scale up existing communities of practice for sustainable healthcare to allow achievements and learnings to be shared, and common challenges to be raised. The Strategy should reflect respect for First Nations Knowledges in this enabler, and its inclusion. ○ Research: There is a high priority need for better data on climate-related health and wellbeing outcomes. Data can guide better investment, and disinvestment, in programs and interventions. It is crucial that First Nations peoples are tasked with conducting relevant research and that data sovereignty is an underpinning principle. ○ Collaboration: There is limited support for collaboration on climate change and health. The health sector has self-organised to collaborate on responding to climate change and health and health care decarbonisation, but these efforts require government investment in order to scale up and be more effective. This is reflective of the interdisciplinary nature of climate and health, and it should be a priority of the DHAC to address the barriers and foster enablers to ensure better outcomes for climate and health. ○ Monitoring and reporting: Regular assessment and forecasting of climate-related health impacts across the country are vital. Monitoring over long time periods with robust indicators would help governments and services understand climate change risk, identify specific vulnerabilities, highlight region-specific climate mitigation and adaptation challenges, and track how communities and organisations are responding. Monitoring of the implementation of solutions is also required, in terms of implementation progress, impact, and within the principle of data sovereignty. ● It is recommended the enablers be expanded to include governance, finance and planning. All of these are crucial aspects in the successful implementation of any national strategy. Governance should include: ○ A board (via an Act of Parliament) be established to advise Ministers on the implementation of the Strategy. There should be representatives from public

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and private hospitals, general practitioners, allied health professionals, public health specialists, consumers (particularly form climate impacted and vulnerable communities), climate and health experts and national climate agencies. The Board should be supported by a committee of senior officials from all jurisdictions. The Board should produce an annual report on Strategy progress.

- It is recommended that 'measurement' should become an enabler, as opposed to a standalone objective, and should be supported through a dedicated team that collates and reports on carbon emissions from the health sector. These should be reported through the proposed Board and should include epidemiologists who can explore the health impacts of emissions loads.
- It is crucial there is a commitment of funding.
- The Strategy lacks the inclusion of the commercial determinants of health and climate that exacerbate inequality and impact outcomes. It is crucial that conflicts of interest are recognised, and that the Strategy describes how it is going to manage conflicts of interest in the policy making process

25. For each of these enablers:
    a. What is currently working well?
    b. What actions should the Strategy consider to support delivery?

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Thank you for taking the time to complete this survey – your feedback is greatly appreciated!

Please submit this form in Word format to Health.Climate.Consultation@health.gov.au.

CAPHIA
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Written submission in response to

NATIONAL HEALTH AND CLIMATE STRATEGY

Consultation Paper

ABOUT CAPHIA

The Council of Academic Public Health Institutions Australasia (CAPHIA) is the peak organisation that works to advance public health education and research. CAPHIA leads and represents public health in universities throughout the Australasian region. Across our 39 member institutions, we represent thousands of public health educators, researchers, workforce developers and students. CAPHIA delivers professional development programs, advocates for academic public health and actively contributes to local and global partnerships and networks.

SUBMISSION FOCUS

CAPHIA's submission focuses on our core expertise: public health education, research and workforce development. As such, we primarily address consultation questions relating to the proposed "Workforce, Leadership and Training" enabler of the National Health and Climate Strategy.

Response to the:
National Health and Climate Strategy Consultation Paper

ABOUT CAPHIA:

The Council of Academic Public Health Institutions Australasia (CAPHIA) is the peak organisation that works to advance public health education, research, and workforce development. CAPHIA leads and represents public health in universities throughout the Australasian region. Across our 39 member institutions, we represent thousands of public health educators, researchers, workforce developers and students. CAPHIA delivers professional development programs, advocates for academic public health, and actively contributes to local and global partnerships and networks. We advance public health curricular through development of best practice competencies and education for healthier people and a healthier planet (1).

CAPHIA acknowledges the Traditional Custodians of the country throughout Australia and their connections to land, sea, and community, and recognise their past and ongoing contributions to the generation of knowledge systems. We work in partnership with First Nations people across Australasia to promote quality, culturally safe education in public health. CAPHIA also recognises the critical role First Nations knowledge plays in our health and prioritises the teaching of their knowledge, perspectives, and leadership to enact a sustainable and equitable future (2).

SUBMISSION FOCUS:

CAPHIA's submission focuses on our core expertise: academic public health. As such, we address Enabler 1, which pertains to workforce, leadership, and training. More specifically, our response centres around Enabler 1.1. which moves to *"encourage medical colleges and other education and training institutions to ensure the impacts of climate change on health form part of the training curriculum for all health care professionals."*

INTRODUCTION:

As outlined in the Consultation process, community input including diverse perspectives, experiences and knowledge of all stakeholders is essential in developing the *National Health and Climate Strategy.* As CAPHIA membership represents 33 Australian universities and two affiliate institutional members, we set the standard for academic public health curricula and are well placed to make recommendations on education and training requirements of the health workforce.

We welcome the opportunity to share our perspectives and recommendations to build our desired future state: a sustainable, appropriately resourced, and highly educated health workforce to best support the aims of the *National Health and Climate Strategy.* We look forward to enacting the mechanisms and recommendations outlined below with you.

CAPHIA RESPONSE:

General feedback

CAPHIA recognises the crucial role education plays in creating a sustainable and equitable future (2); and we support the submission's active focus on partnering with First Nations peoples to harness their deep knowledge, ways of being, and ways of doing to help create a healthier future and a healthier planet.

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We also applaud the inclusion of a Health in All Policies approach to holistically monitor and assess the impact of decisions on the public's health and on climate and intervene where necessary to achieve the Strategy.

The impact of climate on health is core to the public health curriculum including:

- ***One health and planetary health*** which emphasises the complex intersection between the earth and people, and the co-benefits of improvements in each (e.g., improvements in the health of people can reduce hospital admissions and decrease the carbon cost of primary care) (3, 4)
- ***The social determinants of health*** which are integral in determining a person's individual susceptibility to the health impacts of climate change (e.g., numerous social determinants can impact heat vulnerability which is a known risk-factor of cardiovascular disease) (5, 6)
- ***The commercial determinants of health*** which often serve to worsen existing health inequalities in relation to climate change (e.g., ongoing Cobalt mining operations in a number of low-income nations) (7)

24. How could these enablers be improved to better inform the objectives of the Strategy? Should any enablers be added or removed?

Recommendation 1. E1.1 reworded to "Invest and embed climate and health competencies in all clinical specialist training and certification programs, and in continuing professional development and re-certification programs".

Clinicians at all stages of their career require capability development and upskilling. Focusing only on the future workforce may have a translation-to-practice lag of a decade.

The current wording of Enabler 1.1. focuses on *emerging* medical practitioners which misses the opportunity to engage with current specialists, many of whom are in senior roles and leadership positions within their respective hospital and health service. This has the potential to create a substantial lag in the translation of education into standard clinical practice. Climate and Health education should be integrated into the already mandated professional development that these senior clinicians complete on an annual basis.

Recommendation 2. Add new objective E:1.2 "Invest and support a climate and health competency uplift for the whole public health workforce".

The workforce required to address the climate crisis is the public health workforce – not just the medical workforce.

The proposed *Health and Climate Strategy* aims to protect the health and wellbeing of Australians from the effects of climate change – this is public health. The conversation needs to be reframed to reflect this, including investment in the workforce required to enact the Strategy.

Therefore, it needs to be clearly acknowledged that the public health workforce is far broader than medical specialists. Focusing only on medical professionals is harmful as it ignores the many and varied professionals who address the health of Australians through a variety of health promoting and enabling strategies, and development of healthy environments and systems where we live and work.

As the peak body for academic public health in the region, we define public health as a broad-ranging speciality that may be strengthened by a diversity in skills, backgrounds, and perspectives to

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better reflect and serve populations and citizens (8). The Public Health workforce comes from a variety of backgrounds including, but not limited to:

- "*Educators, researchers and evaluators*
- *Epidemiologists and biostatisticians*
- *Policy writers and program designers*
- *Allied health professionals*
- *Lawyers, ethicists, urban planners, and engineers*
- *Clinicians and practitioners*
- *Health, community, and industry workers, including health promotion practitioners, as well as managers, leaders, and advocates*" (8).

Thus, each of these professions and specialists can positively contribute to the Health and Climate Strategy and should be included in the enabling workforce.

The limited scope outlined in Enabler 1.1 misses a key opportunity to uplift the entire health workforce to improve our climate and the health of local and global populations. Medical specialists and other clinical healthcare providers are an important component of the public health workforce. However, frontline clinicians primarily focus on treating the consequences of suboptimal health systems and environments, rather than preventing poor health outcomes by designing health-promoting and health-enabling systems and environments. Investing in health-promotion and illness-prevention pays significant dividends over time and delivers the best return on investment in health (9). Thus, investing in those who specialise in preventive health and health promotion will create the upstream change required for our shared vision of a healthy planet and a healthy Australia.

Recommendation 3: Add new objective E1.3: "A scan of current education and training activities and resources pertaining to climate change and health."

As with Enabler 2: Research, it is advised to identify and collate education and training activities and resources which exist across the diverse spectrum of public health and in climate-focused social impact organisations.

Providing a 'hub' or similar central facility to access these resources will enable individuals and organisations to upskill in an area they need, and enhance uptake of existing resources, reducing waste and replication.

CAPHIA response to 25 – Workforce, Leadership and Training Enabler

a) What is currently working well?

Climate and Health is a public health issue and needs to be reframed as such. Climate and health impacts all communities and individuals locally and globally. A well-funded, thoughtful, and systematic approach is required to make rapid and meaningful impact to mitigate and adapt to the climate crisis.

Climate and health competencies are already taught in public health curricula across Australasia. This is working well within the limited funding provided to public health education. Investment is required to deliver targeted education, training, and resources to upskill the public health workforce to ensure they have the capability and capacity to deliver the Strategy. Refer to recommendations below for specifics.

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b) What actions should the strategy consider to support delivery?

Recommendation 4: Develop a Climate and Health Workforce Capability Development Grant to genuinely invest in this key enabler.

The aims of the Health and Climate Strategy will not be realised without additional investment in our public health workforce.

The climate crisis requires urgent and significant investment to mitigate against collapse of our global ecosystem (10).

Workforce is a crucial enabler in a healthier planet and healthier Australia. Enablers require investment to succeed.

As we have previously called for, the Australian Public Health workforce requires investment (11). Thus, urgent workforce development investment is needed to achieve the Health and Climate Strategy.

"Encouraging" change within existing structures and funding envelopes is insufficient to enact real change. Most specialist colleges are well funded and able to include these knowledge, skills and capabilities in their existing training and continuing professional development programs. The same cannot be said for all associations, colleges and other non-profits and charities focusing on the capability development of those actively improving the health and climate. To do so it is recommended that the government develop a Health and Climate Workforce Capability Development Grant to genuinely invest in this key enabler. This Grant could encourage innovative approaches through collaborations between entities to optimise the impact of workforce development initiatives, accelerating progress on the Health and Climate Strategy.

Recommendation 5: Invest in the upskilling of the Public Health Workforce: Fund the development of micro-credentials and short courses on OneHealth, health systems and addressing the Sustainable Development Goals

As advised in our submission in response to the *Roles and Functions of an Australian Centre for Disease Control* (12), government-funded short courses and micro credentials are a practical and efficient mechanism to quickly upskill, cross-skill and develop knowledge and capabilities. Contemporary Public Health essentials include "awareness of wider global health considerations, e.g. One Health principles, climate change, economic inequities, trade, and health" (13). As public health education continually evolves and develops in line with research innovation and best practice, policy and practice must be informed by this most up to date knowledge and research. Hence, we recommend including additional government funding for the continued professional development, education, and training of Public Health Practitioners to achieve the Health and Climate Strategy deliverables.

As outlined above, the whole health and public health workforce requires education and/or upskilling to deliver the Health and Climate Strategy.

Comprehensive integration of climate change education across the public health workforce is required, beyond that provided to specialist doctors in training.

Recommendation 6: Decision makers require fundamental public health education to address the climate crisis and create a healthier Australia.

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Health and climate decision makers require (at a minimum) rudimentary education in public health to understand the relationship between climate and health, and the impact of their decisions on both the climate, and the health of the populations they serve. As advocated by the Global Network for Academic Public Health (13), decision makers require a basic understanding of public health including "the principles of One Health, recognizing the connection between the health of people, animals, and the environment". By understanding the essentials of public health, the Australian Government can better serve its communities, prevent, and respond to public health emergencies (including the climate crisis), adapt health services to meet urgent needs, and avoid exacerbation of health inequities.

CONCLUSION:

CAPHIA supports the broad directions of the *National Health and Climate Strategy Consultation Paper.* However, as the peak academic public health body setting public health education standards in Australasia, we are keen to ensure the consultation paper encompasses the whole public health workforce with comprehensive integration of climate change education.

As outlined in our aforementioned recommendations, we firmly advocate that the entire public health workforce has the potential to contribute to the Health and Climate Strategy and should be provided with development and upskilling opportunities accordingly. To ensure this education is robust, significant investment by the Government is required to collate existing resources and address current gaps. We propose that short courses and micro credentials are a practical and efficient mechanism to quickly upskill and cross-skill individuals from across the public health workforce, at all stages of their career. Similarly, climate change decision makers require upskilling in rudimentary public health principles to ensure they can better serve their communities.

CAPHIA appreciates the opportunity to make this submission, contributing to the conversations to date and assisting in the development of a robust *National Health and Climate Strategy*. Please contact us should you require any additional information or have any queries in relation to this submission.

Professor Rebecca Ivers, AM
Chair, Council of Academic Public Health Institutions Australasia (CAPHIA)

Holly Donaldson
Executive Director, Council of Academic Public Health Institutions Australasia (CAPHIA)

On behalf of the CAPHIA Board of Directors.

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References:

1. Council of Academic Public Health Institutions Australasia (CAPHIA) 2016, Foundation Competencies for Public Health Graduates in Australia, 2nd Ed., Canberra, ACT.
2. Taylor J., Roiko A., Coombe L., Devine S., Oldroyd J., Hallett J., Murray Z., Nona F., Amato Ali D., Crawford G. and Gurnett T., Council of Academic Public Health Institutions Australasia, Public health education for a sustainable future 'Call to Action', Aust N Z J Publ Health, 47 (2), 2023, 100042.
3. Rabinowitz PM, Pappaioanou M, Bardosh KL, Conti L. A planetary vision for one health. BMJ global health. 2018;3(5):e001137–e001137.
4. Correia T, Daniel-Ribeiro CT, Ferrinho P. Calling for a planetary and one health vision for global health. One health. 2021;13:100342–100342.
5. Solar O, Irwin A, Wise M. Social determinants, political contexts and civil society action: a historical perspective on the Commission on Social Determinants of Health. Health promotion journal of Australia. 2006;17(3):180–5.
6. Zhang S, Rai M, Matthies-Wiesler F, Breitner-Busch S, Stafoggia M, de Donato F, Agewall S, Atar D, Mohammad M, Peters A, Schneider A. Climate change and cardiovascular disease – the impact of heat and heat-health action plans. European Society of Cardiology. 2022; 22(18).
7. World Health Organisation (WHO) 2023. Commercial determinants of health. Last accessed 12/07/2023: https://www.who.int/news-room/fact-sheets/detail/commercial-determinants-of-health
8. Council of Academic Public Health Institutions Australasia (CAPHIA) 2022. Position Statement: Educating the Public Health Workforce. Last accessed 05/07/2023: https://caphia.com.au/wp-content/uploads/2022/12/CAPHIA-Position-Statement_-Educating-the-Public-Health-Workforce.pdf
9. Masters R, Anwar E, Collins B, Cookson R, Capewell S. Return on investment of public health interventions: a systematic review. Journal of Epidemiology and Community Health. 2017;71(8):827834.
10. IPCC 2023, Summary for Policymakers. In: Climate Change 2023: Synthesis Report. A Report of the Intergovernmental Panel on Climate Change. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, H. Lee and J. Romero (eds.)]. IPCC, Geneva, Switzerland, pp. 1-36.
11. Gurnett T, Prokopovich K, Ivers R, Cullerton K, Stekelenburg N and Slevin T 2022, 'Letter to the Editor: Government support and commitment to university-level public health education, research and workforce development is critical,' Australian and New Zealand Journal of Public Health, vol. 46, no. 3, pp. 417-18. DOI: 10.1111/1753-6405.13244
12. Council of Academic Public Health Institutions Australasia (CAPHIA) 2022, CAPHIA Written submission in response to Roles and Functions of an Australian Centre for Disease Control. Last accessed 05/07/2023: https://caphia.com.au/wp-content/uploads/2022/12/FINAL-SIGNED-CAPHIA-Submission_-Roles-and-Functions-of-an-Australian-CDC-2022.pdf
13. Global Network for Academic Public Health. 2021. Global governance for improved human, animal, and planetary health: the essential role of schools and programs of public health. Last accessed 14/11/2022: https://s3.amazonaws.com/ASPPH_Media_Files/Docs/GNAPH_Global+governance+for+health.pdf

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Australian Government
Department of Health and Aged Care

NATIONAL HEALTH AND CLIMATE STRATEGY

Detailed submission form

This form allows you to provide responses to the full set of questions in the Consultation Paper available here.

Alternatively, you may wish to complete the briefer online survey available here.

Please submit this form in Word format to Health.Climate.Consultation@health.gov.au.

Respondent details

What is your name?
[redacted]
What is your email address?
[redacted]
What is your organisation?
Australian Institute of Health Innovation (AIHI), Macquarie University
Have you read and agreed to the Privacy Statement? (NB we will not be able to use your submission unless you tick this box)
☒ I have read and agreed to the Privacy Statement
Do you identify as Aboriginal and/or Torres Strait Islander? (Yes/No/Prefer not to say)
[redacted]
Please select which applies to you: ☐ Individual citizen ☐ Health Service Provider ☐ Industry and Life Sciences Organisation or Representative ☒ Academic or Researcher ☐ Primary and/or Allied Health Peak or Advocacy Organisation or Representative ☐ Aged Care Service Provider

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☐ First Nations Health Service Provider
☐ First Nations Community Group
☐ First Nations Peak or Advocacy
☐ Medical College or Peak professional body

Questions for feedback from the Consultation Paper

Introduction

1. How could these objectives be improved to better support the vision of the Strategy?

1. ***Measurement:*** *measure and report on health system greenhouse gas emissions, so progress in emissions can be tracked and quantified.*

   Measuring the type and proportion of greenhouse gas emissions attributed to the health system is integral to understanding baseline emissions, the origin of emissions (in relation to Scope 1, Scope 2 or Scope 3), and establishing a trajectory of progress. We would advise that the Consultation Paper should consider by which metric(s) greenhouse gas emissions will be measured.

   The Consultation Paper should provide options for measuring and reporting on the use of anaesthetic gases such as desflurane or nitrous oxide. Meaningful examples demonstrating the impact of these gases would strengthen the messaging in the discussion paper (for example one hour of surgery using desflurane is equivalent to driving 200-400 kilometres; one hour of surgery using nitrous oxide is equivalent to driving 100 kilometres). Under Objective 2, Mitigation, medicines and gases that pose a risk to the environment are cited, however practical approaches to reducing their use need to be provided (page 19). It is unclear if any targets or timelines have been set and these are needed to drive change and to measure progress.

   Furthermore, the impact of these emissions on climate and health needs to be understood, including an understanding of immediate environmental impact, for example, ambient air pollution, and long-term health impact(s), for example respiratory issues. Cross-disciplinary research is needed to shed light on the prevalence and incidence of climate-related diseases, both communicable and non-communicable.

   Additionally, a broad understanding of climate and health needs to be enmeshed into greenhouse gas measurement, that is, understanding that climate and health are not two separate entities, and therefore research that investigates the inter-relationships between greenhouse gas emissions and health impacts should be prioritised.

   Reporting greenhouse gas emissions must be mandatory for all States and Territories and transparent about assumptions and scope. Reporting must be comparable across States and Territories to enable accurate comparisons and to enable sharing of effective strategies for emissions reductions. Reporting should reflect not only the proportion and origins of emissions (reflected at baseline), but also the reduction of emissions as a result of actions taken by Government.

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Cross-disciplinary partnerships and data registries will help bridge the gap between sectoral or institutional silos and deepen an understanding of the relationships between climate and health across sectors. Data related to unforeseen health disasters such as COVID-19, bushfires and floods will offer valuable insights and lessons learned for future responses to prevent population illness and burden on the health system.

2. ***Mitigation:*** *accelerate the reduction of greenhouse gas emissions from the health system.*

   This objective should outline the options and strategies that could be implemented in different contexts to accelerate the reduction of greenhouse gas emissions from the health system. Currently, it is assumed evidence gained during the measurement phase (above) will inform policy and practice to reduce emissions, however this connection is unclear. Acceleration should be informed by evidence, aligned with clinical care standards, and be cost-effective. Additionally, it should seek to align with current local and international best practice, cross-sector policies, and legislation that calls for action to reduce emissions.

3. ***Adaptation:*** *strengthen the resilience of the health system and communities to anticipate and respond to health impacts of climate change.*

   The health system in this instance should include all policies, practices, processes, mechanisms, workforce, and environment within which it operates. The definition of 'workforce' should encompass all staff including administration, maintenance, food services and other staff, as well as clinical and medical staff.

   The workforce may anticipate the health impacts of climate change by being encouraged to implement more sustainable behaviours into their workplace. Although, the onus of this should not be placed solely on individuals, individuals must also be supported by appropriate processes and mechanisms that enable sustainable practices.

   To increase system resilience, workforce planning is needed to ensure adequate surge-capacity in preparation for the influx of patients that are already arising due to climate change. Health workforce training and education to build knowledge and capacity among all staff working in the healthcare sector is needed. Training should be provided as an embedded responsibility and a part of regular work. Optional or adjunct training and education may not be undertaken, as it may be seen as beyond people's regular work responsibilities.

   Develop policies that favour suppliers and supply chains with green credentials and products that are environmentally friendly, for example biodegradable PPE, electric vehicles, local food suppliers who rely on local produce.

   Ensure that healthcare precincts are proactive in creating green spaces and encourage a tree canopy to maintain patients', staff and community wellbeing. For example, large multi-story carparks could be used for vertical gardens.

   Improve public transport access to healthcare precincts to improve access for patients and staff whilst at the same time reducing CO_2 emissions, traffic congestion and noise pollution in the local community.

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Consideration of current pressures on the health system, including current pressures on hospital staff for example, will ensure policies are practicable and cognisant of the demands of the working in healthcare settings. A common issue in policy versus practice whereby policies have little adherence or uptake is work as imagined versus work as done. Ill-fit and overreaching policies can result in a significant gap between policy and practice. Therefore, co-designing with the healthcare workforce to inform the policies that impact them is vital.

Community responsiveness may refer to community resilience of people residing in rural, regional, and remote areas impacted by climate-related disaster, the resilience of healthcare services located in rural, regional, or remote areas that are often under-resourced, including inadequate staffing and equipment.

Other community resilience may refer to building the capacity of priority populations (including Aboriginal and Torres Strait Islander peoples and culturally and linguistically diverse (CALD) communities), by ensuring climate and health information, including disaster responsiveness, is available, accessible, affordable, and acceptable (i.e., culturally safe).

4. ***Health in all policies:*** *Maximise the synergies between good climate policy and public health policy by working across policy areas to lessen the impact of climate change on the social and cultural determinants of health and wellbeing.*

Alignment with other policies that are addressing the same or similar issue through a different lens is important. Forming partnerships and putting health at the centre of climate strategy, and conversely, climate health at the centre of health strategy, is also crucial.

We also support monitoring current gaps between policy and practice and understanding where the opportunities are to leverage current policies, as well as amend them. The Consultation Paper should indicate how health will be integrated into all policies, via which mechanisms and which current policies will be leveraged. Multistakeholder, multisectoral collaborations are needed across government portfolios, departments and agencies in addition to partnerships with communities, NGOs and industry. The establishment an "all of Government" Health and Climate Change Authority should be considered to lead on urgent policy and action in this area.

2. How could these principles be improved to better inform the objectives of the Strategy?

1. ***First Nations leadership****: First Nations knowledge and experience must be central to decision making on climate and health policy at all levels.*

This is outside our expertise.

2. ***Tackling health inequities****: A health equity approach recognises some populations are more vulnerable to and have less capacity to adapt to the health impacts of climate change, and that responses to climate change need to take account of disparities in health outcomes.*

This principle does not include the concept of co-design or a person-centred approach in tackling health inequalities. For brevity, this paragraph need not

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mention the specific populations most likely to experience health inequities, however the subsequent section(s) that expand on this principle should.

Further description should mention priority populations who experience these health inequities, how inequities manifest according to determinants of health, and how they are, or could be addressed in the health system. It would be useful to understand how the Department plans on working with communities to ensure systems are responsive to them.

Embedded in this principle or as an additional principle, should be the human right to health.

3. ***Population health and prevention****: The response of the health system, and society more generally, to climate change must be underpinned by a public health perspective. This recognises that prevention of disease and maintenance of good health across the lifespan, in combination with optimal secondary and tertiary prevention, assists both mitigation and adaptation.*

   Although it is important to include a public health perspective in disease prevention related to climate change, low-value care must also be considered, as this can result in unintended consequences that negatively impact climate health, by unnecessary overuse of resources. Currently, 30% of care has little or no benefit to the patient or is wasted resources such as duplication. Since every episode of care has a carbon emission associated with it, prevention policies (such as wide-spread diagnostic testing), need to balance benefits to the patient versus harms to the patient and the environment.

4. ***One Health****: The Strategy will be underpinned by the principle of One Health – recognising the connection that exists between the health of people, animals and the environment.*

   We are pleased to see One Health as a guiding principle for the strategy. Degradation of the environment has a direct impact on human health through air pollution, emergence of new diseases, and development of drug-resistant microbes, for example. The establishment of an Australian Centre for Disease Control is a good first step. A broader approach is needed that brings together sectors, portfolios and departments in a multistakeholder "Health and Climate Change Authority", potentially as an adjunct or a part of the Australian CDC.

5. ***Evidence-informed policymaking****: The response to climate change must be based on the best available data, evidence and research – but we must also be willing to take action on a prudent and precautionary basis in the face of uncertainty and incomplete information. Where possible, actions should be prioritised based on the principles of cost-effectiveness analysis, considering where resources can be allocated to maximise population health gains, while also taking account of health inequities and rights-based approaches.*

   Principle 5 demonstrates a mature understanding of decision sciences as facilitated through cost-effectiveness analysis (CEA). CEA is the synthesis of the best available evidence, and the characterisation of its uncertainty. The definition of cost-effectiveness, or a positive economic outcome, is where there is a net health benefit expected of a decision, from a health system or societal perspective. Principle 5 rightly signals that decisions and action cannot necessarily wait for statistical significance or inter-rater agreement. Instead, decisions are informed by

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the likelihood that policy options, as competing claims to scarce resources, would preclude more valuable and otherwise attainable outcomes.

The concepts in this statement are appear to be linked to seminal work by Karl Claxton [1], on which economic evaluation methods are based, where he states that "if the objective is to maximise health gain for a given budget, then programmes should be selected based on the (posterior) mean net benefit irrespective of whether any differences are regarded as statistically significant or fall outside a Bayesian range of equivalence. This is because one of the mutually exclusive alternatives must be chosen and this decision cannot be deferred.

The opportunity costs of failing to make the correct decision based on the mean are symmetrical and the historical accident that dictates which of the alternatives is regarded as current practice is irrelevant."

Claxton's view on evidence uncertainty is not without critique. It is worth considering emerging methodological practices surrounding life-cycle assessments, such as that proposed by Kirwin et al., [2], which focus on overcoming challenges with the integration of evolving evidence.

The reference to inequities and rights-based approaches is important. It recognises the role of a decision-maker in an extra-welfarist framework, to consider their willingness to pay for an expected outcome, but as moderated by parallel pursuits and protections for equity, fairness, and other societal goals. Specific goals may warrant explicit consideration and inclusion as additional consequences within a CEA.

It is helpful for Principle 5 to say 'evidence-informed' rather than 'evidence-based'. No economic model or set of synthesised evidence is complete. Interpretation of information and its biases is always required and should be part of a transparent and accountable process that enables reasonable public engagement and procedural justice.

Given the signal from Principle 5 that an extra-welfarist approach to resource allocation would be implemented, it is important for this decision-making process to reflect Health Technology Assessment (HTA) best practices. HTA exists to inform other areas of public health spending, and to establish contradictory processes would risk making policy decisions that are allocatively inefficient and unsustainable.

[1] Claxton K. The irrelevance of inference: a decision-making approach to the stochastic evaluation of health care technologies. *J Health Econ*. 1999;18(3):341-64.

[2] Kirwin, E. Round, J. Bond, K. and McCabe, C. A Conceptual Framework for Life-Cycle Health Technology Assessment. *Value in Health*, 2022. 25(7): p. 1116-1123.

6. ***Partnership-based working across all levels of government and beyond****: All levels of government need to work closely with each other, as well as with communities, patients, First Nations, not-for-profit organisations, peak bodies, private industry and education and research institutions to craft and implement a holistic and nationally consistent response to climate change.*

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Although this is mentioned throughout the Consultation Paper, it is not described how competing priorities and interests will be managed. A broader approach is needed that brings together sectors, portfolios, government department, communities and industry in a multistakeholder "Health and Climate Change Authority", potentially as an adjunct or a part of the Australian CDC.
3. Which of the various types of greenhouse gas emissions discussed above should be in scope of the Strategy's emission reduction efforts?
All emissions mentioned should be included. Specific emissions measured should be: • CO_2 emissions due to all activities (food waste, transport, low-value care etc.) • Methane • Emissions attributed to hydrofluorocarbons (sevoflurane and desflurane) • Emissions attributed to chlorofluorocarbons (isoflurane) • Nitrous oxide
4. What existing First Nations policies, initiatives, expertise, knowledge, and practices should the Strategy align with or draw upon to address climate change and protect First Nations country, culture, and wellbeing?
This is not within our scope of expertise.
5. What types of governance forums should be utilised to facilitate co-design of the Strategy with First Nations people to ensure First Nations voices, decision-making and leadership are embedded in the Strategy?
This is not within our scope of expertise.

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Proposed Objective 1: Measurement

6. Beyond the schemes already noted above, is your organisation involved in any existing or planned initiatives to measure and report on health system emissions and/or energy use in Australia?
The Australian Institute of Health Innovation (AIHI) is the pre-eminent research capability in Australia and one of the largest and most prestigious in the world. Its 300 staff, honorary fellows and students publish 300 books, chapters and peer-reviewed articles in the international literature each year, with a specific focus on health systems strengthening, improvement, implementation science, sustainability, climate change and health reform, working with 152 countries. It forms part of the Faculty of Medicine, Health, and Human Sciences (FMHHS) at Macquarie University in Sydney. FMHHS sponsors the MQ Health Sustainability Committee in which representatives from AIHI, faculty, and the Macquarie University Hospital and Clinic, address emissions, waste, other pollutants, and energy use related to FMHHSand MQ Hospital and clinic. Work includes measuring emissions related to desflurane, reducing single-use surgical tools, disposable hospital curtains, and waste management pathways.
7. What additional data and information is required to support targeted emissions reduction efforts within health and aged care?

Identifying areas which have the potential to have a large carbon footprint or may be easy to change (positive outcome without extensive change). In light of this, we suggest that the following areas be monitored and reported on:
 	
Travel:
• Quantify unnecessary staff and patient travel (e.g., associated with testing and screening, discussion of test results. Activities which could be replaced with telehealth rather than face-to-face consultations)
• Unnecessary medical conference travel (promotion of online learning and meetings)
• Workforce and patient transport (healthcare professionals to and from work)
  ○ Metro – public transport and infrastructure consideration
  ○ Rural, regional, and remote – travel between services (healthcare professionals and patients move between towns often kilometres away)
• Volunteer branches and organisations – volunteer travel
• Monitor transition to electric vehicles for patient transport and ambulance fleets
 	
Low-value care (see previous and comments below).
 	
Inventory and supply chain emissions (see previous and comments below).
 	
Food waste:
• Methane emissions related to organic/food waste not properly disposed of from hospitals – review waste management practices of contractors dealing with waste and impose checks, audits and controls
 	
Pharmaceuticals and new technology
• Current profile of emissions attributed to the production of new medical instruments versus recycled (life cycle analysis as part of the HTA)

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- Pharmaceuticals account for 18% of GHG emission in Australia, therefore adding an emissions component to new drug approval/assessment could reduce this area of emissions. Disposal of drugs also needs to be considered.

Currently, the consultation paper canvasses important literature, however it is evident there is extensive literature that has not been analysed. We recommend consulting with a breadth of literature that examines the interplay between health and the environment, as well as literature that reflects an implementation science approach.

Proposed Objective 2: Mitigation

8. What do you think of these proposed focus areas for emissions reduction? Should anything else be included?

Emissions related to production, distribution and disposal need to be clearly highlighted. To conduct this, a lifecycle assessment should be conducted. Life cycle analysis processes need to be developed and refined to enable their use in decision-making. Development of standardised software to facilitate this is essential.

In instances where medical and surgical equipment is reused, the emissions and pollutants related to sanitising agents should also be reflected on.

Although not considered an emission, other pollutants need to be considered in this strategy, for example water pollutants and soil pollutants and soil toxicity.

9. Which specific action areas should be considered relating to the **built environment and facilities (including energy and water)**, over and above any existing policies or initiatives in this area?

All new buildings and refurbished facilities should be net zero carbon. New facilities should be equipped with future-proofed equipment (e.g., solar or electric generators, not liquid gas since this will be phased out. No piped NO_2 since this is being phased out). Purchasing and tenders for new buildings need to be quickly updated to reflect future needs rather than past status quo.

10. Which specific action areas should be considered relating to **travel and transport**, over and above any existing policies or initiatives in this area?

As above (please refer to section 7).

11. Which specific action areas should be considered relating to **supply chain**, over and above any existing policies or initiatives in this area?

- Medicines and gasses
  - Substance
  - Origin
    - Place of manufacture
    - Transportation-related emissions
    - Use context (e.g., anaesthetic)
  - Disposal
  - Quantity
- Medical devices
  - Origin
    - Place of manufacture
    - Transportation-related emissions

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- Disposal / safe re-use / recycling
- Medical and surgical equipment
  - Origin
    - Place of manufacture
    - Transportation-related emissions
  - Disposal
- PPE – gowns, masks, gloves, goggles, sanitiser
  - Origin
    - Place of manufacture
    - Transportation-related emissions
    - Biodegradable options
  - Disposal
- Food and beverage in hospitals
  - Circular economy (consider emissions attributed to weight of recycled material)
  - Reduced food waste
    - Composting
    - Inventory management
    - Only prepare necessary food quantities
    - Reusable crockery or cutlery
    - Bio-degradable or compostable crockery and cutlery
- Administrative materials (paper, pens, etc)
- Utilisation of recycling facilities and proper waste streams
  - Workforce training (healthcare professionals and maintenance staff)

Training patients and visitors – signage, apps, videos in waiting rooms

12. Which specific action areas should be considered relating to **medicines and gases**, over and above any existing policies or initiatives in this area?

As above (please refer to section 11).

13. Which specific action areas should be considered relating to **waste**, over and above any existing policies or initiatives in this area?

As above (please refer to section 11).

14. Which specific action areas should be considered relating to **prevention and optimising models of care**, over and above any existing policies or initiatives in this area?

While prevention is important, reducing overdiagnosis and overtreatment will benefit patients and the system.

Before clinical guidelines are changed, there must be evidence that it improves patient outcomes. For example, recent changes to gestational diabetes guidelines led to more appointments, testing and emotional distress for pregnant women but not improvements in outcomes for the mother or child).

Reducing wasteful and low-value care will have a significant reduction in greenhouse gas emissions.

Models of integrated care and care coordination combat system fragmentation, improves patient and provider experiences, averts unnecessary tests, imaging and travel. For example, the Kids GPS integrated care model was shown to reduce ED presentations, hospital admissions, days off school and approximately 50,000km of travel. [3]

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[3] Breen, C, Altman, L, Ging, J, Deverell, M, Woolfenden, S, & Zurynski, Y. Significant reductions in tertiary hospital encounters and less travel for families after implementation of Paediatric Care Coordination in Australia. *BMC Health Services Research*, *2018, 18*(1), 751.

Regarding optimising models of care, supporting the use of telemedicine when appropriate, directly benefits patients, doctors, and the system by reducing travel, missed school and work, and increasing the likelihood of attendance. It also reduces greenhouse gas emissions from care.

Supporting social prescribing (referral of patients to non-medical care, such as art on demand, or activities that address social determinants on health) would also provide benefits to the system and patients. [4]

[4] Royal Australian College of General Practitioners (RACGP), *Social Prescribing Roundtable November 2019 Report*, RACGP, 2019.

15. What can be done to involve private providers within the health system in the Strategy's emissions reduction efforts?

- Create shared standards for net zero carbon emissions that can be used across facilities and procedures in public and private systems.
- Work in partnership with the private providers and insurers to support and commit to the uptake of net zero care and facilities.

16. Where should the Strategy prioritise its emissions reduction efforts?

a) How should the Strategy strike a balance between prioritising emissions reduction areas over which the health system has the most direct control and prioritising the areas where emissions are highest, even if it is harder to reduce emissions in these areas?

b) Which of the six sources of emissions discussed above (on pages 13 to 18 of the Consultation Paper) are the highest priorities for action?

a) The energy supply chain is the largest source of carbon emissions and also out of the direct control of health systems. This area will provide the highest reduction faster than any other area therefore working at a national scale, the Strategy could use its leverage to focus on this area in conjunction with other policy makers at the Federal level.

b) In order of priority and biggest emitter:
1. Supply chain
2. Medicines and gases
3. Built environment and facilities (including energy and waste)
4. Prevention and optimising models of care
5. Travel and transport
6. Waste

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17. What 'quick wins' in relation to emissions reduction should be prioritised for delivery in the twelve months following publication of the Strategy?
All priority setting activities require trade-offs for the allocation of scarce resources. It is therefore critical that the decision-making around priorities be transparent. Changing anaesthetic gases and asthma inhalers would provide a rapid reduction in greenhouse gas emissions and has sufficient evidence of both patient and system outcomes for implementation. Focusing on increasing the usability and uptake of life cycle assessment in Health Technology Assessment and in hospital and clinical settings would create a solid basis for future decision-making.

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Proposed Objective 3: Adaptation

18. What health impacts, risks and vulnerabilities should be prioritised for adaptation action through the Strategy? What process or methodology should be adopted to prioritise impacts, risks and vulnerabilities for adaptation action?
Health impacts in addition to those mentioned on pages 24-25 include: • Illness related to soil toxicity • Chronic non-communicable disease and illness related to soil, water and food contamination • Impact of climate-related illness exacerbated by rural/regional/remote residency Processes/methodology to prioritise impacts, risks and vulnerabilities: • Rights-based approach • Population health metrics (QALYs and DALYs) • Proportion of population – utilitarian approach • Cost-effectiveness
19. Should the Australian government develop a National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan? If yes: a. What are the key considerations in developing a methodology? b. How should their development draw on work already undertaken, for example at the state and territory level, or internationally? c. What are the key areas where a national approach will support local/jurisdictional vulnerability assessment and adaptation planning?

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20. Would there be value in the Australian government promoting a nationally consistent approach to vulnerability assessment and adaptation planning for the health system specifically, for instance by issuing guidance and associated implementation support tools for states, territories and local health systems? If yes, what topics should be covered to promote a nationally consistent approach? What examples of existing guidance (either from states/territories or internationally) should be drawn from?
Yes. See other replies.
21. What immediate high-priority health system adaptation actions are required in the next 12 to 24 months?
According to Braithwaite et al., [5] the 60:30:10 Challenge refers to 60% of care on average aligning with evidence-based guidelines, 30% is waste or low-value care, and 10% suffers some form of harm. This issue has persisted over the course of three decades, implying that linear models of change that heavily rely on policies and hierarchies are insufficient. Deep learning systems have the capacity to enable the utilisation of big and smaller-scale data, to support less waste in the health system. [5] Braithwaite, J., Glasziou, P. & Westbrook, J. The three numbers you need to know about healthcare: the 60-30-10 Challenge. *BMC Med*. 2020; 18:102. AIHI has produced two systematic reviews that are under review, and once they are published, insights can be shared. These systematic reviews focus on healthcare and the carbon footprint, and how the healthcare system can cope with an influx of patients. In addition, AIHI is writing a book, the Routledge Handbook on focussing on climate and health systems which is due to be published later in the year. These resources expand on our immediate term, medium term and long-term suggestions above. Learnings thus far have indicated health systems are ill-prepared, and that it is not simple to achieve net zero carbon, not for healthcare, not for the economy and not for other sectors. Consideration of additional challenges is recommended. To help aid this process, efforts need to be galvanised across the health system, and an implementation science approach is recommended. AIHI Professors and staff are experts in implementation science, and are willing to share learnings from our research.

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Proposed Objective 4: Health in All Policies

22. What are the key areas in which a Health in All Policies approach might assist in addressing the health and wellbeing impacts of climate change and reducing emissions?
As above (please refer to section 21).
23. What are the most effective ways to facilitate collaboration and partnerships between stakeholders to maximise the synergies between climate policy and public health policy? What are some successful examples of collaboration in this area?
In addition to points mentioned above, having local practice or hospital-based (including private hospitals) sustainability committees and officers to help coordinate and implement goals of a national sustainability unit. Making healthcare sustainability outcomes (emissions reductions targets) part of a hospital's requirement for ongoing accreditation. MQ Health Sustainability Committee brought together many motivated staff and identified several areas in Macquarie University Hospital to improve sustainability such as reducing Clinical Waste, single use plastics such as water bottles/theatre wraps/blueys, unnecessary pathology testing, desflurane use, paper use including paper towels. Some areas the Hospital were doing well included paperless records, a trial of more sustainable 'blueys,' and using renewable energy from its energy supplier.

Enablers

24. How could these enablers be improved to better inform the objectives of the Strategy? Should any enablers be added or removed?
None should be removed. Enabler 3 Communication and engagement should include a section that considers different demographics and targeted strategies. Specific enablers should be added under Enabler 4 'Collaboration' to illustrate specific intentions and actions. An additional enabler is potentially aligned national and international policy and legislation. Policy may be government and non-government. Enabler 4 may precede this.
25. For each of these enablers: a. What is currently working well? b. What actions should the Strategy consider to support delivery?

Thank you for taking the time to complete this survey – your feedback is greatly appreciated!

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Australian Government
Department of Health and Aged Care

NATIONAL HEALTH AND CLIMATE STRATEGY

Detailed submission form

This form allows you to provide responses to the full set of questions in the Consultation Paper available here.

Alternatively, you may wish to complete the briefer online survey available here.

Please submit this form in Word format to Health.Climate.Consultation@health.gov.au.

Respondent details

What is your name?
[redacted]
What is your email address?
[redacted]
What is your organisation?
Healthy North Coast (NNSW Primary Health Network)
Have you read and agreed to the Privacy Statement? (NB we will not be able to use your submission unless you tick this box)
☒ I have read and agreed to the Privacy Statement
Do you identify as Aboriginal and/or Torres Strait Islander? (Yes/No/Prefer not to say)
[redacted]
Please select which applies to you: ☐ Individual citizen ☐ Health Service Provider ☐ Industry and Life Sciences Organisation or Representative ☐ Academic or Researcher ☒ Primary and/or Allied Health Peak or Advocacy Organisation or Representative ☐ Aged Care Service Provider ☐ First Nations Health Service Provider ☐ First Nations Community Group ☐ First Nations Peak or Advocacy ☐ Medical College or Peak professional body

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Questions for feedback from the Consultation Paper

Introduction

1. How could these objectives be improved to better support the vision of the Strategy?
Objectives are strong.
2. How could these principles be improved to better inform the objectives of the Strategy?
Suggest the addition of the following 2 principles: - **Trust and transparency.** This will be fundamental to the principles of the Strategy. From a Healthy North Coast perspective, experience with compounding natural disasters over the last 5 years, including the catastrophic 2022 Northern Rivers floods, as well as nationally, the misinformation around COVID-19, the erosion of trust in health and government will be a challenge over the next 10 years. An excellent approach to community-level communications around climate change and health is imperative to the successful delivery of the Strategy. - **Place-based planning.** A local approach to relevant data, key players and initiatives is important to ensure relevance and buy-in.
3. Which of the various types of greenhouse gas emissions discussed above should be in scope of the Strategy's emission reduction efforts?
Outside of scope of subject matter expertise.
4. What existing First Nations policies, initiatives, expertise, knowledge and practices should the Strategy align with or draw upon to address climate change and protect First Nations country, culture and wellbeing?
Reference documents: - DISCUSSION PAPER: Climate Change and Aboriginal and Torres Strait Islander Health – Climate in health (Lowitja Institute) - REPORT: Aboriginal peoples and the response to the 2019-2020 bushfires Healthy North Coast has seen from a local context: - First Nations people have repeatedly shared how top-down command and control-style interaction and experience with government and emergency response agencies can negatively impact their communities. - There is a disconnect between what policy and strategy is saying about the importance of First Nations people having a voice at the table, and the reality of what occurs on the ground. As a result, some First Nations communities in our area consistently see poorer experiences of and outcomes from climate disasters than non-Indigenous populations. - Resilience factors are different for First Nations peoples. See reference documents above. - At the local level, we have witnessed emergency response organisations referring to First Nations communities with a deficit mindset in the context of natural disaster.

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5. What types of governance forums should be utilised to facilitate co-design of the Strategy with First Nations people to ensure First Nations voices, decision-making and leadership are embedded in the Strategy?
This question is for First Nations organisations and leaders to speak to.

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Proposed Objective 1: Measurement

6. Beyond the schemes already noted above, is your organisation involved in any existing or planned initiatives to measure and report on health system emissions and/or energy use in Australia?
Early conversations with primary health care have identified an interest in reducing greenhouse gas emissions. Primary Health Networks are well placed to assist with this through our quality improvement and practice support, but would require resourcing to enable its prioritisation.
7. What additional data and information is required to support targeted emissions reduction efforts within health and aged care?
Out of scope of subject matter expertise.

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Proposed Objective 2: Mitigation

8. What do you think of these proposed focus areas for emissions reduction? Should anything else be included?

Suggested inclusions:

Built environment and facilities:

- **Develop clinical education that advocates for the impact and benefits of green prescription** (also known as outdoor prescribing, or nature prescribing) – discussed below.

Models of care:

- **Prioritisation of telehealth consultation approaches, including specific subsidies to incentivise telehealth in regional and rural areas for significant impact** – discussed below.
- **Increased or incentivised capacity for the delivery of group treatments / group interventions where appropriate** – discussed below. [*Also relates to Transport]*

Medicines and gases:

- **Accreditation model for sustainable prescriptions** – discussed below.

9. Which specific action areas should be considered relating to the **built environment and facilities (including energy and water)**, over and above any existing policies or initiatives in this area?

Develop clinical education that advocates for the impact and benefits of green prescription (also known as outdoor prescribing, or nature prescribing). This prescribes the outdoor environment as a treatment option, or alternative care pathway, relevant in relation to rehabilitation, mental health, chronic disease prevention, weight management, and so on. Significant evidence demonstrates that this approach prevents the carbon impact of clinical and diagnostic interventions that would otherwise be required if a condition were to worsen. Even just from a physiotherapy perspective, when compared to gym exercise, or repeated prescription of low dose pain medications – rehabilitation conducted on soft or uneven (natural) surfaces, balance training on sand, etc. is shown to be extremely effective, resulting in a number of associated other clinical benefits and less demand on built environment and facilities (energy, maintenance, water, etc).

10. Which specific action areas should be considered relating to **travel and transport**, over and above any existing policies or initiatives in this area?

Explore the place-based application of subsidised telehealth in remote and regional areas where a phone call consultation could replace a 100km+ round trip for people accessing care, allowing the reduction of carbon emissions. Research demonstrates that in many applications a telehealth approach results in 'no difference of clinical significance' to the quality of care or patient outcomes.

Also note: the first 2 bullet points under Models of Care (number 14) below.

11. Which specific action areas should be considered relating to **supply chain**, over and above any existing policies or initiatives in this area?

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Green tick model of care/prescribing to support a "greener" health system and to better align and inform health service practitioners as well as members of the public around the environmental impact of health care decision making.

The PBS could be aligned with the Climate Health Strategy by providing greater benefits or subsidies against prescription options that are "greener" in terms of carbon footprint. An accredited system that informs clinical decisions at the delivery point of care around pharmaceutical prescriptions, diagnostics and the climate implication of alternate approaches. The green tick model could also provide the required information to influence decisions around the unnecessary ordering of diagnostic testing.

Clinical education or accreditation standards could identify other opportunities for "greening" clinical practice, such as addressing single use items and disposables vs. sterilised, reusable items.

12. Which specific action areas should be considered relating to **medicines and gases**, over and above any existing policies or initiatives in this area?

Accreditation model for sustainable prescriptions – Explore the development of 'green tick' (or some other accredited indication) displaying the carbon impact of prescribing decisions. E.g. sustainable anaesthetics choices, the use of sustainable medications and prescriptions in primary care (an example is the use of medical gases in anaesthesia or the use of metered dose inhalers in the management of asthma, but there would be many applications of this.

13. Which specific action areas should be considered relating to **waste**, over and above any existing policies or initiatives in this area?

Specific action areas to consider:

- **Single use disposables** vs. reusable sterilised items.
- **Bio waste/contaminated waste** costs 10x as much to destroy as standard waste. A review of the protocols of what is defined as biowaste/clinical waste/contaminated waste could make a significant difference in terms of the energy/carbon required to destroy or dispose.
- **Food waste in residential care** facilities is often disposed of as part of general waste. Rotting food in general disposal produces methane, which is more than 25x more damaging to the atmosphere than carbon dioxide.

14. Which specific action areas should be considered relating to **prevention and optimising models of care**, over and above any existing policies or initiatives in this area?

Specific action areas:

- **Increased or incentivised capacity for the delivery of group treatments / group interventions where appropriate** – for certain conditions this is shown to be as effective as individualised treatment options. There are additional positive benefits of group and combined treatments. Rehabilitation settings present examples of group approaches working well in application – cardiac, pulmonary, stroke, patient education sessions. *[also relates to Transport]*

- **Create visible and public display of emissions built into health pathways and protocolised models of care.** i.e. Doctor looking to manage an ankle injury,

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presents options (xray, CT, immobilisation options). It would present the emissions impacts alongside the clinical options, and allow that to inform decision making.

- **Comparisons between diagnostic tests, pathology investigations and interventions for the management of chronic disease (prescriptions, equipment or therapies) that may inform responsible clinical decision making in relation to climate impact.** The display of emissions information at the point of care, alongside financial impacts may assist a clinician to consider this in their decision making.

15. What can be done to involve private providers within the health system in the Strategy's emissions reduction efforts?

Commission the provision of a basic level of education as part of inductions, competency and credentialling. All of this would allow for comprehensive and holistic decision making, factoring in clinical, financial, climate and patient experience and equity considerations.

16. Where should the Strategy prioritise its emissions reduction efforts?

    a. How should the Strategy strike a balance between prioritising emissions reduction areas over which the health system has the most direct control and prioritising the areas where emissions are highest, even if it is harder to reduce emissions in these areas?

    b. Which of the six sources of emissions discussed above (on pages 13 to 18 of the Consultation Paper) are the highest priorities for action?

All of the six sources of emissions discussed above are important. The greatest impact, therefore, requires that we target our investment and action in the preventative space. Investment in preventative medicine currently sits at less than 2% of total health spend, for meaningful change to occur we need to significantly increase the investment in preventative upstream health. Applying a climate lens and health economics lens to building a case for prevention allows better focus on the prevention of conditions that would otherwise require heavily resourced interventions downstream. An example of this would be to target the risk factors for chronic disease such as obesity and physical inactivity associated conditions (stroke, heart attack, hypertension, etc).

This will reduce the emissions impacts of health service delivery throughout the continuum.

A climate and health focussed cost-benefit analysis could be carried out as we work to gradually increase preventative health investment, demonstrating the efficacy of this approach.

17. What 'quick wins' in relation to emissions reduction should be prioritised for delivery in the twelve months following publication of the Strategy?

This is 2-pronged:

1) **Support the system:**
    - Incentivise change to behaviours and clinical practice (MBS items and subsidies)

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- Provide excellent information to increase clinical awareness and understanding ('green tick' accredited prescriptions, information to inform sustainable diagnostics and treatment plans)
- Create a developmental or elective standard for accreditation
- Increase education offerings through peak bodies for the health workforce:
    - Formalise the understanding that a key component of the commitment to working in health is a consideration of climate impacts
    - Orientation and induction processes are adapted to include climate considerations.

2) Investing in the patient and community:

- Develop a clearly articulated 5-year plan to cumulatively increase the investment in preventative health. Conduct a cost benefit analysis and evaluation of the impact of this approach.
- Excellent community-level communications plan to raise public awareness about the health system changes that are being delivered.
- Public reporting of baseline data at a regional level, actions, outputs and impacts.

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Proposed Objective 3: Adaptation

18. What health impacts, risks and vulnerabilities should be prioritised for adaptation action through the Strategy? What process or methodology should be adopted to prioritise impacts, risks and vulnerabilities for adaptation action?

There are a number of things that need to be prioritised for adaptation action through the Strategy, in order to ensure innovation and change in the climate and health space.

1. **Review existing knowledge:**

   Conduct a comprehensive review of the extensive existing literature and research that has already been carried out in the Australian context. The National Climate Change Adaptation Research Facility has produced some excellent research across adaptation, and pages 6-14 of this report *Building the knowledge base for adaptation action: Information Manual* presents guidance around different methodology and frameworks to prioritise impacts, risks and vulnerabilities for adaptation action.

2. **Create access to data:**

   One of the most important factors to enabling change and excellent decision making is facilitating access to reliable, local data on the interrelationships between the determinants of climate vulnerability and social determinants of health. Health impacts can't be prioritised without an understanding of the level of risk that we are facing, and the likely impacts of those risks.

   Highly recommend **commissioning a detailed data mapping project** to inform health planning. This map would overlay all of the locally relevant factors in a publicly accessible format, allowing for informed prioritisation of actions that would have the greatest impact.

   The following datasets should be included:
   - Historical climate emergency data of fire, flood, storm, drought and heatmaps
   - Modelled risk, likelihood, and severity of impacts
   - Demographics indicating key population vulnerabilities – older people, children, people with a disability, Indigenous population, LGBTQIA+ people, IRSED (the index of relative socioeconomic disadvantage), and so on (a lot of this work is already done through ProfileID)
   - Health vulnerabilities that make people more vulnerable to disaster impacts (in the immediate and long term) inc mental health, respiratory conditions, mobility conditions, obesity and so on
   - Australian Disaster Resilience Index (this work has already been done),

   The combination of this data would empower not only health commissioning bodies and decision makers, but will also provide agency to communities to properly inspect the details around health risk and health impacts associated with a changing climate, at a local level. Provision to communities informs community-led adaptation activities.

3. **Public reporting**:

   Public reporting of this information builds a quality improvement expectation into the general population's understanding of what can, is, and should be done, and is best practice for ensuring improved outcomes.

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4. **Community led resilience and adaptation:**

   Healthy North Coast has worked with communities to support community-led resilience and adaptation activities. The foundation of this work is based on:
   - community connection,
   - food, water and energy security,
   - building protective mental health behaviours and resources through trauma-informed training and peer-to-peer supports, and
   - improving knowledge of local climate change impact and preparedness for increasing frequency and severity of natural disaster.

   Much of this falls outside of the traditional health system, however, evidence supports investing in community-led resilience in order for communities to better absorb the shocks from adverse events (not limited to natural disaster).

   An example of our Community Wellbeing and Resilience activity is Plan C Community Carers and Responders (CCR) Network. Healthy North Coast has funded Plan C to train 400 CCRs across the far North Coast footprint supporting greater crisis prevention, preparedness, response and recovery at the community level. Program participants receive 3 days of free training, including self care, disaster resilience community building, emergency communications as well as food, water and energy security, a full day of first aid training and a full day of psychological first aid training.

19. Should the Australian government develop a National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan? If yes:
    a. What are the key considerations in developing a methodology?
    b. How should their development draw on work already undertaken, for example at the state and territory level, or internationally?
    c. What are the key areas where a national approach will support local/jurisdictional vulnerability assessment and adaptation planning?

A National Health Vulnerability and Adaptation Assessment, and a National Health Adaptation Plan could be extremely useful in addressing issues and impacts. This requires a systemised, structural assessment approach and an excellent framework for action, bringing together the extensive existing research and experiences of Australian communities.

Key considerations to include are:

- **University research** – post bushfire, Ash Wednesday, Black Saturday, 2019/2020 bushfires fires, cyclones, floods (especially on the North Coast). Look at social research and utilise the findings of the social research. So much is already known.
- **Deloitte Access Economics Modelling** - such as *Building resilience to natural disasters in our states and territories*, *Australian Business Roundtable for Disaster Resilience & Safer Communities Report*, the health and wellbeing impacts outlined within *The social and economic cost of the North and Far North Queensland Monsoon Trough* report, and the impacts and recommendations outlined *The economic cost of the social impact of natural disasters* report.
- **A national synthesis of all the Australian experiences** of major and catastrophic events (starting with existing research) and working to refine those

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learnings at the community level in the development of the National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan.

A national approach will support local/jurisdictional assessment and adaptation planning through the provision of:

- Strong leadership and legislated accountability
- Excellent frameworks for assessment and action
- Oversight on monitoring and evaluation
- Joined-up planning
- Public reporting of outcomes and progress
- Local climate health impact modelling and data.

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20. Would there be value in the Australian government promoting a nationally consistent approach to vulnerability assessment and adaptation planning for the health system specifically, for instance by issuing guidance and associated implementation support tools for states, territories and local health systems? If yes, what topics should be covered to promote a nationally consistent approach? What examples of existing guidance (either from states/territories or internationally) should be drawn from?

There would be demonstrable value in a nationally consistent approach to assessment and adaptation planning for the health system, providing that it:

- Appropriately utilises existing research and tools
- Provides excellent tools and recommendations for implementation
- Allows for local, place-based participatory planning approaches
- Facilitates the utilisation of the information gathered through the consistent assessment and planning approaches to create a publicly reported dashboard, comparing different regions and their approaches, showing a data baseline, planned actions, outputs and impacts, overtime.

Meaningful change requires that data is fed back to those it who created it, and to those it affects. Data is a powerful tool that can be used to empower communities and inspire transformation. A significant opportunity for accountability and influence will be missed if this critical step of 'closing the loop' is not done. This is also a key component of trust and transparency.

21. What immediate high-priority health system adaptation actions are required in the next 12 to 24 months?

Immediate, high-priority health system adaptation actions are:

- **Leadership and accountability** – the implementation of this Strategy requires clear roles and responsibilities as well as an approach to reporting that incentivises excellence and facilitates consequences for inaction.

- **Joined-up planning** – this requires appropriate resourcing in terms of staffing and funding. One consistent high-level guidance framework, assessment criteria, and a well-designed data hub for (a) sharing of information and (b) to enable excellent monitoring and evaluation. Joined up planning should allow sharing of learning, ideas and approaches within and between jurisdictions. Initiatives that come out of these forums need to have a funding commitment.

- **Climate change health impact modelling** – described under question 18. Commission the mapping of regional climate impact models, (e.g. fire, flood, storm, drought, heat). Overlaying all of the locally relevant factors in a publicly accessible format, allowing for prioritisation of action with the most impact.

- **Local data** – data must be meaningful at a local level to appropriately measure and incentivise change, as well as a quantifiable representation of progress.

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Proposed Objective 4: Health in All Policies

22. What are the key areas in which a Health in All Policies approach might assist in addressing the health and wellbeing impacts of climate change and reducing emissions?
It is important not to limit thinking in the development of a National Climate and Health Strategy to MBS incentives and amendments to medical supply chains. We need to inspect the health impacts of climate, and also the climate impacts of health. The two are intrinsically linked and require robust, courageous, systematic policy development to address appropriately. A HiAP approach would require a formal line of sight and quality assurance mechanism across all policies that health is embedded in. We need to be clear about what is meant by, and measure the impact of, including health in all policies, with detail around what our expectations are of the health system (and other policy makers) in this regard. The development of a clear guidance framework explicitly outlining the factors that need to be addressed within policies from a health and climate context, is also required. This should be provided to policy makers across all sectors to ensure it is done to an acceptable standard.
23. What are the most effective ways to facilitate collaboration and partnerships between stakeholders to maximise the synergies between climate policy and public health policy? What are some successful examples of collaboration in this area?
International examples that appear promising (although we have not validated) include: ▪ Future Generations Commissioner for Wales and the Well-being of Future Generations (Wales) Act 2015. The Commissioner provides oversight to the Act. The Act requires public bodies in Wales to think about the long-term impact of their decisions, to work better with people, communities and each other, and to prevent persistent problems such as poverty, health inequalities and climate change. ▪ Healthy Cities – "Healthy cities are places that deliver for people and the planet… Healthy cities lead by example in order to achieve change for the better, tackling inequalities and promoting good governance and leadership for health and wellbeing. Innovation, knowledge sharing and health diplomacy are valued and nurtured in healthy cities". ▪ 100 Resilient Cities – "Helping cities around the world become more resilient to physical, social and economic shocks and stresses". This work includes financial and logistical guidance, expert support for the development of a robust Resilience Strategy, access to solutions, service providers, and partners to help develop a locally relevant Resilience Strategy, and membership of a global network to help and learn from.

Enablers

24. How could these enablers be improved to better inform the objectives of the Strategy? Should any enablers be added or removed?
In order to be effective, the Strategy must be expanded to include the following high-level structural supports:

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- **Leadership** – someone must be driving this, its delivery, coordination and reporting. A clear role with clear responsibilities.
- **Accountability** – a measurement framework that benchmarks regions and their baselines, monitors and evaluates progress, and publicly reports on the status, outputs and outcomes. There must be public incentives for excellence and consequences for inaction.
- **Resourcing** – a financial commitment to deliver Health & Climate improvement initiatives at the local, regional and national level.
- **Public reporting** – the most evidenced way to ensure quality improvements and ongoing progress.

In addition to the above, the meso-level additions, below, would improve the Strategy by supporting ongoing quality improvement, thus improving the efficacy and sustainability of the Strategy itself:

- **Workforce leadership and training** – the health workforce requires overarching education about the health impacts of climate and the climate impacts of health service delivery. This should be coupled with access to excellent data and information.
- **Research** – The process of delivery and roll out of the strategy as well as its findings need a research basis, but also need to have rigorous academic oversight to ensure that we are measuring, learning and evaluating throughout its evolution.
- **Communication and engagement** – This should be done at all levels, community, service providers, peak bodies, local, state and federal government. Building a communications plan into the development of the strategy will ensure effective, consistent communication is carried out throughout its application and our various geographies.
- **Collaboration** – learning circles, networks between like-jurisdictions and communities of practice. Allow the sharing of knowledge and approaches.
- **Monitoring and evaluation and reporting –** a comprehensive approach to ensure meaningful measurement, facilitate buy-in and incentives excellent performance against the aims of the Strategy.

25. For each of these enablers:
    a. What is currently working well?
    b. What actions should the Strategy consider to support delivery?

As outlined above.

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Thank you for taking the time to complete this survey – your feedback is greatly appreciated!

Please submit this form in Word format to Health.Climate.Consultation@health.gov.au.

Submission to the Senate Select Committee on Australia's Disaster Resilience

Contact

[redacted]

Primary Health Network (PHN) Cooperative

Executive Summary

Despite the demonstrated and potential value of PHNs and primary care (e.g., general practices, allied health, pharmacy, and community health providers) to contribute to disaster resilience, they are systematically neglected components of civil capabilities absent from formal disaster management arrangements and state-led health preparedness, response, and recovery planning. Currently, the capacity of PHNs and primary care to support disaster preparedness, response, and recovery is not adequately recognised, utilised, embedded, or resourced to reach its full potential and deliver maximum value.

This has resulted in uncoordinated, reactive, and under-resourced disaster responses and recovery efforts which add to the already overburdened mental and emotional toll on the health workforce and community members within a disaster impacted region. Despite this, PHNs have demonstrated an ability for agility in the coordination of a primary care response in disasters, which if better integrated into disaster management frameworks, would provide even more benefit.

Solution:

For a disaster resilient Australia, an integrated, nationally consistent (one-system) approach to disaster preparedness, response and recovery efforts is needed. PHNs and primary care must be embedded within a one-system approach, as they play an integral role in supporting people and communities to prepare for, respond to, and recover from a disaster event.

We recommend that:

1. PHNs are formally recognised and included in disaster management arrangements. This includes planning, preparedness, response, and recovery arrangements.
2. PHN are adequately resourced to undertake this formal role and meet the needs for their local communities.

Outcomes:

Implementing these two recommendations will:

- Ensure the role and scope of PHNs and primary care is clearly understood by all relevant stakeholders to ensure an efficient, nationally consistent and coordinated one-system approach to disaster management.
- Ensure the utilisation an effective coordination of a highly skilled primary healthcare workforce, comprising general practitioners, pharmacists, nurses, and allied health professionals, is maximised and workforce burnout is minimised.
- Strengthen communication and coordination between all parties, reducing duplication and confusion during response and recovery.
- Enable continuity of care during times of disaster, reducing pressure on hospitals, and meeting the health needs of people and communities.
- Ensure preparedness and planning is tailored to local needs and that recovery efforts can continue for as long as they are needed, rather than until funding runs out.
- Facilitate opportunities for PHNs to provide targeted support to other sectors, such as aged care as part of disaster management arrangements.

This submission will elaborate on the above themes and provide the rationale for the outcomes listed.

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Introduction

Primary Health Networks (PHNs) are independent organisations established in 2015 by the Commonwealth Government of Australia.

Nationally, there are 31 Primary Health Networks (PHNs) working at regional and jurisdictional levels to strengthen primary care, improve person-centred service integration and increase the efficiency and effectiveness of primary healthcare services for Australians; particularly those at risk of poor health outcomes.

The primary care system is made up of a diverse mix of organisations, consisting of a series of mostly small- and medium-sized private practices (often single discipline), alongside not for profit and publicly funded community health services and Aboriginal Community Controlled Health Organisations (ACCHOs). Primary care services aim to provide high quality care when and where people need it.

PHNs are a key component of the primary care system and the health system, valued for their ability to facilitate collaboration, their strong understanding of the needs of their communities and their understanding of the complexities of demand and supply of healthcare. PHNs are also valued for their key role in regional commissioning. Health care commissioning is a continual cycle that involves planning, designing, or procuring, monitoring, and evaluating health services to make sure they are performing well and improving the health of the communities that they work within.

Local knowledge of community need, workforce supply and barriers to access, as well as relationships with local health providers and other stakeholders (particularly Local Health Networks (LHNs) / Local Health Districts (LHDs) / Hospital and Health Services (HHS)), is used by PHNs to facilitate the design and implementation of initiatives to improve the provision of, and access to, primary health care.

PHNs are uniquely positioned to deliver value to the health sector in a range of areas, including:

- System coordination and integration to reduce fragmentation and enhance coordinated, integrated care by working collaboratively across services and sectors.
- Collaboration and building relationships with providers and health services within, and external to, the primary health care sector.
- Collation of information and data to inform planning, and to monitor and evaluate sector performance within the local area. This includes engaging with local stakeholders to obtain high quality qualitative data.
- Communication and engagement with the community and primary health care providers, including education and workforce development.
- Bridging the jurisdictional, hospital-community-primary care and cross-sector divides through collaborative commissioning and co-design.

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Response

This submission represents the views of all 31 PHNs (the PHN Cooperative). We welcome an opportunity to discuss any aspect of this submission further.

The PHN Cooperative welcomes the opportunity to provide a response to the Senate Select Committee on Australia's Disaster Resilience.

Our response will address the following terms of reference:

(a) Current preparedness, response, and recovery workforce models, including:

> **ii.** the impact of more frequent and more intense natural disasters, due to climate change, on the ongoing capacity and capability of the Australian Defence Force,
>
> **iv.** The role of Australian civil and volunteer groups, not-for-profit organisations, and state-based services in preparing for, responding to, and recovering from natural disasters, and the impact of more frequent and more intense natural disasters on their ongoing capacity and capability.

(b) Consideration of alternative models, including:

> **i.** Repurposing or adapting existing civil and volunteer groups, not-for-profit organisations, and state-based services.

(c) Consideration of the practical, legislative, and administrative arrangements that would be required to support improving Australia's resilience and response to natural disasters.

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(a) Current preparedness, response, and recovery workforce models, including:

ii. the impact of more frequent and more intense natural disasters, due to climate change, on the ongoing capacity and capability of the Australian Defence Force

Key Messages:

- Australia needs a cohesive, proactive, one-system approach to disaster preparation, response, and recovery to effectively respond to cascading disasters.
- The Australian Defence Force (ADF) plays a critical role in disaster management, however, there is a need for a fully integrated and utilised civil health capacity considering the cascading, more frequent and intense nature of disasters.
- Primary healthcare and Primary Health Networks (PHNs) are a crucial component of civil health capacity that have proven experience in facilitating continuity of care and responding to local need in times of disaster.
- Despite this, there is a lack of a nationally consistent, approach to PHN involvement in local disaster preparedness, response, and recovery efforts. This fosters variability in the care delivered in communities, undermining the principle of universal access to quality care.
- To ensure Australia has the best possible disaster preparedness, response, and recovery approach in the face of cascading disasters, formal structures must be created, and funding provided to embed PHNs and primary care within an integrated one-system disaster approach.

Disasters are no longer one-off events. Their increased frequency and intensity can trigger compounding, cascading disaster scenarios, with one disaster exacerbating another. This amplifies the consequences on people's health and wellbeing, with more harmful impacts in the short and long-term, and generates unique challenges that make systematic preparedness, response, and recovery efforts more resource and workforce intensive.

The PHN Cooperative supports the role of the Australian Defence Force (ADF) in supporting Australian communities in response to disasters where civil contingencies are exhausted or are predicted to be exhausted. However, given the ADFs primary mission of national defence and the growing number of domestic and international disasters threatening Australia, all civil capabilities need to be fully integrated and utilised to ensure an effective alternative approach is available in the eventuality that the ADF does not have the capacity to respond to domestic disaster relief. Further, due to the impact of disasters on the mental and physical health of both the defence and primary care workforce, it is crucial that all aspects of a disaster response are systematically integrated and effectively work together within the framework of a 'one-system' approach, to minimise these impacts and reduce undue fatigue on the workforce.

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PHNs coordinate primary healthcare, a key component of the civil health capacity. PHNs across the country have been involved in supporting the primary care health workforce to prepare for, respond to, and recover from the impacts of various disasters, including the COVID-19 pandemic, the 2019-2020 bushfires, and multiple flood events in Victoria, Queensland, and New South Wales. These efforts are ongoing, with disaster recovery persisting for prolonged periods, in some cases for many years.

However, there is a high degree of variation in the contribution of PHNs to disaster preparation, response, and recovery efforts with many PHNs operating independently from systematic disaster management arrangements (see case study 1). Even when the important roles of PHNs are recognised, a lack of a nationally consistent, one-system approach to PHN involvement in local disaster resilience fosters variability in the care delivered in communities, undermining the principle of universal access to quality care.

The lack of PHN and primary care involvement in disaster management arrangements means that they are often called upon on short notice and on an ad hoc basis for assistance. This can result in the duplication of service provision by local primary care providers and external agencies (including the ADF), leading to an inefficient allocation of resources and a lack of support where it is most needed. Additionally, it can contribute to services gaps, when a lack of understanding of the role of PHNs and primary care leads to requests that are outside their scope (see case studies 1, 4 and 5).

Where this systematic exclusion and inefficient resource allocation occurs, it contributes to community frustration and can result in workforce fatigue as community primary care providers are required to deal with additional logistical arrangements. This can leave local providers, who must continue to assist the community once the emergency response workforce and the resources they bring depart, disempowered and unsupported, exacerbating the risk of ongoing workforce burnout and retention issues in disaster impacted regions.

National disaster preparation, response, and recovery initiatives must be systematically integrated with the local community responses to ensure local coordination and ongoing support after an event. In a healthcare context, primary care is well-suited to provide this support given its interaction with 85% of the population annually[i]. PHNs, as experts in regional primary care coordination, have essential skills, capabilities, and existing local relationships to support the integration of the primary care into coordinated disaster preparedness, response and recovery efforts (In the handful of localities where PHNs are incorporated into local arrangements, PHNs enable primary care providers to continue delivering primary care to their local communities *and* effectively contribute to the local health response (see case studies 1, 2, 3, 4 and 5). However, PNHs currently face many barriers to delivering their maximum value due to their continued systematic exclusion from formal disaster management processes (see case studies 1, 2, 3 and 4).

Australia needs a cohesive, proactive, one-system approach to disaster preparation, response, and recovery to effectively respond to cascading disasters. To achieve this, primary care must be incorporated. PHNs, despite lack of recognition, have repeatedly demonstrated their capacity to contribute to disaster management efforts. Yet, in many circumstances, a lack of a nationally consistent one-system approach has undermined the delivery of a best practice response. To ensure Australia has the best possible disaster preparedness, response, and recovery approach in the face of cascading disasters, formal structures must be created, and funding provided to embed PHNs and primary care within an integrated one-system disaster approach.

The case studies in this document demonstrate how PHNs can contribute to disaster preparation, response, and recovery and do so in innovative ways. Importantly, challenges and barriers limited the

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preparedness, response, and recovery capacity of PHNs in most of these cases, ultimately reducing the potential value they could have provided.

Case Study 1. A need for one-system, Western Australian Primary Health Alliance (WAPHA). In early 2020, the WAPHA responded comprehensively to COVID-19 across its three PHNs (Perth North, Perth South, and Country WA). WAPHA coordinated and distributed information on the vaccine rollout with general practice, residential aged care facilities, and disability accommodation. Additionally, WAPHA supported various programs such as outreach COVID-19 vaccination, COVID positive home visits, and after-hours GP Respiratory Clinics.

However, despite WAPHA's attempts to raise concerns about the lack of primary care involvement in the state's COVID-19 planning and coordination efforts, the state declined to involve them in the development of a whole health system-wide framework for disaster management.

Later, when WA Health approached WAPHA to lead community-based care for mild-moderate COVID-19 symptoms, WAPHA was unable to anticipate and plan for this request due to WA Health's limited understanding of how the primary and community care sector worked. This demonstrated the need for involvement in state planning to ensure seamless coordination across the health system.

Furthermore, the state's differing policies to the Australian Government regarding eligibility for COVID-19 vaccination disrupted the primary health-led rollout. Practitioners were forced to repeatedly inform patients that they were not eligible at their clinics, creating confusion and frustration.

WAPHA's experience in the COVID-19 response in Western Australia highlights the importance of integration and collaboration across health systems to create a unified whole. Collaboration strengthens preparedness for future disasters, promoting efficiency and effectiveness in the response.

Case Study 2. Associate Member of one Local Disaster Management Group, Northern Queensland PHN (NQPHN).

In North Queensland, while Queensland Health is the primary health representative in the Local Disaster Management Group (LDMG), the Northern Qld PHN is an associate member of one LDMG, and is “in the room” during disaster planning and responses. This allows NQPHN to actively participate in disaster management efforts. NQPHN in this instance, is well positioned to hear and anticipate requests for primary health support, which can improve response times and enhance overall effectiveness of disaster response efforts. NQPHN can also provide timely feedback of primary healthcare needs.

NQPHN promotes and advocates for the role of primary care in disaster preparedness, response, and recovery within the LDMG outside of disaster times, enhancing their contribution to the overall disaster management efforts.

By including PHNs as members of LDMGs, a whole-of-system approach can be enabled to support primary care response times during a disaster. This will enhance the primary care providers’ capability and preparedness to respond to disasters and support on going recovery post-disaster.

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Case Study 3. Response and innovation in a crisis, Nepean Blue Mountains PHN (NBMPHN).[ii]

The Blue Mountains bushfires in October 2013 highlighted the need for local coordination of primary health resources during disasters. The NBMPHN and local health district recognised the absence of primary healthcare in formal processes and the potential for high demand from displaced residents on an already stretched emergency department for primary care matters.

NBMPHN organised GPs to attend evacuation centres on a 24/7 basis. They also coordinated primary healthcare efforts within practice settings, diverting patients to neighbouring practices where GPs were not open or operational due to the impact of the fires. NBMPHN was the conduit to communicating what was happening on the ground in relation to primary care, back to the emergency operations centre, and seeking support from practices in surrounding towns to extend hours or see patients from other practices over this period.

In the recovery phase, the PHN secured additional funding for counselling services for local residents with payments made to private mental health clinicians by the PHN.

NMBPHN also showed their innovation and preparedness in anticipating the next disaster. They coordinated with other local response members, including the hospital district's Local Health Network, provided training to local GPs and organised a register of GPs willing to be called on in times of disasters. The Medical Incident Management and Support (MIMMS) training for GPs was included in the preparedness efforts, as well as packs developed for doctors in emergencies. These packs included identifying vests with "DOCTOR" printed on them, referral forms, contact numbers, script pads and other supplies.

The Nepean Blue Mountains PHN demonstrated their value in local coordination of primary health resources during disasters and in recovery, and their innovation in preparing for future emergencies. Because of their planning and experience, the NBMPHN was able implement many of their innovative practices during the 2019-2020 bushfires.

However, the role of the PHN and general practice contribution to emergency management is still not formally recognised in plans and this means that involvement relies on relationships which need to be continually re-established when there are staffing changes. The PHN needs to continually educate disaster management personnel on the contribution and value add of primary care. This often means primary care and the PHN are overlooked in preparedness planning and the full potential of involvement is not realised.

The lack of a dedicated resource or funding for disaster preparedness also means that the learnings from the 2013 bushfires and development of the PHN disaster planning response took a significate amount of time as other priorities took precedence. This limits PHNs ability to contribute effectively as funding tends to only be provided for recovery activities and PHNs must scramble in the height of a disaster to develop processes on the run which is poor practice.

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Case Study 4. Disaster Management Framework, Healthy North Coast (HNC).[iii]

The Northern NSW floods in 2022 put significant strain on emergency services. It was necessary for primary health care services and the local PHN (HNC) to play an active role in the response effort due to the catastrophic nature of the event, even though this role was not articulated in local or state-wide plans. Some of the requests made to primary health care from response agencies were relevant to the scope and nature of primary health care, some were not. In response Healthy North Coast developed a Disaster Management Framework to define the role that primary health care and the PHN could play in future responses on the North Coast. The Framework has been shared with local response agencies to help prepare for future disasters.

HNC's Disaster Management Framework is structured around the four phases of emergency management: preparedness, response, recovery, and prevention. A severity scale provides guidance to assess the severity of an event and determine the appropriate level of response. The Disaster Action Plan outlines the activities that HNC will undertake during a disaster, depending on the severity, and the key services, such as general practice, community pharmacies and psychologists, the organisation will work with. More than 40 activities sit under the objectives of: 1) Communicate, advocate and network; 2) promote and enhance local planning; 3) communicate and escalate; and 4) commission, debrief, share learnings, and evaluate.

The Disaster Management Framework has provided HNC with a structured approach to prepare, respond, recover, and prevent disasters that have a health impact on communities. The framework has been informed by 2022 Northern NSW floods in 2022 but also learnings from the 2019 bushfires, the 2021 Mid North Coast floods and the COVID-19 pandemic. It has also been tested through scenario planning which has resulted in a more comprehensive and tailored response.

The Disaster Management Framework has enabled HNC to articulate the contribution that primary health care and primary health networks can make during disasters on the North Coast. *Key challenges exist, however, with the incorporation of the Disaster Management Framework into local emergency management plans.*

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Case Study 5. Ensuring Coordinated Healthcare During Disasters, COORDINARE (South Eastern NSW PHN).

The South Eastern region of NSW experienced unprecedented, catastrophic bushfire damage in December 2019 and into March 2020, followed closely by the COVID-19 pandemic. In response to these events, PHNs took on new responsibilities, ranging from supporting communities in their recovery from drought and bushfire trauma to helping ensure that primary care is connected into a planned and well-coordinated disaster response.

COORDINARE has developed processes and tools to ensure that GP and Aboriginal Community Controlled Health Organisations (ACCHOs) are supported as an essential service to ensure access to medical care during a disaster or pandemic, therefore helping maintain community health and resilience. COORDINARE is also working to ensure that primary care is represented at the regional and local level in preparation and planning. Our vision for disaster planning and management is: ***One coordinated regional health system*** *that supports resilient communities to prepare and respond to past, present, or future disasters.* Key activities undertaken by COORDINARE include:

- **Disaster response register**
  COORDINARE maintains a register of trained primary health care providers willing to assist during a disaster situation - which could include providing medical care at a residential aged care facility, another general practice, or an evacuation or recovery centre.

- **Audit of primary care providers**
  COORDINARE conducted a baseline audit and consultation with the aim of ensuring that general practices had emergency plans and business continuity plans in the event of a disaster or pandemic. COORDINARE provided training and resources regarding improving emergency plans, scenario planning and implementing specific HealthPathways regarding emergencies (e.g., treatment for burns and smoke inhalation for bushfires, COVID-19 management).

- **Disaster Management Community of Practice**
  COORDINARE established a Community of Practice online hub for GPs to foster peer-to-peer collaboration, enabling them to share information, connect and collaborate and stay informed of important news and events in the region as they happen.

- **Liaising with Emergency Management Agencies**
  A key role for COORDINARE is to strengthen and build local and regional partnerships for planning, communications and effectively responding to disasters. COORDINARE has been campaigning to have primary care representation as a recognised part of the disaster preparedness and planning process. There is now agreement to have GP representatives on the two Regional Emergency Management Committees, and in some of the Local Emergency Management Committees with observer status.

However, financial, and structural barriers (including legislative barriers) exist for our GPs and ACCHOs to participate fully in disaster management processes. Dedicated government funding will be needed if the PHN disaster management coordination and representation roles are to continue in the future, which will be essential in ensuring people are able to access primary care during and after an emergency.

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iv. The role of Australian civil and volunteer groups, not-for-profit organisations, and state-based services in preparing for, responding to, and recovering from natural disasters, and the impact of more frequent and more intense natural disasters on their ongoing capacity and capability.

Key Messages:

- PHNs and primary care have an important and unique role to play in disaster and crisis situations and must be better integrated into emergency preparedness, response, and recovery efforts as recognised in several formal government documents and reports (e.g., Royal Commission into Disaster Management Arrangements, Primary Care 10 year plan)
- PHNs, in a disaster context, deliver value in two critical areas:
    - To ensure a continuity of access to primary care resources to meet continuing health care needs and reduce pressure on acute care.
    - To address the immediate impacts of the disaster at-hand.
- PHNs have a proven track record as innovators in the development of locally integrated disaster preparedness, response, and recovery efforts.
- Despite their efforts, PHNs do not have a formal role in Commonwealth or state/territory disaster emergency management arrangements.
- This lack of coordination results in the underutilisation of a highly skilled primary healthcare workforce in disaster situations (general practitioners, pharmacists, nurses, and allied health professionals).

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Primary care has an important and unique role to play in disaster and crisis situations.

Primary care providers often share the disaster experience with their local community affording them a deeper understanding of their health care needs and the real-time effects of the disaster on the community. The Royal Australian College of General Practice (RACGP) recognises that general practice is the "linchpin of Australia's health service" in responding to disasters, from the immediate and acute phase through to long-term recovery.[iv]

The Primary Care 10 Year Plan states:

> "Primary health care needs to be better integrated into emergency preparedness and response at local, jurisdictional and national level to prepare for future droughts, floods, bushfires, communicable disease outbreaks and other emergencies" [v]

This statement for the inclusion of primary care in disaster arrangements is further supported by Recommendation 15.2 of the 2020 Royal Commission into Disaster Management Arrangements, which states:

> "Australian, state and territory governments should develop arrangements that facilitate greater inclusion of primary healthcare providers in disaster management, including: representation on relevant disaster committees and plans and providing training, education and other supports"[vi]

PHNs, as the regional coordinating bodies of primary care, have been acknowledged to provide value in preparing for, responding to, and recovering from disasters.

In The Primary Care 10 Year Plan 2022-2032 (The Primary Care 10 Year Plan), PHNs are recognised for their "vital role" in supporting the primary care response to drought, bushfires, floods, and COVID-19 pandemic in recent years. The Commonwealth has recognised this through the important responsibility afforded to PHNs in the implementation of the Primary Health Care 10 Year Plan with an action area to:

> "[i]ntegrate primary care services into local and state emergency preparedness and response arrangements, with facilitation from PHNs"[vii]

The benefits of PHN representation in formal disaster management arrangements are also articulated in the 2020 PHN Cooperative White Paper, 'The role of Primary Health Networks in natural disasters and emergencies'[viii]. The paper notes that while Commonwealth and state/territory agencies hold responsibility for on-the-ground disaster management during disasters or health emergencies, PHNs are well placed to coordinate a strong primary health care response. A one-system approach that incorporates PHNs and primary care can more effectively deliver care where and when it is needed, reducing pressure on the acute sector in a cohesive, organised, and effective way.

PHNs act in two capacities in relation to disasters:

1. Firstly, PHNs enable a continuity of care by supporting primary care to keep delivering for communities. This is important for:
    a. maintaining the health and wellbeing of local communities as community health needs do not cease and give way to the presenting disaster, rather, the effects of chronic disease and mental health continue and are in some cases exacerbated because of the disaster.
    b. reducing pressure on acute care in hospitals during and after a disaster.
2. Secondly, PHNs help to address the immediate impacts of the disaster at-hand.

PHNs have a proven track record as innovators in the development of locally integrated disaster preparedness, response, and recovery efforts.

PHNs streamline healthcare services by coordinating care so that people receive the right care, in the right place, at the right time. PHNs achieve this by leveraging their broad networks (e.g., general practice, allied health, pharmacy, and community health providers like Aboriginal Community Controlled Health Organisations (ACCHOS)) within their local communities to continually identify and assess current and emerging needs and develop responses accordingly (see case study 6). PHNs bring these critical skills to the table in disaster preparedness, response, and recovery efforts, as demonstrated in the case studies included throughout this document.

In previous disaster situations, PHNs have acted to ensure the continuity of primary care by coordinating in real-time with providers and gathering intelligence on changes to practice opening hours and practice closures as well as coordinating the extension of hours where necessary (see case studies 7, 8, 9 and 10). Where practices are closed in a disaster region, PHNs have also been able to utilise their local networks, and overcome issues of provider numbers, credentialling, billing and resourcing of supplies, to coordinate general practitioners to practice from other sites and arrange additional support to be provided from neighbouring regions, including via telehealth (see case studies 11 and 12). This is crucial as it ensures continuity of routine care for the community and ensures additional pressure is not added to already stretched acute emergency hospitals and health services.

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PHNs have also demonstrated their capacity to advocate for and implement innovative solutions in response to community need, such as advocating for changes to MBS to enable increased access to telehealth for disaster impacted regions (see case study 11) or coordinating integrated models of multidisciplinary care to support people during the COVID-19 pandemic (see case study 13).

Yet, PHNs do not have a formal role in Commonwealth or state and territory disaster and emergency management arrangements.

Despite their proven capacity to prepare for, respond to, and assist in the recovery from disasters, there has historically been a lack of systematic coordination with primary care providers and PHNs. PHNs across Australia have varying degrees of integration with disaster management systems, with the vast majority not included. This lack of coordination results in an underutilisation of a highly skilled primary healthcare workforce, comprising general practitioners, pharmacists, nurses, and allied health professionals. Given the unique local knowledge and established community relationships held by primary care, this is an inefficient workforce approach and undermines the provision of essential care to the community when it is most needed.

It is essential that PHNs and primary care providers are enabled to function as efficiently as possible during times of crisis. Primary care professionals are trusted community leaders that people look to for guidance and the management of acute injury or illnesses and ongoing management of chronic disease (e.g., asthma and chronic obstructive pulmonary disease (COPD) are exacerbated by bushfire smoke and thunderstorms). If these essential services are not integrated into disaster planning and response activities, in a coordinated way that leverages the existing capability of PHNs as system coordinators, they will be unable to provide the appropriate level of holistic and ongoing support their communities need as a consequence of cascading disasters.

It also presents a missed opportunity to maximise the primary care workforce capacity to relieve pressure on the already stressed acute care sector (refer to Royal Commission report[1]**)[ix].** By enabling continuity of care in primary care (e.g., keeping general practices open to see patients), this can prevent people from presenting at hospital emergency departments. PHNs have meaningful relationships with LHD / LHN / HHS and the state-led health workforce and can support them in times of disaster. However, a lack of PHN integration state-led disaster management arrangements consistent with a one-system approach, prevent PHNs from being able to provide maximum support.

Furthermore, during a disaster, aged care shifts to the jurisdiction of the state government, not the commonwealth; thus, supporting aged care is not within the PHNs scope of work. Despite this, some PHNs have been able to offer support to struggling residential aged care facilities (RACF) during disasters (see case studies 1, 5, 6 and 15). Future PHN support for RACFs during disaster could be better coordinated, enabled, and increased if PHNs were formally involved in state-based disaster management arrangements.

It is worth noting that in the face of a health workforce crisis, health resources are finite. Coordinating care, providing efficiency, and reducing undue stress on healthcare workers is vital to preventing further workforce exodus. PHNs have the skills and experience to assist with this and can play an

[1] The Royal Commission into Natural Disaster Arrangements noted that despite being trusted members of the community that are depended upon in the event of a natural disaster, PHNs and primary care providers remain inconsistently incorporated into natural disaster arrangements. This in turn, impedes the delivery of healthcare. The Commission recommended that PHNs be incorporated at the necessary level of government.

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important role in supporting and promoting the well-being of the primary care workforce (see case study 14).

Case Study 6. A Collaborative Flood Response, Murray PHN.

During a recent flood event, Murray PHN worked collaboratively with stakeholders to ensure access to primary care services to displaced people and health services (general practices, pharmacies etc.).

Emergency Primary Care Clinics (EPCCs) were established in flood impacted areas and Murray PHN recruited and maintained a roster of general practitioners and nurses across a 7-day period to provide services for displaced people. Murray PHN also provided necessary equipment to manage conditions and ensured clinical governance oversight through a GP medical advisor. Twice daily stand-up meetings were held on site at emergency evacuation centres and included the clinical staff from the EPPC, Acute Health Services, Ambulance Victoria, Commissioned Health Services and State government.

In addition, Murray PHN helped ACCHOs and pharmacies to access generators and sandbags with the assistance of the State government and State Emergency Service. Murray PHN also provided direct advice on how to protect key equipment (servers, fridges etc.) in the event of flooding.

By maintaining regular contact with primary care providers including pharmacies, the PHN was able to ascertain significant supply chain issues, which resulted in decreasing stock in wound management equipment and medications, specifically antibiotics, insulin, and antidepressants. To address this issue, the PHN coordinated with other providers to share stock and worked with the State Government and the other stakeholders (e.g., The Pharmacy Guild), to liaise with usual transport suppliers to expedite deliveries and find alternate delivery modes.

Murray PHNs also supported Residential Aged Care Homes (RACH) during the floods with many significantly impacted by staff shortages and COVID outbreaks, and with GPs not able to access their patients. The PHN worked with local general practices not impacted by the flood to provide temporary services to RACH and arranged for staff that were part of the roster for the EPCC to provide staffing to the RACH.

Case Study 7. Lismore Health Precinct – Supporting Primary Care Continuity, Healthy North Coast PHN (HNC).[x]

The Lismore Health Precinct was established by Healthy North Coast in response to the 2022 Northern NSW flood recovery efforts. Funded by the Australia Government the Precinct houses over 20 primary health services to provide care for Lismore residents impacted by the floods.

The initiative was coordinated in just three weeks and will be available for clinicians for at least two years after the flood at no cost to providers. The precinct included general practice, pharmacy, pathology, mental health, and a range of allied health services. The initiative ensured local providers could remain viable, continue to generate income, and care for the community.

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Case Study 8. We Are Open, Healthy North Coast (HNC).

We Are Open is an initiative that focuses on supporting general practitioners, Aboriginal Medical Services (AMSs), and pharmacies to extend their opening hours during times of emergency. The program was first introduced during the 2019 bushfires and has been used in disasters since. We Are Open is a cost-effective solution to ensuring service continuity of primary health care services during emergencies.

We Are Open can be activated in situations where there have been disruptions to health care facilities, reduced availability of the health workforce, or essential utilities such as electricity, water, and telecommunications have been cut off. The program is funded via the Australian Government PHN program although there is no specific schedule for this initiative. The program ensures access to essential primary care services to assist in preserving local emergency department capacity. It also allows more residents to access timely and appropriate local care and provides an alternate option to providing emergency health care services at evacuation centres.

Communication of extended hours and opening times to evacuation centres, hospitals and health services, and others involved in the emergency and relief response efforts, assists with patient flow management. Participating services agree to see new patients affected by the emergency, charge patients the same bulk billing and fee structure as regular weekday fees and provide information to allow monitoring of patient throughput during the additional sessions. In return, participating primary care providers are supported financially by the PHN to prepare and co-ordinate additional service delivery.

During the catastrophic 2022 Northern NSW floods, We Are Open was activated in affected areas to provide extended primary care services to patients who were impacted by the floods. Participating general practices and AMSs extended their opening hours and provided essential services to their patients at no extra cost. The initiative played a critical role in providing primary care services to the affected communities, as well as assisting in the management of patient flow at local hospitals and emergency departments.

The We Are Open initiative has been a vital part of HNC's disaster management approach. It has allowed communities to continue to access general practices, AMSs, and pharmacies during disasters while also supporting the broader health system's response efforts.

Case Study 9. SMS Emergency Alert System, North Queensland PHN (NQPHN).

NQPHN serves the disaster-prone regions of North Queensland. In preparedness for these events, including cyclones, floods, and bushfires as well as public health emergencies, NQPHN developed its SMS Emergency Alert System to notify GPs and pharmacies in preparation for adverse events.

This program enables NQPHN to communicate to subscribers via direct SMS. Examples of these SMS communications include seeking:

- business operation status, or
- the capacity to provide workforce support in response to a request from Local Disaster Management Groups or Hospital and Health Services (HHSs).

All subscribers are categorised via profession, Local Government Area, and HHS region. This enables targeted SMS communications to be sent as required.

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Utilisation of this system during a significant wet weather event resulted in the ability to ascertain the business operation status (open for business) of 55 general practices and pharmacies within 1.5 hours with minimal impact or disruption to subscribers' business operations.

60 per cent of responses were received within 30 minutes of the SMS message being sent.

Prior to the introduction of the SMS Emergency Alert System, NQPHN staff manually gathered information from general practices and pharmacies by phone, which was a burden on healthcare professionals who had to take time away from patient care to provide this information.

Case Study 10. Capacity Tracker Implementation, Gippsland PHN as well as Hunter New England and Central Coast PHN.

Gippsland PHN and Hunter, New England and Central Coast PHN recognised the need for real-time data from the primary care sector to ensure operational readiness in times of disaster, as well as to gauge workforce, vacancies, and PPE supplies. To meet this need, they introduced Capacity Tracker, a software developed by an NHS agency in response to COVID-19.

Capacity Tracker was introduced to general practice, pharmacies, and residential aged care facilities during the COVID-19 pandemic. The software enabled real-time data sharing to identify issues early and assess service capacities, with the information fed into daily regional meetings that included health and emergency services.

In addition to its COVID-19 response, Gippsland PHN also utilised Capacity Tracker to gauge primary care capacity to scale up and respond to other emergencies, such as floods and bushfires. The provision of accurate and real-time information on workforce and resource needs helped coordinate response efforts and ensured that those affected by the disaster received care and support in a targeted and timely manner.

The implementation of Capacity Tracker by Gippsland PHN and Hunter, New England and Central Coast PHN was a success, providing critical real-time data that helped coordinate response efforts during emergencies. The technology has since been adopted by other PHNs across Australia and highlights the importance of real-time data sharing and coordination in ensuring operational readiness and continuity of care during times of disaster.

Whilst the platform was initially resourced through COVID-19 funding, ongoing licencing costs require support from other sources, and its utility is dependent on PHNs being able to share this important information with other emergency response agencies to facilitate co-ordination of local efforts.

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Case Study 11. PHNs Advocate for MBS Change in Response to Flooding.

In early 2021, the Hawkesbury region in New South Wales (NSW) experienced severe flooding, causing local GPs to close and patients to be evacuated or left isolated/cut off. This posed a significant primary care access challenge for affected residents, who were unable to see their regular GPs due to the telehealth rule that requires patients to be an existing patient/be seen face-to-face once per year.

To address this challenge, Primary Health Networks (PHN) in the region advocated for an exception to the telehealth rule during disasters. The Department of Health and Aged Care

granted this exception at the PHN's request, enabling patients to access telehealth appointments with GPs who were not their regular providers.

To facilitate this, the PHN created a list of GPs in non-flood areas who were willing to accept telehealth appointments for patients in flood-affected areas that could not see their regular GP. This list was published and made available to affected residents.

When subsequent floods hit the region and other parts of NSW, the PHN's telehealth exception was not only accepted again but was also made a permanent Medicare Benefits Schedule (MBS) item/exception that applies when a region is listed as disaster affected. This means that PHNs Australia-wide no longer need to seek MBS exceptions during each disaster, and affected residents can access primary care through telehealth during disasters without needing to see their regular GPs face-to-face.

This innovative approach by the PHN Cooperative demonstrates the value of their local knowledge and advocacy skills in responding to community needs during disasters. By identifying barriers to access and advocating for solutions, PHNs can ensure that affected residents receive the care they need, even when local resources are stretched.

Case Study 12. Response to the February 2022 Floods, Brisbane North PHN.

In February 2022, Brisbane North PHN was faced with the challenge of supporting 134 of their 340 practices in the region that were affected by floods. Nearly 40% of practices had their service continuity disrupted due to water damage, road flooding, and power outages.

The PHN acted proactively to ensure continuity of primary care provision and rapid issue identification through directly liaising with each practice to confirm their status, impact on service continuity, and provision of targeted support where needed. The PHN provided communications on access to key emergency contacts, disaster support, and mental health services. The PHN also liaised with the local hospital network where electronic communication was not possible to ensure continuity of referrals for acute/outpatient services could continue.

In the long-term, the PHN provided intensive support to five practices that were forced to close due to the flooding including assisting with obtaining new provider numbers, operating out of different practices temporarily, and the set up, and billing for telehealth services. The PHN also assisted practices in obtaining maintain access to the Practice Incentives Program.

Overall, Brisbane North PHNs proactive response ensured that practices could continue the provision of primary care services for their respective communities with minimal disruption. The PHNs response was critical in alleviating pressures on primary care providers in the immediate days following a disaster.

Case Study 13. Integrated COVID-19 Pathways, North Western Melbourne PHN.

During the second wave of COVID-19 in Victoria, North Western Melbourne PHN (NWMPHN) identified the need for early intervention and monitoring of COVID-19 positive patients to minimise community transmission and enable timely and appropriate care transitions for deteriorating patients. The goal was to improve clinical outcomes and strengthen the public health response.

NWMPHN developed and piloted the COVID-19 Pathway as an integrated model of care with primary, community and acute hospital providers to proactively support the health and social care needs of people with COVID-19. Following the pilot, the care pathways was expanded to

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include the remaining hospitals in the network and informed Victorian guidelines for state-wide adoption.

As a result of the COVID-19 care pathway, 80 percent of COVID-19 positive patients enrolled in the North Western COVID-19 Care Pathway were able to be cared for in the community by GPs. This meant patients were able to recover more comfortably in their own homes, already burdened hospitals were spared further admissions, and the risk of further transmission was greatly reduced at a time when infections were hitting record highs. Additionally, 89% of respondents to the experience survey rated the healthcare they received as good or very good.

More than 300 GPs and 200 practices received proactive PHN support to implement the pathway and were provided with access to secondary consult support, education, and training and the HealthPathways Melbourne platform, which saw 2,633 page views during the second wave.

Overall, the Integrated COVID-19 Pathways developed by North Western Melbourne PHN proved to be an innovative solution to meet the health and wellbeing needs of people with COVID-19 in the region. The success of the program was due to the collaborative effort of various healthcare providers and the proactive support of the PHN in implementing the pathway.

Case Study 14. Workforce Support and Wellbeing Program, Healthy North Coast (HNC).[xi]

The Workforce Support and Wellbeing Program was designed to support primary care teams in the region during the disaster recovery period after the 2022 Northern Rivers floods, with a focus on retaining the workforce by addressing the impacts of the flooding on the mental health and wellbeing of healthcare professionals.

The program's three key initiatives were developed in consultation with local clinicians and aimed to provide rest and relief for overworked healthcare professionals, promote resilience and debriefing among teams, and build individual capacity to be responsive to patient needs. The first initiative, Debrief and Wellbeing, was tailored to support teams and individuals in looking after themselves following the flood event. The program was delivered by a local psychologist and/or experts in this area and offered flexible content to meet the needs of participants. Importantly, the program was free and easily accessible, providing an opportunity for early intervention when issues arose and aiming to increase individual resilience.

A buddy locum service was also established with practices linking up to provide much needed rest to exhausted health professionals and administration staff. With funding from the Australian Government, the PHN was able to ensure no service was at a loss for sharing their staff with another practice. Out-of-region locums were also engaged when there was no local capacity.

By focusing on the needs of healthcare professionals and supporting their wellbeing, the Workforce Support and Wellbeing Program helped to ensure that the primary care workforce remained in the region to provide essential services to the community during the recovery period. The program's engagement and empowerment approach not only addressed the immediate impacts of the flooding but also aimed to build individual and team resilience to better prepare for future challenges.

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(b) Consideration of alternative models, including:

i. Repurposing or adapting existing civil and volunteer groups, not-for-profit organisations, and state-based services.

Key Messages:

- Disaster management arrangements must be dynamic and systematic, incorporating all aspects of disaster preparation, response, and recovery efforts, and be responsive to local community preferences, values, and needs.
- The system intermediatory role, expertise, and existing structures of PHNs makes them ideally placed to contribute to systemic preparation, response, and recovery efforts in disaster situations, coordinating the efforts of primary care providers within wider disaster management arrangements.
- To appropriately utilise Australia's primary care resources and ensure a continuity of care during disasters, PHNs must take on a consistent and defined role in disaster management. PHNs will require systematic formal recognition, authorisation, and resourcing to accomplish this.

Disaster management arrangements must be dynamic and systematically incorporate all aspects of disaster preparation, response, and recovery efforts to effectively utilise the available workforce, especially given the toll that more frequent and intense disasters are likely to have on human resources. These arrangements must also be responsive to local community preferences, values, and needs. Finding creative, flexible solutions to workforce continuity should be a priority, as an external, fly in workforce is not a sustainable option, given the increased frequency of cascading disaster events (see case study 15).

PHNs are ideally placed to effectively contribute to coordinated, systemic resilience efforts in disaster situations, coordinating the efforts of primary care providers within wider disaster management arrangements. This requires PHNs to be formal members of disaster management arrangements, complementary to the LHN / LHD / HHS role within the broader health response. In some regions there are existing arrangements between local PHNs and local disaster management committees (see case study 2); however, this has not been systematically adopted across Australia.

PHNs have systems in place that can be drawn upon immediately, including capabilities in coordinating the primary care workforce and local reporting of system issues and needs. These systems could be better utilised within a disaster management context if PHNs are systematically incorporated into local health planning across Australia. PHN capabilities in coordinating the primary care workforce allows for the quick mobilisation of primary care resources, while reporting structures allow for dynamic assessment to be undertaken to ensure these resources are utilised effectively and where they are most needed. Their utilisation across Australia, however, remains inconsistent with variability in the way PHNs are incorporated into disaster arrangements, and many not included at all. PHNs must take on a consistent and defined role in disaster management arrangements to appropriately utilise Australia's primary care resources, but require systematic formal recognition, authorisation, and resourcing to accomplish this.

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PHNs possess valuable knowledge of local communities which will assist decision-making structures to allocate resources based on population circumstances, such as the presence of vulnerable groups, as well as tailor proposed solutions to these communities. This is demonstrated in the case studies throughout this document, however, their incorporation into wider arrangements is essential to ensure Australia's preparation, response, and recovery in the face of more frequent, cascading disasters. The involvement of PHNs can be particularly beneficial in the recovery phase of a disaster as PHNs are able to tailor and deliver ongoing support to where it is most needed (case study 16 and 17).

Case Study 15. Enhancing the Immunisation Workforce, Tasmanian PHN.

The Tasmanian PHN demonstrated its capacity to address disasters through its work enhancing the immunisation workforce.

In March 2021, in response to the increased demand on the immunising workforce, the Tasmanian PHN subsidised access to the Course, 'Immunisation Practice in Primary Healthcare and Tasmanian endorsement unit'. The first intake targeted nurses and Aboriginal health workers working in general practice and Aboriginal Community Controlled Health Organisation (ACCHO), later expanding to those working in residential aged care and disability facilities in 2022.

201 participants registered for the course. This created an opportunity to either enhance professional development in vaccination, or on completion of the course for registered nurses (RNs) to register in Tasmania as an Authorised Immuniser.

Whilst assisting in meeting an immediate need, this initiative also strengthens the vaccination workforce for the longer term.

A funded role in disaster preparedness would have potentially enabled an ongoing training program to build authorised immuniser workforce over time as part of pandemic planning, providing an immediate capability at the time of the pandemic, rather than building this workforce as the pandemic progressed.

Case Study 16. Primary Health Care Infrastructure Support, Healthy North Coast (HNC).[xii]

The Flood Recovery Infrastructure Grants Program 2023 offered financial assistance to eligible primary healthcare services located in the Lismore Local Government Area (LGA) that were impacted by the 2022 floods.

Co-funded by the Australian and NSW Governments through a $5 million flood recovery package, the grants provided up to $150,000 per eligible grant recipient to rebuild flood-damaged infrastructure, repair or replace flood-damaged equipment, or relocate to alternative premises within the Lismore LGA. Using a place-based approach the PHN worked closely with local primary health care professionals to ensure local needs were identified and addressed appropriately via the grant distribution methods. The program was open to primary health care providers.

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Case Study 17. Community Wellbeing and Resilience Grants, NSW.[xiii]

Community Wellbeing and Resilience grants have been made available by PHNs in bushfire and flood effected regions via Australian and NSW government recovery funding. The grants support communities to recover from the impacts of natural disasters and build their capacity to face future challenges. The program funds grass-roots community initiatives that address trauma impacts, improve social and emotional wellbeing, build individual and community resilience, strengthen social and cultural connections, and increase preparedness, response, and recovery capabilities.

Activities demonstrate local leadership, respond to identified community needs, mobilise the skills, passion, and experiences of individuals, families, and organisations, foster the development of partnerships and linkages, and focus on long-term sustainability.

Some PHNs offer grant writing support as part of the commissioning method to build capacity of small community organisations. Some PHNs also facilitate a community of practice to ensure learnings are shared between providers.

The limitation of this program is that the grants are short-term and small scale so successful initiatives cannot be funded again unless alternative funding is sourced.

PHNs in other jurisdictions also have had similar programs; however, the role of such programs are not consistently recognised and could be better built into disaster management frameworks.

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(c) Consideration of the practical, legislative, and administrative arrangements that would be required to support improving Australia's resilience and response to natural disasters.

Given more frequent, intense, and cascading disasters, considerations need to be made to allow PHNs across Australia to support the capacity of the primary care workforce to prepare for, respond to, and recover from disasters.

The following recommendations outline what practical, legislative, and administrative requirements are needed to support this objective:

1. *It is vital that primary care is integrated within existing disaster arrangement structures and that PHNs have a seat at the decision-making table to enable this integration*. PHNs can embed a primary health focus to disaster planning, preparedness, and response decision-making to complement current processes focused on the acute care setting. To do so:
    a. Current emergency preparedness, response, and recovery legislation at both the Commonwealth and state/territory levels must allow for the representation of PHNs on Emergency Management Committees.
    b. PHNs should be incorporated within the health portfolio on disaster committees consistently across Australia to ensure effective coordination of primary health resources. As highlighted in case studies 1 and 2, incorporating PHNs into local disaster committees results in more cohesive and efficient disaster responses by the primary care sector.
    c. To support this aim, funding of a disaster coordinator role in each PHN across Australia is essential to allow PHNs the resources to participate in disaster preparedness activities.
2. *Adequate resourcing must be provided to enable PHNs and the primary care workforce to adequately prepare for, respond to, and recover from disasters.* Currently, funding is generally distributed on an ad hoc basis where a disaster is declared for the immediate response, leaving PHNs to independently fund preparedness and recovery efforts.
3. *Primary care and PHNs must be adequately prepared to respond to disasters through support for involvement in capability building and training alongside emergency services and tertiary care providers in local disaster arrangements.* These capabilities must also be tested alongside emergency services to ensure effective lines of communication and execution of plans. PHNs must be adequately funded to strengthen the disaster preparedness, response, and recovery capability of the primary care workforce with funding targeted towards communities likely to face disasters.
4. *Regulatory requirements must be changed so that primary care providers are able to practice from different locations, including medical installations and other practices.* Provider numbers are necessary for billing, prescribing, and referral processes. During the 2019-2020 bushfires, short term regulatory changes enabled primary care practitioners to practice from various locations for up to two weeks and apply for a new provider number beyond this point. These arrangements should be in place and nationally approved for them to be immediately available, when necessary, rather than policies that are enacted on an ad hoc basis (see case studies 4 and 11). PHNs are ideally placed to distribute such information to providers, ensuring they are prepared to practice when needed.

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5. *Funding must be available to PHNs and primary care providers to continue to serve the community during disasters.* This could be by way of existing funding mechanisms such as MBS items that can be claimed by PHNs and primary care providers alike. Flexible funding options should also be available to PHNs that can be drawn upon immediately in the event of disaster. In the past, PHNs have had to privately fund providers during disasters as they were unable to access Medicare funding. PHNs have also supported primary care providers to stay open for longer (see case study 9).

6. *The Government must invest in the expansion of data sharing capabilities*:

   a. They must provide PHNs with access to relevant data to inform planning and preparedness activities. The sharing of this information will allow for the targeted planning of responses in disaster situations that are specific to individual community needs.

   b. There must also be an expansion of interoperable technology that support the continuity of clinical care through systems such as MyHealth record. Patient notes and prescriptions should be able to be easily recorded and shared to ensure continuity of access to care and maintaining safety and quality.

7. *Clarity must be provided around insurance coverage for primary care providers practicing in a disaster response capacity.* During previous disasters, insurance coverage has been unclear, which creates undue stress and uncertainty for practitioners giving up their time to serve the community in distressing and difficult disaster circumstances.

8. *Credentials must be provided to primary care providers in temporary medical installations to ensure that primary care providers are correctly identifiable when necessary.* They must also be provided with identifying clothing such as high-visibility vests with "DOCTOR" or "REGISTERED NURSE" on them, like the NBMPHN initiative implemented after the 2013 bushfires (see case study 3).

9. *Clinical governance structures must also be implemented for all practitioners in a disaster response setting*. This should be embedded within disaster preparedness structures to avoid clinical risk from breaches of care safety and quality during the response phase. PHNs can develop these frameworks in conjunction with local care providers and local disaster management structures appropriate to workforce and local needs (see case studies 3 and 4).

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References

[i] Australian Institute of Health and Welfare (AIHW), https://www.aihw.gov.au/reports/health-care-quality-performance/general-practice-allied-health-and-other-primary-c

[ii] Nepean Blue Mountains Primary Heath Network, see https://www.nbmphn.com.au/Resources/About/268_0618-DisasterPlanning_F

[iii] Healthy North Coast, see https://hnc.org.au/wp-content/uploads/2022/12/HNC-Disaster-Management-Framework-and-Action-Plan.pdf

[iv] RACGP 2017, Managing emergencies in general practice: A guide for preparation, response and recovery, June. Available at: https://www.racgp.org.au/download/Documents/e-health/Managing-emergencies-in-general-practice.pdf

[v] Commonwealth of Australia (Department of Health) 2022, Future focused primary health care: Australia's Primary Health Care 10 Year Plan 2022-2032. Available at: https://www.health.gov.au/sites/default/files/documents/2022/03/australia-s-primary-health-care-10-year-plan-2022-2032-future-focused-primary-health-care-australia-s-primary-health-care-10-year-plan-2022-2032.pdf

[vi] The Royal Commission into National Natural Disaster Arrangements, Royal Commission into National Natural Disaster Arrangements Report, October 2020. Available: https://naturaldisaster.royalcommission.gov.au/publications/royal-commission-national-natural-disaster-arrangements-report

[vii] Commonwealth of Australia (Department of Health) 2022, Future focused primary health care: Australia's Primary Health Care 10 Year Plan 2022-2032, 8

[viii] PHN Cooperative 2020, The role of Primary Health Networks in natural disasters and emergencies, White Paper. Available at: https://www.nbmphn.com.au/Resources/About/The-Role-of-Primary-Health-Networks-in-Natural-Disf

[ix] The Royal Commission into National Natural Disaster Arrangements, Royal Commission into National Natural Disaster Arrangements Report, October 2020. Available: https://naturaldisaster.royalcommission.gov.au/publications/royal-commission-national-natural-disaster-arrangements-report

[x] Healthy North Coast, see https://hnc.org.au/lismore-health-precinct

[xi] Healthy North Coast, see https://hnc.org.au/workforce-support-and-wellbeing-program/

[xii] Healthy North Coast, see https://hnc.org.au/flood-recovery-primary-care-workforce-infrastructure-grants/

[xiii] Healthy North Coast, see https://hnc.org.au/community-wellbeing-resilience-program/

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24 July 2023

Submission lodged to: Health.Climate.Consultation@health.gov.au

RE: Submission on the National Health and Climate Strategy discussion paper

To whom it may concern,

Better Streets (www.betterstreets.info) is a coalition of community groups, businesses, and individuals who believe that prioritising people instead of cars on our streets is essential for fostering vibrant, accessible, and sustainable urban environments in communities throughout Australia. We want to see streets that are accessible to all and encourage active transport, such as walking, cycling, riding, and scooting, particularly around schools. Our coalition has been established to foster constructive engagement between governments, communities, and businesses.

In making this submission Better Streets agrees to the relevant Privacy Statement.

Better Streets supports the development of a *National Health and Climate Strategy* and the proposal in the consultation paper to adopt a "Health in All Policies" framework.

The consultation paper includes two example actions that relate to active transport and planning:

- *Transport policy – vehicle electrification will reduce air pollution and respiratory disease, while urban planning encouraging active travel will improve air quality, reduce greenhouse gas emissions, and lower the risk of cardiovascular disease, diabetes and depression.*
- *Housing policy – economic, construction and land use planning levers can be used to encourage housing with thermal comfort throughout the seasons, lowering energy costs, improved indoor air quality and increased community connectedness.*

The reference in *Transport policy* to active travel is welcomed but needs to be expanded to capture active transport infrastructure which goes beyond "urban planning". Active transport infrastructure investment is a critical component for realising health and climate benefits in Australian towns and cities and is critical to reducing emissions from the transport sector. Infrastructure that supports active transport is very low cost and can be delivered by a significant proportion of the construction sector which means that it will not increase inflationary risks.

We believe that a key step in acknowledging the co-benefits of active transport to health and climate change will require a formal agreement between agencies of the Australian Government: health, climate and infrastructure. This is because the expenditure is mainly in infrastructure (footpaths, crossings, cycleways, which largely fall to local and state governments); while the benefits are predominantly in health and climate. Those health cost savings flow largely to the Australian Government, with some for state governments. We note that the NSW Ministry of Health has published a paper showing that the health benefits of a single kilometre walked is around $5.50 and a single kilometre cycled is around $1.50 (https://www.health.nsw.gov.au/heal/Documents/nsw-active-transport-health-model.pdf).

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Recommendations:

1. **Create a formal agreement recognising the co-benefits between the health, climate and infrastructure agencies in the Australian Government (and encourage state and local governments to follow suit)**

2. **Provide funding and rapid roll out of extensive active transport infrastructure to address health and climate policy objectives, noting that the four largest capital cities (Sydney, Melbourne, Brisbane, Perth) all have large cycling networks listed on Infrastructure Australia's Infrastructure Priority List. This could be funded by the Australian Government in partnership with state and local governments.**

3. **Establish a rapid formal review of state transport legislation, policies and programs that make walking and cycling less safe and convenient than driving (e.g. urban speed limits, right of way, liability, enforcement). Tie Australian Government transport funding to immediate reform of these.**

   Better Streets agrees that the consultation paper is correct to link transport policy with urban planning, however, that the link extends beyond housing quality and safety to include settlement patterns and city structure that supports active and healthy lifestyles.

Recommendation:

4. **The Australian Government should enter into agreements with state governments to stop new strategic land use plans for sprawled greenfield development and revoke strategic land use plans that have not begun implementation that lead to development that increases absolute vehicle kilometres travelled. The Australian Government should require extensive change and co-operation in state transport and planning agencies to achieve this end. This could be led by the Cities and Suburbs Unit, through the National Urban Policy and following the work of the COAG Reform Council review of capital city metropolitan planning systems.**

   The consultation paper does not mention taxation or advertising regulation but these are critical policy tools to discourage growth in private vehicle use and growth in larger more polluting and more dangerous vehicle types that impact uptake of active transport. See for example the recent paper "Rammed" about advertising in Australia by auto manufacturers by Comms Declare (https://commsdeclare.org/rammed).

Recommendation:

5. **Immediately review regulation in taxation and advertising to ensure absolute growth of private vehicle use is reversed.**

   Better Streets strongly supports the *Framework for a national strategy on climate, health and well-being for Australia* developed by Climate and Health Alliance (https://www.caha.org.au/framework). We particularly support the following recommendations from their submission: 1.1, 1.13, 1.15, 1.16, 1.26, 1.19, 1.20, 1.21 and 1.22 with the specific inclusion here of e-bikes. And, recommendations 4.18, 6.7F, 6.12, 6.16, 8.4, 8.6, 8.14, 8.21, 8.23, 8.28, 8.35 and especially strongly 8.7.

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Recommendation:

6. **Adopt the comprehensive recommendations of the Climate and Health Alliance Framework as an excellent approach to "Health in All Policies".**

   In relation to section "2.2 Travel and Transport" of the discussion paper – Scope 3 emissions, from employee commuting and, to a lesser extent even supply chain transportation, can be reduced by providing for and encouraging staff to walk or cycle to work (as the NHS has done, very actively, for many years). End-of-trip facilities should be provided at all workplaces and schemes to purchase and/or lease e-bikes or ordinary bikes should be offered to staff, like at the NHS. Even scope 4 emissions, though difficult to account for, can be acknowledged with simple provision of well-located visitor bicycle parking.

7. **Include an action, and funding, for all health workplaces to provide for and encourage active transport to work for staff, and bike parking for visitors.**

If you would like to discuss any of the above, please contact Better Streets at the details provided below.

Yours sincerely,

Sara Stace
President, Better Streets
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contact@betterstreets.org.au

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SUBMISSION

Submission to the Department of Health and Aged Care

Submission on the National Health and Climate Strategy Consultation

24 July 2023

The Australian Academy of Technological Sciences and Engineering (ATSE) is a Learned Academy of independent, non-political experts helping Australians understand and use technology to solve complex problems. Bringing together Australia's leading thinkers in applied science, technology and engineering, ATSE provides impartial, practical and evidence-based advice on how to achieve sustainable solutions and advance prosperity.

Australia ranks as the 14th highest emitter globally, with healthcare representing about 7% of all Australian emission outputs (CSIRO 2023; Malik et al. 2018). As part of the race to net zero, Australia must minimise its carbon footprint within the health system and beyond. At the same time, as extreme weather events become more common, there is an urgent need to protect the health and wellbeing of Australians from the consequences of climate change. Failing to act on the impacts of climate change, maintain quality health services to the community, and reduce greenhouse gas emissions from the health system could be detrimental to Australia's future. A well-designed National Health and Climate Strategy provides Australia with the opportunity to become a global leader in environmentally sustainable healthcare.

Responding to climate change from a health system perspective is multifaceted and must consider preventative and adaptive strategies. ATSE makes the following recommendations for inclusion in Australia's first National Health and Climate Strategy:

Recommendation 1: Focus on measuring and reducing Scope 3 emissions, which comprise the largest portion of the healthcare supply chain.
Recommendation 2: Dedicate measurement and mitigation efforts for emissions falling outside of Scopes 1 to 3, including providing remote communities with facilities to support virtual care.
Recommendation 3: Introduce a 'triple bottom line' approach to reporting and evaluating healthcare, covering health benefits, financial savings, and environmental benefits.
Recommendation 4: Promote grey (structural) and green (natural) environmental management strategies to adapt to climate variation affecting Australia's health system.
Recommendation 5: Provide government-led incentives to reduce single-use items across the health system.
Recommendation 6: Encourage 'buy local' procurement to reduce transportation-related emissions and promote the reuse of resources.
Recommendation 7: Implement low-emission procurement criteria to begin decarbonising the supply chain.
Recommendation 8: Ensure the National Health and Climate Strategy plans for and promotes primary preventative health and infrastructure precautions to build a climate change-resilient population.
Recommendation 9: Integrate standardised, government-led sustainability training for staff across the health sector to improve the understanding of the environmental impact of the healthcare they provide.

Comprehensively measuring health sector emissions

Scope 1 emissions are defined as direct emissions produced within the boundary of an organisation, Scope 2 emissions are energy-related indirect emissions, and Scope 3 emissions consider other indirect emissions. While considering all Scopes is important, the Strategy should ensure it concentrates measurement and mitigation efforts on the largest emission producer within the health system (refer to Image 1). Scope 3 emissions comprise 71% of the healthcare supply chain (Karliner et al. 2019). The Strategy must target measurement and reduction efforts for Scope 3 emission producers, such as producing, transporting, and disposing of goods and services.

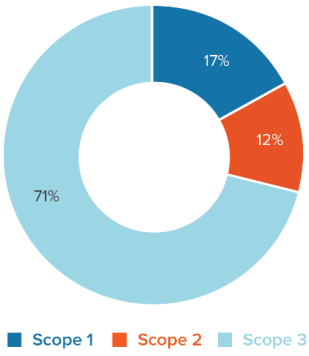


Image 1: Global healthcare footprint split by Greenhouse Gas Protocol. Image courtesy of Karliner et al (2019).

Objective one of the proposed Strategy (measuring greenhouse gas emissions) must be designed to account for a realistic and practical representation of the health system's climate impacts. This could be modelled on the UK's 'Delivering a 'Net Zero' National Health Service' document, which breaks down the health system's carbon emissions into categories, such as supply chain and personal travel (NHS 2020).

Attaining healthcare emission data across all levels of the health system is critical to improving clarity and transparency. Resources such as the HealthcareLCA database provide open access and continuously updated access to environmental impact values for healthcare resources, including pharmaceuticals, treatments and services (HealthcareLCA 2023). Annual reporting mechanisms and monitoring must be

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implemented to hold different health system (including private and public) sectors responsible, with the promotion of achievements incentivising emission reduction activities.

In relation to the Strategy's Objective 2 (mitigation), examples that encourage greener patient and visitor transport could include providing bicycle parking facilities, end-of-trip facilities, parking demand management and a points system to incentivise sustainable travel. Co-benefits may be improved physical activity, social wellbeing, mental health, and reduced air pollution and associated disease. While sustainable visitor and patient travel should be encouraged, the Strategy must also account for some unavoidable emissions from urgent travel, where patients and visitors seek convenient travel options during what may be a stressful time.

Virtual care (such as telehealth) can improve accessibility for patients while reducing travel-related emissions. Digital infrastructure in rural and remote areas must be improved so that digital health services can, where appropriate, replace in-person consultations involving long travel times. Taking an approach modelled off 'The Hub' (enabling regional students to study while remaining in their hometown) would mean that the digital infrastructure required for virtual care (including computers and good wi-fi) is more accessible to remote communities (JSL Media 2022).

Recommendation 1: Focus on measuring and reducing Scope 3 emissions, which comprise the largest portion of the healthcare supply chain.
Recommendation 2: Dedicate measurement and mitigation efforts for emissions falling outside of Scopes 1 to 3, including providing remote communities with facilities to support virtual care.

Supporting planetary health with a 'triple bottom line' approach

Current levels of resource utilisation in the health system are unsustainable. For the Strategy to align with Australia's obligations under the Paris Agreement, the health system must work with manufacturers and suppliers of healthcare resources and services to achieve net zero emissions. A 'triple bottom line' approach would encourage the consideration of profit, people, and the planet.

An exemplar is provided by the Northern Sydney Local Health District (NSLHD)'s commitment to net zero by 2035 using a planetary health framework (NSLHD 2021a); this is 15 years before the Australian Government's commitment to achieving net zero emissions in Australia. Planetary health describes that humans' long-term health depends on the Earth's wellbeing. Strategies proposed by the NSLHD Planetary Health Framework (NSLHD 2021a) can be adopted across the Australian health system; this includes improving lighting measures (e.g., using LED lighting), using solar panels, encouraging utilisation of electronic record management, and rolling out environmentally efficient chillers and boilers across the health system. In many cases, low-carbon models of care improve health outcomes, patient experiences and provide cost savings. Across the NSLHD alone, the use of solar reduced energy consumption from the grid by 1,814,356 kWh, creating cost savings of $317,240. A combination of grey (structural) and green (natural) environmental management techniques would therefore help improve the health system's resilience. Green strategies could include reducing waste by composting and using renewable energy sources, and grey approaches could include low-emission vehicles and equipment.

The proposed focus areas for emission reduction within the Strategy are comprehensive and could be strengthened with further mitigation actions. The Strategy should include product lifecycle management (PLM) as part of its supply chain, built environment and facilities focus areas. Investing in environmentally-centric PLM means that the lifecycle a product goes through, from design and development, to its retirement or disposal, can be designed to minimise emissions. This would close the loop and reduce unknowns.

A hospital within the NSLHD has already demonstrated the viability of adopting a low-waste, circular economic strategy. This included metal salvaging from laparoscopic procedures, using dry mix recycling so that high-quality plastics can be turned into processed engineered fuel, using biodegradable kidney dishes and trays made of 100 per cent bagasse (releasing fewer carbon emissions upon incineration), and increasing battery recycling initiatives (NSLHD 2021b). Another example of reducing waste in healthcare is

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dialysis (especially haemodialysis), which is a water-hungry treatment. A “3R” approach to dialysis-related wastewater management can be implemented, which includes “reduce” (reduce dialysis need and dialysate flow etc.), “reuse” (reuse wastewater as potable water), and “recycle” (dialysis effluents can be used for agriculture and aquaponic use) (Hmida et al. 2023).

Instead of defaulting to consumable items, which require a constant turnover of manufacturing, transportation and incineration at the detriment of the environment, reusable items should be considered the default, with single-use items only for when there is no other suitable option. This transition could be supported by Government incentives (such as tax reductions) to make the sustainable choice more attractive. Changes can be made to reduce Scope 3 emissions, such as washing hospital bed linen instead of using disposable linen which is incinerated, or using reusable laboratory glassware over plastic.

Recommendation 3: Introduce a 'triple bottom line' approach to reporting and evaluating healthcare, covering health benefits, financial savings, and environmental benefits.
Recommendation 4: Promote grey (structural) and green (natural) environmental management strategies to adapt to climate variation affecting Australia's health system.
Recommendation 5: Provide government-led incentives to reduce single-use items across the health system.

Promoting local procurement to curb emissions from imports

One quarter of global healthcare emissions are produced outside the country where it was consumed (Karliner et al. 2019). Significant efforts must be made to reduce reliance upon imports. ATSE's submission on Australia's Science and Research Priorities highlighted the opportunity to leverage Australian expertise for advanced manufacturing – including medical manufacturing, clean energy and electric transportation (ATSE 2023a). The Strategy should encourage the health system to adopt a circular economy approach through 'buy local' procurement and promotion of reusing and redistributing resources (including furniture, ICT equipment, and medical equipment). While many government-run health facilities use a centralised government agency for procurement (e.g., HealthShare), it has the drawback of leaving some local health districts powerless to take action. Change is therefore needed on how healthcare settings procure resources across public and private healthcare to enable all aspects of the health system to make greener choices.

The healthcare sector has considerable purchasing power which can be harnessed to improve emission reductions. Embedding sustainability in procurement practices would incentivise manufacturers to reduce emissions. The UK's NHS, for example, has published a procurement policy outlining its commitment to limiting business in the future to only suppliers possessing a Carbon Reduction Plan (NHS 2023). The Strategy could adapt this across the Australian public and private healthcare landscape. In alignment with this change, steps must be taken to abate the risk of greenwashing: ATSE's submission on greenwashing recommended that a legal definition of environmental sustainability and shared frameworks for greenhouse gas accounting is needed (ATSE 2023b). The Strategy should outline a clear governance structure such as dedicated committees to oversee National Health and Climate Strategy decisions, activities and progress occurring at all levels of the health system. Providing a percentage of planetary health weighting on tenders would also help to reinforce that price should not be the only consideration.

Recommendation 6: Encourage 'buy local' procurement to reduce transportation-related emissions and promote the reuse of resources.
Recommendation 7: Implement low-emission procurement criteria to begin decarbonising the supply chain.

Assessing and preparing for 21st Century health needs

Most risk assessments are based on a deterministic basis, that is, what would happen in predictable circumstances. However, a probabilistic approach is more realistic since it considers a changing climate and how changing weather impacts public health. ATSE has explored this in the context of infrastructure in its publication *Explaining Probabilistic Risk Assessment* (ATSE 2022a). The Australian Government must

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approach the Health and Climate Strategy based on the 21st Century climate. For instance, Australia may have more heat waves, and the North may be wetter and more prone to flooding. ATSE calls for greater investment in climate-related research to assess climate risks, vulnerabilities and methods of improving the resilience and sustainability of the health system.

Resilience must be built into health infrastructure to avert climate risks. Refer to ATSE's position statement on climate-resilient infrastructure, which determines that infrastructure needs to be designed to include robustness, redundancy, resourcefulness, and rapid recovery (ATSE 2022b). Integrating resilience based on construction standards, such as the regularly amended National Construction Code (NCC 2022), would contribute towards reducing preventable health impacts.

The Health Climate Strategy must also include a plan to proactively mitigate and prepare for major public health issues linked to climate change, which will continue to place an increasing burden on the health system. For example, Australia could be reasonably expected to again be subjected to extreme bushfire-linked smoke conditions. Between July 2019 and March 2020, bushfire smoke caused a public health emergency, resulting in over 400 deaths, 2,000 respiratory hospitalisations and 1,300 presentations to the Emergency Department for asthma (Asthma Australia, 2020). As the climate changes, Australia is also increasingly prone to tropical diseases, including the Ross River and Barmah Forest viruses. The Strategy should plan to support primary preventative actions (such as immunisation against infectious disease) to reduce the burden of climate-exacerbated injury and disease.

Recommendation 8: Ensure the National Health and Climate Strategy plans for and promotes primary preventative health and infrastructure precautions to build a climate change-resilient population.

Aligning climate and public health policy through education

From the setting of care, to the types of medicine prescribed, at the heart of emission-based decisions are health professionals, whose clinical decisions influence the emissions of the entire system. In alignment with the Strategy's Enabler one (workforce, leadership and training), sustainability training needs to be applied at all levels of the health system (from practitioners to members of hospital boards) to improve the understanding of the environmental impact of the healthcare they provide. At board level, this could include an Australian government-led version of the UK's 'Board-level Net Zero Leadership Training' offered by the Centre for Sustainable Healthcare (CSH n.d.).

Recommendation 9: Integrate standardised, government-led sustainability training for staff across the health sector to improve the understanding of the environmental impact of the healthcare they provide.

ATSE thanks the Department of Health and Aged Care for the opportunity to respond to the National Health and Climate Strategy Consultation. For further information, please contact academypolicyteam@atse.org.au.

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References

Asthma Australia. (2020). *Bushfire Smoke Impact Survey 2019-2020*.

ATSE (2022) *Explaining probabilistic risk assessment*.

ATSE (2022b) *Building a resilient Australia*.

ATSE (2023a) *Submission to Australia's Science and Research Priorities: Conversation Starter*, *Australian Academy of Technological Sciences and Engineering*.

ATSE (2023b) *Submission to the Greenwashing inquiry*, *Australian Academy of Technological Sciences and Engineering*.

CSH (n.d.) *Board-level Net Zero Leadership Training*, *The Centre for Sustainable Healthcare*.

CSIRO (2023) What are the sources of Australia's greenhouse gases?, CSIRO.

HealthcareLCA (2023) *A database of environmental assessments within healthcare*, *HealthcareLCA*.

Hmida M Ben, Mechichi T, Piccoli GB and Ksibi M (2023) 'Water implications in dialysis therapy, threats and opportunities to reduce water consumption: a call for the planet', 104(1).

JSL Media (2022) *Queensland councils inspect regional educational hub*, *Inside Local Government*.

Karliner J, Slotterback S, Boyd R, Ashby B and Steele K (2019) Health care's climate footprint.

Malik A, Lenzen M, McAlister SM and McGain F (2018) 'The carbon footprint of Australian health care', The Lancet Planetary Health, 2(1).

NCC (2022) *National Construction Code*, *National Construction Code*.

NHS (2020) *Delivering a 'Net Zero' National Health Service*.

NHS (2023) *Suppliers*, *National Health Service*.

NSLHD (2021a) *Planetary health*, *Northern Sydney Local Health District*.

NSLHD (2021b) *NSLHD Planetary Health Framework 2021 - 2023.*

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NATIONAL HEALTH AND CLIMATE STRATEGY

Detailed submission form

This form allows you to provide responses to the full set of questions in the Consultation Paper available here.

Alternatively, you may wish to complete the briefer online survey available here.

Please submit this form in Word format to Health.Climate.Consultation@health.gov.au.

Respondent details

What is your name?
[redacted]
What is your email address?
[redacted]
What is your organisation?
The National Rural Health Alliance (The Alliance)
Have you read and agreed to the Privacy Statement? (NB we will not be able to use your submission unless you tick this box)
☒ I have read and agreed to the Privacy Statement
Do you identify as Aboriginal and/or Torres Strait Islander? (Yes/No/Prefer not to say)
[redacted]
Please select which applies to you: ☐ Individual citizen ☐ Health Service Provider ☐ Industry and Life Sciences Organisation or Representative ☐ Academic or Researcher ☒ Primary and/or Allied Health Peak or Advocacy Organisation or Representative ☐ Aged Care Service Provider ☐ First Nations Health Service Provider ☐ First Nations Community Group ☐ First Nations Peak or Advocacy ☐ Medical College or Peak professional body

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About the Alliance

The National Rural Health Alliance (The Alliance) welcomes the opportunity to respond to the National Health and Climate Strategy Consultation (V1 long-form submission – objective 3) *into the challenges posed to human health by climate change in rural Australia.* The Alliance is the peak body for rural health in Australia and views climate change as a significant and enduring threat to health and considers that the adverse health risks are greater in rural and remote communities.[1]

The Alliance represent 47 member bodies[1] and our vision is for healthy and sustainable rural communities across Australia. The Alliance is focused on advancing rural health reform to achieve equitable health outcomes for rural communities, that is, the 7 million people residing outside our major cities. Our members include health consumers, health care and medical professionals, service providers, health and medical educators, students, and the Aboriginal and Torres Strait Islander health sector.

Introduction

Rural and remote Australian communities are, for numerous reasons, particularly prone to the health-related impact of climate change. The geographic location of rural and remote communities renders them at risk of extreme weather events such as heatwaves, extended periods of low rainfall or drought, flood and more recently bushfires.

Rural community demographics have higher proportions of older Australians and Aboriginal and Torres Strait Islander peoples, greater incidence of chronic disease, comorbidities, and poor mental health mean that already susceptible groups experience greater health challenges. [2] Furthermore, rural, and remote communities face socioeconomic disadvantage including higher rates of unemployment, poverty, welfare dependency, digital exclusion, lower rates of educational attainment and reduced access to appropriate health services. In some communities, infrastructure such as housing, telecommunications, transport, and sanitation is also lacking. Climate change has been described as a risk multiplier, exacerbating existing health challenges and other disadvantage.

The effects of climate change are high across rural Australian communities, who have high vulnerability and low resilience to disasters. Natural disasters (drought, floods, storms, animal and insect plagues) have a flow on health impact to both physical and mental health.[3-5] Rural Australians are more likely to have been affected by flooding at least once since 2019 (61%) than people living in urban areas (38%), and significantly more likely to have been affected by bushfires (49%) than people in urban areas (36%).[5]

Currently climate impacts are imposing economic costs of around $38 billion per year and projected to increase with population growth even with global action to reduce emissions.[6] Therefore, it is important that healthcare clinics in rural and remote regions of Australia with workforce shortages including emergency services are supported to care those communities affected by extreme weather events such as heatwaves, bushfires, and drought.[2]

About 7 million people (28 percent of the population) live in rural Australia.[2] Broadly, rural Australian industries, including agricultural industries and mining, contribute almost $400 billion per year to the value of the economy.[7] Agriculture, fisheries and forestry, rural industries and resources generate at least 80 per cent of the country's exports per year.[8] Furthermore, 46 per cent ($107 billion) of the nation's annual tourism expenditure occurs in regional Australia with half a

[1] Please see https://www.ruralhealth.org.au/about/memberbodies for details

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million people directly employed in rural tourism-related industries.[9] This is a significant economic contribution and key to sustenance of international trade, stimulating economic wealth and facilitating employment. Climate change could impact the productivity and competitiveness to these industries and employers.[7] The health and wellbeing of people living in rural Australia is essential to the broader economic productivity and development of the nation. Furthermore, it is important to encourage other businesses and families to relocate to rural Australia, to invest and take up employment to maintain our nation's wealth.

There are severe health inequities for rural and Australia. Currently there is a $6.5 billion annual shortfall in health expenditure in Australia's regional and remote communities which equates to each person in rural Australia missing out on nearly $850 a year of healthcare access. This shortfall presents unique challenges and requires the Australian Government to allocate more spending to healthcare for rural and remote Australians.[10] Rural and remote communities need access to multidisciplinary healthcare services and health workers to support their physical and mental wellbeing, more so in times of disaster (flood, drought, bushfire).

The Alliance acknowledges the accumulation of social, economic, and environmental burden from climate change leaves many communities in rural and remote Australia highly vulnerable to the health risks associated with climate change. Furthermore, the Alliance supports the development of National Climate Change and Health Strategy to facilitate planning for future climate health impacts to rural and remote Australia. Access to high-quality health care is essential to enhance overall health and wellbeing and facilitate improved health equity for rural Australians. Improving access to health services for those living in rural and remote Australia is also fundamental to the generation and further development of the economy.

The National Rural Health Alliance has a position paper: Rural Health Policy in a Changing Climate: three key issues which also form part of background and input to this submission process. See: https://www.ruralhealth.org.au/document/position-paper-rural-health-policy-changing-climate-three-key-issues

Some of our members have noted that the consultation paper does not mention "air". Air quality should at least be highlighted in the built environment section as a specific action area. Given that the encroachment of the built environment on the natural environment accelerates climate change due to deforestation etc, and increases the likelihood of zoonoses such as COVID-19 being introduced into the human population, and with several pandemics of respiratory viruses in the last 20 years, much has been learnt about the importance of breathing clean air, indoors and outdoors. Air pollution is usually thought of as outdoor air, i.e. pollution from the built environment and from natural occurrences such as fire. With all that we've learned in the mitigation of the airborne COVID-19 virus, the indoor and outdoor air quality's impact on health should be described as a part of the Strategy.

The outcome of the strategy must be that all levels of government to take immediate action to reduce the impact of climate change. Rural communities need assistance to plan and mitigate against health impacts and to be provided with the resources required to respond to the impacts of climate change to enjoy good health across their lifespan. Below is a broad scope of recommendations for policy action to address the health implications of climate change. The following recommendations are referenced within the National Health and Climate Strategy Consultation Paper responses.

The Alliance makes the following recommendations:

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1. **Immediate action -** the cost of inaction on climate change will be much higher than the cost of action. Therefore, governments in Australia should act immediately to introduce policies and incentives to reduce the nation's greenhouse gas emissions and mitigate climate change impact.
2. Governments should ensure the **transition to a sustainable economy** is managed and planned to support those regions and sectors of the economy most affected by climate change, through the development of regionally specific transition plans that support the viability and sustainability of communities and businesses.
3. Governments will need to address the implications of climate change in their **health care planning** in terms of prevention, early intervention, primary care, secondary care, tertiary care, crisis and trauma management, mental health service provision, and health care workforce education and training. Governments should promote and **build the role of multidisciplinary healthcare services and professionals** to respond to rural Australians vulnerable to the impact of extreme weather events, vector borne and zoonotic diseases, air pollution, rising sea levels and food and water security.
    a. This includes funding of the Primary care Rural Integrated Health Services (PRIM-HS) model advocated for by the Alliance that aims to address the barriers to recruitment and retention of health professionals in rural areas – professional, financial, and social.
4. **Enhance evidence-based workforce interventions in rural and remote Australia to train healthcare students that have been shown to increase recruitment and retention in rural areas once training ceases. These trainees will support vulnerable rural Australians impacted by climate change.**
    a. Select students from rural and Aboriginal and Torres Strait Islander backgrounds to undertake training in a rural region. Include training pathways for healthcare, for local students to stay local to support country, culture, and wellbeing. Having an Aboriginal and Torres Strait Islander employed in health-related sectors such as aged care, mental health, primary care, and disability will grow the workforce across the health industry and build capacity to respond to climate change disasters.[11]
    b. Provide these students with positive rural training experiences, preferably via longer placements, via the **Rural Health Multidisciplinary Training** (RHMT) **program** so that they will remain in rural Australia and address the health care gaps that currently exist.
    c. Provide mechanisms to link rural health students with rural jobs in rural and remote Australia.
    d. Implement articulated pathways of training that enable the movement of local students into health careers - from school to vocational education and training and beyond – to grow rural and remote Australia's health workforce.
    e. Extend the funding for the salaries of specialist trainees in the hospitals and clinics through the Specialist Training Program (STP) and the Flexible Approach to Training in Expanded Settings (FATES) to develop mentorship programs and to support supervisors of training in rural and regional hospitals. Building a critical mass of specialists in rural Australia is imperative to support the shortage of medical workforce and to replenish those medical staff considering leaving in rural Australia due to more extreme weather conditions. [12]

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5. **Support and expand workforce interventions that build a rural workforce with a generalist scope of practice**: **rural generalist program for medical professionals,** the new **rural generalist framework for nurses** and **the allied health rural generalist pathway.**[13-15]

    a. Include **climate education** into training frameworks with strategies to managing healthcare workers own wellbeing and mental health whilst working with communities impacted by climate change.

b. Provide easily accessible information to all healthcare workers to ways of mitigating environmental and clinical waste, including information from pharmaceutical companies outlining medications with the least emissions.

6. **Extend funding** for the use of and upskilling in **digital technology** for both health professionals and consumers, to support timely, efficient, and collaborative health care.[16] Digital technology provides an adaptable, timely and capable workforce to provide continuous personalised care without delay to rural Australians whose health is impacted by climate change. Better connectivity and interoperability of digital systems is required to support digital technology. The benefits to rural Australians can include the avoidance to hospital admissions, less travel, reduce duplication of pathological tests, and overall better coordination of care. [17] Electronic medication prescription increases timely health care, reduces medication errors and is significantly more secure in a climate change event.

7. **Governments must prioritise and support research** to assist rural, and remote communities to better adapt to and mitigate the direct and indirect effects of climate change on health, including the impact of extreme weather events, risks to agriculture and food security, and the potential threat of vector-borne diseases.

8. **Government must prioritise the funding** to run cleaner, cheaper transport across rural and remote Australia. Build energy efficient and environmentally sustainable housing and healthcare facilities that have low emissions and can withstand increased air temperatures, heatwaves, and natural hazard events.

Questions for feedback from the Consultation Paper

Introduction

1. How could these objectives be improved to better support the vision of the Strategy?
All objectives need to • Support the health outcomes for all rural Australians in all policies. • Support and expand more multidisciplinary health care clinics and workers to support the rural Australians impacted by climate change in all policies. • Support and expand climate change education in all polices. • Strong support to minimising health systems' carbon emissions. • Expand and integrate research in all policies.
2. How could these principles be improved to better inform the objectives of the Strategy?

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The Alliance supports the six principles in the draft Strategy and particularly notes the principles about First Nations leadership and tackling health inequities and the broader determinants of health and prevention. The principles should be expanded to specifically include addressing the health impacts affecting people living in rural Australia and the health care workforce in rural Australia.

3. Which of the various types of greenhouse gas emissions discussed above should be in scope of the Strategy's emission reduction efforts?

Strong support for:

- **Government funding** to run cleaner, cheaper transport and support other modes of transport across rural and remote Australia. It should include options to electrify modes of transport including public transport. More swap and go battery exchange stations and quick charge stations in rural areas is warranted to support the reduction of emissions.
- Build energy efficient and environmentally sustainable housing and healthcare facilities that have low emissions and can withstand increased air temperatures, heatwaves, and natural hazard events.
- more sustainable public transport infrastructure

Recommendation: (8)

4. What existing First Nations policies, initiatives, expertise, knowledge, and practices should the Strategy align with or draw upon to address climate change and protect First Nations country, culture, and wellbeing?

Strong support to engage with the First Nations people to develop the National Health and Climate Strategy. The strategy must support and grow the First Nations environmental health workforce [11]

Recommendation: (4)

5. What types of governance forums should be utilised to facilitate co-design of the Strategy with First Nations people to ensure First Nations voices, decision-making and leadership are embedded in the Strategy?

Strong support to consult and engage all First Nations healthcare stakeholders including aged care and mental health workers to the principles and framework sets. This will support best practices based on their own experiences and build confidence to stakeholder engagement going forward. The Alliance suggests holding governance forums in regional, rural, and remote regions to include those with connection to their communities can attend and local voices are heard, and knowledge is shared. The forums could include speakers and workshops as appropriate.[18, 19]

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Proposed Objective 1: Measurement

6. Beyond the schemes already noted above, is your organisation involved in any existing or planned initiatives to measure and report on health system emissions and/or energy use in Australia?
This question falls outside the National Rural Health Alliance remit.
7. What additional data and information is required to support targeted emissions reduction efforts within health and aged care?
Strong support for the inclusion of scope three emissions • Details of additional resources required for rural and remote providers of health care to make adjustments to reduce emissions. • All emissions due to the Australian health and aged care system should be measured, including emissions from products sourced, medications from overseas, food, and patient and visitor travel.

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Proposed Objective 2: Mitigation

8. What do you think of these proposed focus areas for emissions reduction? Should anything else be included?

On average, rural Australians have lower social determinants of health, poorer housing, income, access to fresh food noting that a healthy diet is important to wellbeing and sustaining physical and mental wellbeing. Active travel and physical activity including walking and cycling have major benefits to reducing chronic health conditions and improving mental health. Active health can reduce greenhouse gas emissions, air pollution and reduce cost of road maintenance, and congestion. [20]

The strategy should focus on the proposed areas of transport, town planning for a more active community, housing, healthcare services and workers including digital health.

Transport

The strategy needs to focus and support other modes of transport in rural and remote regions of Australia. It should include encourage options to electrify modes of transport including public transport to rural communities. Currently the distance an electric car travels is reduced in regions with long mountain climbs, extra passengers, and strong wind conditions. More swap and go battery exchange stations and quick charge stations in rural areas is warranted to support the reduction of emissions. Incentives to reduce car transport as more sustainable public transport infrastructure should be developed and implemented. Moreover, this could also include incentives for health care workers to choose electric vehicles over combustion engines, as well as public transport facilities. Currently, some health services are purchasing zero emission vehicles to replace petrol and diesel vehicles for patient and staff transport. The extension of this initiative to all rural Health Services in Australia would further reduce emissions.

Town Planning

Mitigation should include better town planning where people can live, work, and recreate in local parks supported by infrastructure for local transport.[21] Many rural Australians do not have access to public transport and rely on cars to access resources, such as employment, healthcare, nutritious food and to socialise with family and friends.[21] Car dependent areas increases the time rural Australian sit in cars, a form of sedentary behaviour leading to higher risks of respiratory, cardiac and mental health.[22] Sustainable and accessible public transport in rural Australia is important to active travel and improve access to healthcare, education and employment and buying of nutritious foods to support wellbeing. The implementation of bicycle racks with chargers at public facilities including general practice and community health clinics would encourage the general public to exercise and reduce carbon emissions. This will also reduce the premature mortality of diseases and conditions such as respiratory, stroke, cardiovascular, diabetes, high blood pressure, premature birth weights.

Housing

Mitigation should include better housing for Australians living in remotes areas with inadequate supply and poor conditions of social housing. Overcrowding particularly for First Nations people can affect health and education outcomes and reduce employment

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opportunities. Whilst rates of overcrowding has come down overall in Australia, very remote and remote areas (MM6-7) of Australia remain to have the highest proportion of overcrowded households. [23]

Health services

The strategy should support building healthcare centres/facilities to reduce usage of electricity, gas and water including as an example the expansion to the Department of Health, Victoria installation of solar panels in regional and rural public health services across Victoria. This program should be extended to all healthcare facilities across all States and Territories in Australia.[24] There could be better support and funding for Health Care Climate Champions in rural Australia to advocate and help reduce emissions from public and private hospitals and primary care services.

Telemedicine

Mitigation should include stronger support for the implementations and education of digital technology in rural and remote regions of Australia is warranted. The use of telemedicine (where clinically appropriate) reduces patient and consultant travelling long distances avoiding CO2 emission from aviation and transport-related air pollution. [24] More importantly it avails timely access to mental health consulting services during and post a climate disaster.[5] The development of electronic health records for all patients would improve the sharing of information across the healthcare system, better support patient care, and be an efficient resource to deliver appropriate and timely patient care to those living in rural and remote Australia. Moreover, through sharing of information, digital health can prevent adverse medication and medical errors, and better coordinate care and treatment decisions for people living in rural and remote Australia. Patients can access prescriptions and medicine information, utilise online mental health support and access online consultations with a GP.[16]

Recommendations: (2, 3, 6, 8)

9. Which specific action areas should be considered relating to the **built environment and facilities (including energy and water)**, over and above any existing policies or initiatives in this area?

- Strong support for healthcare facilities and housing being built with low emissions to improve the health and wellbeing of rural and remote Australians.
- Strong support for the transition to renewable energy sources and electrification.
- All new healthcare facilities should be developed with ventilation that responds to infection control and decarbonisation.
- Strong support for services such as telemedicine, health promotion and community health care services such as the PRIM-HS model scaled up to provide healthcare close to home and reduce the demand for travel.

10. Which specific action areas should be considered relating to **travel and transport**, over and above any existing policies or initiatives in this area?

Strong support to lower emissions relating to travel and transport in rural and remote areas of Australia.

11. Which specific action areas should be considered relating to **supply chain**, over and above any existing policies or initiatives in this area?

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- The state-run health systems largely already have statewide purchasing contracts that (presumably) incorporate levels of environmental sustainability when awarding tenders. The Federal Government could set up a similar system for primary care, enabling small businesses such as primary care practices to select products that have already been analysed for their environmental footprint, enhancing the ability for a small business to make an efficient choice in procurement, without each small business needing to acquire the analytical skills to independently review each procurement they make. Strengthening local manufacturing in rural Australia should also be considered here, to mitigate some of the supply chain costs incurred in rural Australia from imported goods.
- Acknowledge that supply chain costs are higher in rural and remote Australia and this needs to be factored into budgets and support measures.

12. Which specific action areas should be considered relating to **medicines and gases**, over and above any existing policies or initiatives in this area?

- General support to lower emissions relating to medicines and gases from healthcare services in rural and remote Australia.
- The Federal Government via the PBS could make the metered inhalers that have the larger contribution to greenhouse gases available via "authority required" mechanisms, to encourage prescribers commencing patients on a new inhaler to first try the more environmentally safe device. There should be no changes for patients who are already stable on a device that they can use, and from which they derive efficacy in prevention/relief of respiratory/asthma symptoms.

13. Which specific action areas should be considered relating to **waste**, over and above any existing policies or initiatives in this area?

General support to the reduction of waste in rural and remote regions of Australia.

14. Which specific action areas should be considered relating to **prevention and optimising models of care**, over and above any existing policies or initiatives in this area?

Across Australia, people living in rural areas experience lower levels of access to health care, and are required to travel to inner regional and tertiary centres for primary health care.[25] Improving access to health care and preventative health interventions for Australians living in rural areas must focus on improving and extending funding for community health programs, new models of primary health care and training for rural students interested in health.

Primary health care is in dire straits in many rural locations – indeed it has failed much of the population – where communities are receiving little or no access to care due to a shortage of doctors, nurses and other health professionals, inequity of funding, inadequacy of funding mechanisms and a lack of support. Primary health care regarding use of the acute health system requires not only access to traditional primary care, but also the multidisciplinary care provided by a variety of health professionals, especially in the context of rising rates of chronic disease.

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It is known that where primary health care access is unavailable or booked out and patients cannot get an appointment for 4-6 weeks, patients are required to access emergency departments at higher rates. This situation places more burden on an already congested rural hospital emergency department. All of these issues become amplified in the cases of natural disasters, such as extreme heat, bushfires and flooding.
Support to expand telemedicine and telehealth so more health professions can engage in telehealth consultations and follow up medication reviews after patients are discharged from hospital. This will enable more members of the healthcare team to provide patient advice and monitoring of their chronic disease and support better patient care.

Recommendations: (2, 3, 4, 5, 6)

15.What can be done to involve private providers within the health system in the Strategy's emissions reduction efforts?

The Strategy should set a goal to include climate change mitigation and adaptation requirements in healthcare accreditation standards and this could be supported by developing a clear, ambitious decarbonisation plan that sets out responsibilities and opportunities for the private sector. The Strategy should set a goal that requires all health services and other relevant services to conduct climate change risk assessments as a core risk management strategy. In addition, provide the resources and tools that enable all health services and relevant services (including small business) to conduct a meaningful climate change risk assessment will be key.

16. Where should the Strategy prioritise its emissions reduction efforts?

a. How should the Strategy strike a balance between prioritising emissions reduction areas over which the health system has the most direct control and prioritising the areas where emissions are highest, even if it is harder to reduce emissions in these areas?

b. Which of the six sources of emissions discussed above (on pages 13 to 18 of the Consultation Paper) are the highest priorities for action?

This question falls outside the National Rural Health Alliance remit.

17. What 'quick wins' in relation to emissions reduction should be prioritised for delivery in the twelve months following publication of the Strategy?

This question falls outside the National Rural Health Alliance remit.

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Proposed Objective 3: Adaptation

18. What health impacts, risks and vulnerabilities should be prioritised for adaptation action through the Strategy? What process or methodology should be adopted to prioritise impacts, risks and vulnerabilities for adaptation action?

Extreme weather events, food security and vector borne disease are three key areas climate change will increase the socio-economic disadvantage and exacerbate health risks to those living in rural and remote communities.[1]

1. The geographic location of rural and remote communities renders them at risk of extreme weather events such as heatwaves, extended periods of low rainfall or drought, or high rainfall. Health consequences of extreme weather include increased hospital admissions and deaths during heatwaves, particularly for those with pre-existing health conditions; death, injury, psychological trauma, and mental illness due to bushfires and floods; smoke-related illness associated with bushfires; and long-term mental health impacts of drought. Indirect effects on infrastructure, health systems and individual income-generating capacity amplify these problems, particularly in regional, rural and remote communities where there are elevated levels of disadvantage across multiple domains.[1]
2. There are many groups in rural and remote Australia that are vulnerable to the effects of food insecurity. Food insecurity is generally associated with cost of food, poor nutrition literacy, access to fresh nutritious food, preparation, storage infrastructure and transport links resulting in adverse health and social effect.[1] In Australia, rural, regional and remote communities are at the forefront of climate change impacts, which have a significant negative effect on their social, cultural, economic and environmental health and wellbeing.

Vector borne disease from mosquitoes such as Ross River fever, Barmah Forest virus, Japanese Encephalitis Virus, Murray Valley Encephalitis, Buruli ulcer are influenced by climatic and weather conditions influence transmissibility and the likehood of outbreaks. While the incidence of vector-borne disease in Australia has historically been relatively low by global standards, there is concern that climate change will alter vector distribution, exposure, and infection rates.[1] Better emergency preparedness and education to primary health care workers and community members would help mitigate the effects of vector borne disease transmissibility and outbreaks. Flood mitigation and ensuring housing post-natural disaster should be a priority; one example of this is the residents of Lismore who remain homeless or reside in flood damaged homes awaiting support.

- In addition, the Strategy should require (and support) all health services to develop a climate change adaptation plan that outlines the steps they need to take to prepare for the challenges ahead. This would include such matters as emergency preparedness, infrastructure assessment, workforce skill in managing climate related health risks in their patients.

- The Strategy should account for supply chain disruption from climate change- related events that impact both facilities and delivery of health services. This also extends to food supply chains in communities.

- Health workers are personally impacted by climate change and disasters. The Strategy should account for the fact that we need to have a sustainable supply of health workers health and aged care workforce as in the situations of extreme weather events, many staff will need to prioritise their own patients or immediate families and communities and may not be available for other responsibilities.

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Recommendations: (2, 3, 4, 5, 7, 8)
19. Should the Australian government develop a National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan? If yes: What are the key considerations in developing a methodology? How should their development draw on work already undertaken, for example at the state and territory level, or internationally? What are the key areas where a national approach will support local/jurisdictional vulnerability assessment and adaptation planning?
See comments provided in earlier question.
20. Would there be value in the Australian government promoting a nationally consistent approach to vulnerability assessment and adaptation planning for the health system specifically, for instance by issuing guidance and associated implementation support tools for states, territories, and local health systems? If yes, what topics should be covered to promote a nationally consistent approach? What examples of existing guidance (either from states/territories or internationally) should be drawn from?
General support for a nationally consistent approach to vulnerability assessment and vulnerability planning for the health system. The planning needs to incorporate the uniqueness and consider the healthcare inequities that currently exist for rural and remote Australians impacted by climate change.
21. What immediate high-priority health system adaptation actions are required in the next 12 to 24 months?
• Immediate action should include funding to establish multidisciplinary health services for rural and remote Australians who have poorer access to health services. Limited access or no access to health services means people living in rural and remote Australia have higher levels of disease and are required to travel further for clinical care. Establishment of multidisciplinary primary health care clinics in rural and remote areas of Australia would provide consumers with the healthcare they require, attract, and retain primary health care workers including Aboriginal and Torres Strait Islander Australians to support communities in times of natural disasters or other events due to climate change.[26]. Primary health care needs to be funded in ways that can build the health and resilience of local communities. This goes well beyond fee for service MBS funding which is inadequate to maintain many primary health care services in rural Australia. • There should be funding to expand telemedicine and digital health technology and education to healthcare practitioners and consumers for safer and easier delivery of healthcare including mental health consultations during and after climate events. • Rural health services will need resources to enable preparedness for disruption to health system supply chains.

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Proposed Objective 4: Health in All Policies

22. What are the key areas in which a Health in All Policies approach might assist in addressing the health and wellbeing impacts of climate change and reducing emissions?

Rural and remote Australian communities are, for numerous reasons, particularly prone to the health-related impact of climate change. The geographic location of rural and remote communities renders them at risk of extreme weather events such as heatwaves, extended periods of low rainfall or drought, or high rainfall. Rural community demographics such as higher proportions of older Australians and Aboriginal and Torres Strait Islander peoples, greater incidence of chronic disease, comorbidities, and poor mental health mean that already susceptible groups experience greater health challenges.[27] Furthermore, rural, and remote communities face existing socioeconomic disadvantage including higher rates of unemployment, poverty, welfare dependency, digital exclusion, lower rates of educational attainment and reduced access to appropriate health services. In some communities, infrastructure such as housing, telecommunications, transport, and sanitation is also lacking. Lastly, climate change has been described as a risk multiplier, exacerbating existing health challenges and other disadvantage. This accumulation of social, economic, and environmental burden leaves many communities in rural and remote Australia highly vulnerable to the health risks associated with climate change. To address the emergency health effects associated with climate change, multidisciplinary clinics are required to support effected communities in rural and remote Australia.[26]

The strategy needs to include health in all policies and be targeted at supporting the health and wellbeing of all rural Australians from the effects of climate change. This can be achieved by recommendations: **(1, 2, 3, 5, 6, 7, 8)**

23. What are the most effective ways to facilitate collaboration and partnerships between stakeholders to maximise the synergies between climate policy and public health policy? What are some successful examples of collaboration in this area?

Preventive health and population strategies are good models. The National Health and Climate Strategy must have as its foundation, measures that reduce the cause (i.e., climate change and resulting natural disasters and weather impacts) but also have health measures in place that mitigate against harm and impact. Investment in primary health care and appropriate levels of support for other parts of the health system including acute care are needed to have the infrastructure and care structures in place to meet the needs of all Australians and particularly rural and remote Australians who bear a bigger share of the health impacts of climate change.

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Enablers

24. How could these enablers be improved to better inform the objectives of the Strategy? Should any enablers be added or removed?
• The enablers as listed should all be retained – the issue is whether they are then appropriately resourced and prioritised within government budgets. • In relation to workforce, the Strategy needs to recognise that in emergencies and disasters, healthcare workers are often supporting immediate family and friends. There must be contingency for workforce shortages in extreme weather events. • These enablers will only effective if there is appropriate governance, finance and planning to support and oversee the Strategy.
25. For each of these enablers: a. What is currently working well? b. What actions should the Strategy consider to support delivery?
Please refer to our recommendations listed earlier for other actions the Strategy should consider supporting delivery.

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Thank you for taking the time to complete this survey – your feedback is greatly appreciated!

Please submit this form in Word format to Health.Climate.Consultation@health.gov.au.

References

1. The National Rural Health Alliance. *Position Statement: Rural Health Policy in a Changing Climate: Three Key Issues* 2021 [cited 6th July 2023]; Available from: https://www.ruralhealth.org.au/document/position-paper-rural-health-policy-changing-climate-three-key-issues.
2. Australian Institute of Health and Welfare. *Rural and Remote health*. 2022 [cited 6th July 2023]; Available from: https://www.aihw.gov.au/reports/rural-remote-australians/rural-and-remote-health.
3. Commomwealth of Australia, *Royal Commission into National Natural Disaster Arrangements*. 2020: Canberra.
4. Wang, S., et al., *Urban–rural disparity of social vulnerability to natural hazards in Australia.* Scientific Reports, 2022. **12**(1): p. 13665.
5. Climate Council of Australia, *The Growing Toll of Climate Change on the Mental Health of Australians,*. 2023.
6. Department of Agriculture, W.a.t.E., *National Climate Resilience and Adaptation Strategy 2021-2025*. 2021: Canberra.
7. Australian Bureau of Statistics. *Australian System of National Accounts*. 2022 [cited 5th June 2023]; Available from: https://www.abs.gov.au/statistics/economy/national-accounts/australian-system-national-accounts/latest-release.
8. Reserve Bank of Australia. *Composition of the Australian Economy Snapshot*. 2023 [cited 25th May 2023]; Available from: https://www.rba.gov.au/snapshots/economy-composition-snapshot/.
9. Tourism., A.R. *Australian Regional Tourism*. 2022 [cited 25th May 2023]; Available from: https://regionaltourism.com.au/about-art/#whogov.
10. Nous Group, National Rural Health Alliance *Evidence base for additional investment in rural health in Australia*. 2023: Canberra. https://www.ruralhealth.org.au/sites/default/files/publications/evidence-base-additional-investment-rural-health-australia-june-2023.pdf
11. Department of Health, *National Aboriginal and Torres Strait Islander Health Workforce Strategic Framework and Implementation Plan*. 2022: Canberra.
12. Pendrey, C.G., et al., *Is climate change exacerbating health-care workforce shortages for underserved populations?* The Lancet Planetary Health, 2021. **5**(4): p. e183-e184.
13. Department of Health and Aged Care. *National Rural Generalist Pathway*. 2022; Available from: https://www.health.gov.au/our-work/national-rural-generalist-pathway.
14. Department of Health and Aged Care. *The National Rural and Remote Nursing Generalist Framework 2023-2027*. 2023 30th May 2023]; Available from: https://www.health.gov.au/resources/publications/the-national-rural-and-remote-nursing-generalist-framework-2023-2027?language=en.
15. Services for Australian Rural and Remote Allied Health. *The Allied Health Rural Generalist Pathway*. 2023 [cited 8th June 2023]; Available from: https://sarrah.org.au/our-work/ahrgpathway.
16. Australian Institute of Health and Welfare. *Digital Health*. 2022 [cited 30th May 2023]; Available from: https://www.aihw.gov.au/reports/australias-health/digital-health.
17. Australian Digital Health Agency. *Digital Health Services*. 2023; Available from: https://www.digitalhealth.gov.au/about-us/strategies-and-plans/national-digital-health-strategy-and-framework-for-action.
18. Department of Health and Aged Care. *Modified Monash Model*. 2021 [cited 25th May 2023]; Available from: https://www.health.gov.au/topics/rural-health-workforce/classifications/mmm.

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19. Office of the Registrar of Indigenous Corporations. *Connected governance forums*. 2022 [cited 4th July 2023]; Available from: https://www.oric.gov.au/training/connected-governance-forums.
20. Alliance, C.a.H. *Measuring What Matters*. 2023 [cited 3rd July 2023]; Available from: https://assets.nationbuilder.com/caha/pages/3081/attachments/original/1685329616/20230522_MWM_Consultation.pdf?1685329616.
21. Australian Institute of Health and Welfare. *Built environment and health*. 2022 [cited3rd July 2023]; Available from: https://www.aihw.gov.au/reports/australias-health/built-environment-and-health.
22. Sugiyama, T., et al., *Car use and cardiovascular disease risk: Systematic review and implications for transport research.* Journal of Transport & Health, 2020. **19**: p. 100930.
23. Australian Institute of Health and Welfare. *Aboriginal and Torres Strait Islander people: a focus report on housing and homelessness*. 2019 3rd June 2023]; Available from: https://www.aihw.gov.au/reports/housing-assistance/indigenous-people-focus-housing-homelessness/contents/at-a-glance.
24. Australian Commission on Safety and Quality in Health Care. *A Review of Sustainable Healthcare*. 2022 3rd June 2023]; Available from: https://assets.nationbuilder.com/caha/pages/2966/attachments/original/1667446038/a_review_of_sustainable_healthcare_-_june_2022.pdf?1667446038.
25. Royal Flying Doctor Service, *Equitable Patient Access to Primary Healthcare in Australia*. 2020: Barton, ACT, Australia. p. 44.
26. National Rural Health Alliance. *PRIM-HS*. 2022 [cited 17th July 2023]; Available from: https://www.ruralhealth.org.au/.
27. Australian Institute of Health and Welfare. *Rural and remote health*. 2022 [cited 1st May 2023]; Available from: https://www.aihw.gov.au/reports/rural-remote-australians/rural-and-remote-health.

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AMA submission to the Department of Health and Aged Care – National Health and Climate Strategy

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Introduction

The AMA supports the development of a National Health and Climate Strategy. This is something we have advocated for but overall, the AMA is concerned that the strategy as proposed does not sufficiently address the health impacts of climate change, and rather focuses on environmental sustainability of the health care system.

Climate change is a health emergency. Our current systems are too siloed to achieve the collaboration and action needed to prevent and adapt to the health impacts of climate change. While ensuring the health care system is sustainable is an important component, the strategy needs to reflect that climate change is a health crisis, and preventing health impacts requires a whole-of-government approach. The strategy should be structured to prioritise a health in all policies approach, with a clear vision on what the strategy should achieve. The strategy needs to clearly outline how it will reduce health impact risks. Strategy objectives and actions should not be limited to the scope set for the Department of Health and Aged Care as they are cross-portfolio.

Australia is far behind other countries in acknowledging and acting on the health impacts of climate change.[1] Funding health and climate action should be seen as an investment, not a cost.

The strategy must recognise that while the medical workforce is increasingly passionate about making change in this space, most currently do not have the capacity or capability to do so. The strategy must ensure it includes a plan to increase the capacity and capability of the health system to make meaningful progress. Implementing the strategy will require significant initial funding but will result in substantial savings over time. The AMA supports using the Greener NHS program as a basis for developing healthcare sustainability strategies, noting that the program will need to be adapted to incorporate Australia's jurisdictional, public and private health areas.[2]

The AMA would welcome further opportunity to contribute to the development of the strategy. A draft strategy should be available for consultation before it is finalised. The consultation paper provided does not include adequate detail to determine how the strategy will achieve its objectives.

Strategy fundamentals

Several strategies have been developed by government over time, with varying levels of success. To ensure this strategy is effective and actionable, the AMA implores the department to ensure the strategy is co-designed with all stakeholders and includes the following:

- specific indicators, targets, and timelines
- clearly defining who is responsible for meeting targets and timelines
- a meaningful and effective accountability and reporting framework
- specific, adequate funding.

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Vision and purpose

Strategies require an overarching vision, to ensure the activities and implementation plans that flow from it are designed accordingly. The vision and purpose of this strategy is not clearly defined. The AMA supports a strategy vision where Australians are protected from the health impacts of climate change and Australia achieves a net zero emissions healthcare system. The AMA has committed to achieve a net zero health care system by 2040, with an interim measure of 80 per cent emissions reduction by 2030.[3] The AMA supports a strategy purpose of preventing and responding to the health impacts of climate change, while maximising the health co-benefits that can be achieved from climate action.

Objectives

1. *How could these objectives be improved to better support the vision of the Strategy?*

The objectives need to align with the strategy's vision and purpose and include specific measurements, targets, and actions that will be used to achieve the objective.

The AMA believes that health in all policies should be prioritised over the other existing strategy objectives.

Mitigation is an important objective, however it needs to be expanded in the context of health impacts of climate change more broadly, rather than mitigation and adaptation for the health system alone.

The AMA supports adaptation as an objective as it refers to strengthening the resilience of communities as well as the health system.

Further detail on each individual objective is provided below.

Principles

2. *How could these principles be improved to better inform the objectives of the Strategy?*

The AMA supports the draft principles. The principles could be improved by acknowledging that health is a human right that is at risk due to climate change inaction, and that strategy implementation needs to reflect this urgency.

Principle 5 (evidence-informed policy making) should include prioritising actions that foster quality of care.

Australia needs to prioritise and resource research into all aspects of health and climate change action to ensure governments and other stakeholders can work under the principle of evidence-informed policy making. Decades of inaction has meant that Australia is behind other countries on climate change action and is lacking investment into researching Australia-specific solutions.

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The AMA supports including research as an enabler to implement the Strategy's objectives (see page 16).

The AMA supports the principle 'partnership-based working across all levels of government and beyond'. The department should ensure that climate and health scientific experts, and Aboriginal and Torres Strait Islander communities, are adequately consulted to develop the strategy and throughout implementation. As the strategy aims to achieve a 'health in all policies' approach, several sectors outside of health will need to be consulted, including but not limited to environment, social services, infrastructure, agriculture, food, and transport.

For objectives relating to sustainability, the health care workforce, including the AMA and medical colleges, are essential stakeholders when it comes to determining practicalities that must be considered when changing health system infrastructure, models of care, and medicines.

The strategy should clearly outline how the department will collaborate and coordinate with multiple stakeholders.

Greenhouse gas emissions sources

3. *Which of the various types of greenhouse gas emissions discussed above should be in scope of the Strategy's emission reduction efforts?*

Greenhouse gas emissions are harmful to health, no matter where they come from. The strategy's emissions reduction initiatives should include all types of greenhouse gas emissions that arise from the health system. This includes patient and visitor transport, equipment, and other healthcare products that are imported from overseas. The AMA suggests the strategy prioritise the scope with the largest quantity of emissions and the most feasible emissions to target.

Aboriginal and Torres Strait Islander health and climate change

4. *What existing First Nations policies, initiatives, expertise, knowledge and practices should the Strategy align with or draw upon to address climate change and protect First Nations country, culture and wellbeing?*

5. *What types of governance forums should be utilised to facilitate co-design of the Strategy with First Nations people to ensure First Nations voices, decision-making and leadership are embedded in the Strategy?*

The AMA supports a focus on Aboriginal and Torres Strait Islander partnership for the strategy. It is essential that Aboriginal and Torres Strait Islander peoples have a leading role in identifying and responding to the nature and challenges of their own health.[4]

There is an existing significant gap between Indigenous and non-Indigenous Australians, in terms of health indicators and access to health services. As stated in the consultation paper,

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climate change will only exacerbate these inequities. The AMA believes the strategy should draw upon Aboriginal and Torres Strait Islander policies, knowledges, and practices in order to address the gap.

There has been inadequate involvement of Aboriginal and Torres Strait Islanders for climate change responses, and a lack of research and data that harness the knowledge of the impact of climate change on local communities, and how to respond to them.[5]

Government must ensure that it directly seeks advice from Aboriginal and Torres Strait Islander communities and ensure there is Aboriginal and Torres Strait Islander representation at every stage of strategy development and implementation. The consultation paper does not describe how the department is currently incorporating Aboriginal and Torres Strait Islander knowledge and perspectives.

Proposed Objective 1: measuring health system greenhouse gas emissions

In addition to measuring emissions, the strategy should also outline actions to measure:

- the current and future impacts of climate change, including impacts to human health, the healthcare system, and society as a whole
- the health and societal benefits of climate change action
- the health costs of climate change inaction.

Currently, measuring and reporting on greenhouse gas emissions is very limited and fragmented across Australia. A comprehensive account of Australia's health care system emissions is an essential starting point to improve environmental sustainability. The calculations for the NHS Carbon Footprint and NHS Carbon Footprint Plus are comprehensive and could be used as a template for calculating Australia's emissions.[6]

6. *Beyond the schemes already noted above, is your organisation involved in any existing or planned initiatives to measure and report on health system emissions and/or energy use in Australia?*

N/A.

7. *What additional data and information is required to support targeted emissions reduction efforts within health and aged care?*

Comprehensive data on Australia's health and aged care system emissions is urgently needed. Current stakeholder work in the climate change and health space relies on estimates on health care from the Malik et al study using data from 2014-2015.[7] As described in the consultation paper, data from Australia's National Greenhouse Accounts does not comprehensively capture healthcare emissions.

Further clarification is required around which health care facilities are subject to the commitment to reduce Australian Public Service emissions to net zero by 2030, under the

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Powering Australia plan. Again, a broader commitment to net zero for the whole health system is required.

While some healthcare facilities are already gathering emissions data, there will be many who are not. These facilities require additional support to do so, including funding and expertise to carry out assessments.

It would also be beneficial to undertake and collect research on how emissions reduction efforts can be achieved in collaboration with health care workers and patients, to ensure quality of care is not compromised and health benefits are maximised. Assessing the greenhouse gas emissions of different models of care will also be required to determine best practice for both sustainability and quality of care.

Proposed Objective 2: Mitigation

The strategy should include mitigation actions across all sectors to be more effective in preventing and reducing the health impacts of climate change, while harnessing the opportunity for health co-benefits. Mitigation itself is broader than reducing health care emissions. The strategy should include enabling health care facilities to improve their risk management by including climate change risk assessments.

The AMA believes that under mitigation the strategy should also include a target to reach net zero greenhouse gas emissions. This should be enshrined in legislation to protect the commitment across different governments over time. Achieving a net zero health care system will require a detailed, evidence-based, and ambitious implementation plan with reporting mechanisms separate to the strategy.

England's Greener NHS program has set two net zero targets, differing between what they directly control (e.g. Scope 1 and 2, and some Scope 3 emissions) and what they can influence (e.g. some Scope 3 emissions).[8] Greener NHS, in addition to the historic England Sustainable Development Unit, has resulted in significant reductions in emissions, significant health care system savings, and are on track to reaching net zero. The AMA recognises that there may be situations where the health system cannot meet a net zero target based on emissions reduction strategies alone, for example when quality of care would be compromised. In this case, legitimate carbon offset methods should be considered. The AMA stresses that offsets should be used as a secondary measure to reach net zero and should not be relied upon.

8. *What do you think of these proposed focus areas for emissions reduction? Should anything else be included?*

The AMA supports the proposed focus areas for emissions reduction within health care, as they align with the AMA's position statement on *Environmental sustainability in health care - 2019*. However, further information is required to determine why these focus areas were chosen. The strategy should also determine a timeline for each focus area, detailing priorities, actions, and targets. It will be important for the strategy to specify which aspects of the healthcare system

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these focus areas apply to, and tailor strategies and objectives for each. For example, primary care facilities will require different targets than hospitals.

Built environment and facilities (including energy and water)

9. *Which specific action areas should be considered relating to the built environment and facilities (including energy and water), over and above any existing policies or initiatives in this area?*

It is unclear who proposed to the department the actions suggested in the consultation paper. It would be beneficial for stakeholders to know that these proposals are sourced by scientific experts in the space.

Actions in this space need to be more specific – the "Identify [and make use of] policy levers" action should already be complete, and specific policy levers included in the strategy to make it more effective and meaningful. For example, include in the strategy a plan for legislation, guidelines, and standards improvement to ensure new buildings achieve a certain energy rating. The strategy must also outline how it will support the health system to increase the use of renewables and provide solutions to reduce reliance on diesel-powered generators in hospitals. Renewable energy targets for new and existing facilities by a certain timeframe should also be introduced.

Internationally, efforts to make healthcare infrastructure more environmentally sustainable have focussed on a range of measures, including: attention to the surrounding natural environment and efforts to preserve local habitats; maximising the use of natural light and ventilation in order to minimise electricity use; use of reflective materials to lessen the need for electric cooling; and procuring sustainable or recycled building materials.[9]

As well as the design of buildings themselves, considerations about planning and how health facilities connect with local communities are important in minimising their environmental impact. This includes incorporating safe bicycle and pedestrian access, green spaces for exercise and health promotion activities, and coordinating public transport options.[10]

The use of energy within health facilities is a major contributor to the direct emissions of the healthcare sector in Australia. Although hospitals are the most energy-intensive facilities, smaller clinics can have significant emissions, especially those that include residential elements, like mental health and drug and alcohol rehabilitation centres. In Malik et al's 2014-15 study, gas used to heat hot water was found to contribute 10 per cent of overall emissions for the Australian healthcare sector. [11]

The strong presence of coal in Australia's electricity makeup compounds this increase in energy use and may explain some of the disparity between healthcare emissions in the UK and Australia. Malik et al's 2014-15 study identified that in Australia, 63 per cent of electricity is generated by coal, while in the UK this is only 23 per cent; and the UK's use of wind energy is three times that of Australia's. [12] For this reason the AMA advocates for an active transition

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from fossil fuels to renewable energy sources, as outlined in the Position Statement *Climate Change and Human Health – 2015*.

Travel and transport

10. Which specific action areas should be considered relating to travel and transport, over and above any existing policies or initiatives in this area?

As above, the strategy needs to include more specific action areas and targets than simply stating that we need to 'identify and make use of policy levers…'. This feedback applies to all focus areas.

The AMA supports the focus on ensuring electric and zero emissions vehicles are used, with strategies in place for where the use of emissions vehicles cannot be avoided. This focus area needs to also ensure there is sufficient infrastructure and planning in place to support zero emissions vehicles and more environmentally friendly and active methods of transport, such as electric vehicle charging stations and accessible bus stations. The AMA supports the inclusion of patient and staff travel in measurement of travel emissions.

Supply chain

11. Which specific action areas should be considered relating to supply chain, over and above any existing policies or initiatives in this area?

The AMA would support specific action areas and targets such as the English NHS targets outlined in the consultation paper.

Procurement of external goods and services presents a crucial opportunity to reduce the environmental footprint of Australia's healthcare sector. Products used in healthcare facilities are almost exclusively procured from external sources – including medical equipment, pharmaceuticals, consumables such as bandages and protective equipment, and household items like beds, desks, and computers. In 2014-15, externally procured goods and services (including electricity) comprised almost 90 per cent of Australian healthcare-related carbon emissions. This included pharmaceuticals, which comprised 19 per cent of all healthcare carbon emissions, and aids and appliances, which accounted for 3 per cent. [13]

Efforts to implement sustainable procurement strategies are recommended by the World Health Organisation, including influencing suppliers to consider environmental impacts; assessing the environmental impact of goods and services procured; reducing purchasing where possible; and procuring environmentally friendly products.[14] Additional considerations may include preferencing products made of recycled materials, suppliers that use lower-energy production practices, and environmentally sustainable packaging and transport.[15]

A 2017 study examining barriers to sustainable procurement in Australian health care found that the major challenges were the absence of legislation on the issue and a lack of support

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from senior management in healthcare facilities. Issues such as the availability of sustainable suppliers were minimal when compared to these higher-level barriers. [16]

Medicines and gases

12. Which specific action areas should be considered relating to medicines and gases, over and above any existing policies or initiatives in this area?

As above, the AMA supports more specific actions and targets for each focus area. The AMA suggests this focus area should include all therapeutics, with medicines and gases a priority.

The strategy should include engagement with the Therapeutic Goods Administration and the Pharmaceutical Benefits Advisory Committee to ensure that environmental sustainability is a consideration when approving medicines to be registered in Australia and subsidised by the Pharmaceutical Benefits Scheme. Ensuring environmentally sustainable medicines are accessible and affordable for patients will be key to ensuring their use.

Medical colleges and the AMA are key stakeholders to be consulted when considering a change in each therapeutics model of care to ensure quality care is not compromised.

The strategy should support research to determine the environmental impacts of therapeutics and provide guidance to prescribers. It will be important here to address unintended consequences such as patients feeling guilt and denying treatment if they need a therapeutic with a higher environmental impact.

Waste

13. Which specific action areas should be considered relating to waste, over and above any existing policies or initiatives in this area?

As above, the AMA supports more specific actions and targets for each focus area. The AMA requests stronger actions than 'encouraging' and 'promoting' efforts to reduce waste.

The strategy needs to ensure its actions and targets are specific to each waste issue. For example, medical waste will require a different approach to managing food waste.

Reducing and managing waste will also require behavioural and procedural change for health care workers. The strategy should outline how it will support health care workers to recognise the importance of environmental sustainability actions and guidance on which options are most suitable.

The production of physical waste is one of the most discussed environmental by-products of health care, particularly in terms of waste produced in hospitals. Addressing healthcare waste needs to be guided by evidence-based infection control. Healthcare waste includes single-use clinical equipment, disposable linen, excessive packaging for medical items and materials contaminated by patient fluids or contact. More generally, it also includes food waste from

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patient meals, paper, cardboard and plastic, and general waste similar to that found in households.

Waste management represents a significant cost to the healthcare sector, as well as contributing to indirect carbon emissions. Clinical waste that is deemed to be infectious needs to be properly managed, generally involving either incineration, autoclaving or chemical disinfection, followed by placement in landfill.[17] In Australia, processing clinical waste can be significantly more expensive than processing regular waste.[18] Additionally, incineration, while effective at removing infection risk, can result in harmful emissions including dioxins, furans and mercury.[19,20] Waste placed in landfill continues to emit greenhouse gases as it breaks down, which can take many years for some of the hardy plastics used in medical settings.

Correctly classifying and segregating waste is a key way to reduce negative environmental impacts. Along with instituting recycling and waste management processes, making these processes easy to adopt and accessible for health practitioners is vital to their effectiveness. Moving away from single-use items and towards reusable equipment has also been suggested as a waste-cutting measure. It should be noted that despite critiques of single-use items, it is possible that some items may have a lower environmental impact than reusable items, depending on materials used and sterilisation processes, specifically if energy sources for sterilisation of reusable items has a high carbon intensity. The National Health Sustainability and Climate Unit could provide valuable advice in this regard, including information on the sustainability of different options.

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Prevention and optimising models of care

14. Which specific action areas should be considered relating to prevention and optimising models of care, over and above any existing policies or initiatives in this area?

The AMA supports the inclusion of health prevention and optimising models of care in the strategy. In alignment with a Health in All Policies and a One Health approach, the strategy should recognise the social, cultural, commercial, and environmental determinants of health and develop strategies to address them in the context of climate change and sustainability. Preventive care in the context of both non-communicable and communicable diseases should be addressed in the strategy.

Prioritising preventive health care is a foundational element of reducing health care's environmental footprint. By encouraging and facilitating healthy behaviour and choices, preventive health campaigns and supporting policies can minimise the incidence and severity of chronic and infectious diseases. Keeping populations healthy may alleviate pressure on the acute care system, by reducing the need for complex procedures, more intensive processes and longer hospital stays. The AMA outlines the central role of doctors, especially General Practitioners, in providing preventive health care to patients in the 2010 Position Statement *Doctors and Preventative Care*.

The Treasury's current work on producing an Australian wellbeing framework (*Measuring What Matters*) is an important consideration for the strategy.[21] The AMA's submission outlines that

investing in health has broader benefits for society, including increases in economic output. It outlines the benefits of preventive care and the need for better data collection and reporting on climate change impacts, mitigation, adaptation, and reporting.

The AMA's position statement on *Doctors' Role in Stewardship of Healthcare Resources 2023* outlines the importance of effective stewardship in ensuring patients are able to receive the best quality care now and into the future. Stewardship aims to achieve the best possible health outcomes through the equitable use of resources while minimising adverse impacts and wasteful expenditure, reducing the environmental impact of healthcare and promoting sustainability and our ability to meet future health resource needs. Doctors must balance their obligation to minimise wastage of resources with their primary obligation to care for and protect the health care interests of the individual patient. These two factors should generally not conflict if the stewardship and environmental sustainability governance frameworks are fit for purpose.

Effective stewardship of healthcare resources requires community, government, and healthcare sector support through initiatives such as including stewardship in the curricula for medical schools, through vocational training and professional practice, providing a healthcare environment that supports and values stewardship, increasing public education and awareness of the importance of stewardship of healthcare resources and ensuring clinical guidelines are kept up-to-date to assist doctors in determining the most appropriate tests, treatments and procedures for their individual patients based on the best available evidence in order to reduce low value care and wasteful expenditure. Curtailing waste and managing resources efficiently through effective stewardship of health care resources directly enhances environmental sustainability while delivering better outcomes for patients and providing broader social and economic benefits. There should be Federal Government funding for key programs that encourage research, education and quality improvement in relation to stewardship of healthcare resources including its impact on environmental sustainability.

The AMA is supportive of optimisation of models of care, but those models of care have to be codesigned with and supported by patients/consumers and health professionals, and result in improved patient outcomes while at the same time reducing administrative work by medical professionals and enabling them to spend more time focusing on patient needs.

The AMA believes that building interoperability into the design of all healthcare software and clinical information systems will:

- reduce administrative burden for healthcare workers (reduction of paper waste),
- improve healthcare worker satisfaction,
- create system efficiencies,
- facilitate person centred care,
- minimise avoidable health service use,
- be a key element of creating value based healthcare,
- promote patient independence,
- improve clinical safety and
- improve patient health outcomes.[22]

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15. *What can be done to involve private providers within the health system in the Strategy's emissions reduction efforts?*

The AMA supports including private providers into the strategy. The Australian Commission on Safety and Quality in Health Care is developing a voluntary Sustainable Healthcare Module which can also be applied to private providers. The AMA and Doctors for the Environment Australia have called for this Module to be the starting point of developing a mandatory accreditation standard for environmental sustainability in healthcare.[23] The AMA and DEA also suggested the module could be broadened to cover the following concepts:

- infrastructure and healthcare delivery natural disaster preparedness capacity – prevention, preparation, management, and recovery
- embedding Environment, Social and Governance (ESG) goals and strategic plans within healthcare organisations
- cross-disciplinary environmental and financial sustainability education of healthcare professionals (as per the AMC National Framework for Pre-vocational Medical Training)
- incorporating sustainability as a 'core value' of all organisational activities and decision making.

The above points are all relevant actions that should be considered in the strategy.

While there is a growing interest in climate change action within the health care workforce, the strategy should recognise and address behavioural and cultural change that will need to occur for effective on the ground initiatives. This will include raising awareness of the health impacts of climate change. Healthcare facilities need employed, dedicated environmental sustainability managers with executive support to implement the facilities' environmental sustainability strategy.

Health care facilities that have already begun reducing their emissions have demonstrated significant financial savings. The strategy should also spread awareness that there are several efficiency, economic, and health benefits to making the transition to renewables.

16. *Where should the Strategy prioritise its emissions reduction efforts?*
    a. *How should the Strategy strike a balance between prioritising emissions reduction areas over which the health system has the most direct control and prioritising the areas where emissions are highest, even if it is harder to reduce emissions in these areas?*
    b. *Which of the six sources of emissions discussed above (on pages 13 to 18 of the Consultation Paper) are the highest priorities for action?*

The department should seek expert advice to determine which areas of emissions reduction should be prioritised. Considerations in determining priorities should include:

- the area with the highest emissions
- the relative complexity/ease of reducing emissions in that area
- quality of care
- health benefits

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- financial costs and savings
- costs of inaction.

17. *What 'quick wins' in relation to emissions reduction should be prioritised for delivery in the twelve months following publication of the Strategy?*

As above.

Proposed objective 3: adaptation

The AMA supports the adaptation objective to ensure the health system is resilient and can respond to health impacts of climate change. The information within this objective on the health impacts of climate change should be included at the start of the strategy to better reflect the gravity of the climate crisis. A public awareness campaign on the health impacts of climate change (and the health benefits of acting on it) would benefit broader society in understanding the risks and the importance of mitigation and adaptation.

A One Health approach will be crucial to adaptation methods. This includes better collaboration between health, environment, and agriculture sectors and government departments to more rapidly detect and respond to emerging zoonotic and vector-borne diseases under the new Australian Centre for Disease Control.

Adaptation actions should include ongoing and effective disaster planning that incorporate measures to ensure healthcare facilities are adequately supported when emergencies occur. For example, it took the AMA almost a year of campaigning for funding to be provided to healthcare providers after the Lismore floods.[24] The strategy needs to consider and address issues with:

- disruptions to supply chains and energy
- healthcare facility evacuations
- temporary health care access
- financial support
- emergency accommodation
- building resilient communities.

The AMA has been calling for private health services in rural and regional areas to be declared essential services so they can be offered immediate financial support and resources following climate change-fuelled disasters. The AMA also calls on government to declare all rural health service providers essential workers, so in future disasters they will not have to bear the stress of funding uncertainty in the aftermath.

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18. *What health impacts, risks and vulnerabilities should be prioritised for adaptation action through the Strategy? What process or methodology should be adopted to prioritise impacts, risks and vulnerabilities for adaptation action?*

A priority for the strategy should be to comprehensively determine the scale of health impacts of climate change in Australia. This includes burden of disease, risk, and costs to health, the economy, and society. Having a better understanding of health impacts in the Australian context will make more effective goals and targets for adaptation initiatives.

19. *Should the Australian government develop a National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan? If yes:*
    a. *What are the key considerations in developing a methodology?*
    b. *How should their development draw on work already undertaken, for example at the state and territory level, or internationally?*
    c. *What are the key areas where a national approach will support local/jurisdictional vulnerability assessment and adaptation planning?*

The AMA would support the development of a National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan. As with the strategy, these assessments and plans should not be siloed or limited to the Department of Health and Aged care.

20. *Would there be value in the Australian government promoting a nationally consistent approach to vulnerability assessment and adaptation planning for the health system specifically, for instance by issuing guidance and associated implementation support tools for states, territories and local health systems? If yes, what topics should be covered to promote a nationally consistent approach? What examples of existing guidance (either from states/territories or internationally) should be drawn from?*

The AMA supports the Australian government developing a nationally consistent approach to vulnerability assessment and adaptation planning, however assessments and plans should include expert advice on local risks. Australia has several ecosystems and climates that come with different risks that should be considered. For example, tropical regions will be more at risk of vector-borne disease due to its warm, wet climate. The National Health Sustainability and Climate Unit should provide resourcing, support, and guidance to develop assessments and plans, noting that this work is not familiar to most of the health care workforce.

21. *What immediate high-priority health system adaptation actions are required in the next 12 to 24 months?*

Climate change-fuelled extreme weather events are already occurring, and we are underprepared. Australia so far has been lacking national leadership and coordination with states and territories when such an event occurs. High priority adaptation actions should include ensuring health care facilities are better prepared to face an extreme weather event, and ensuring there is adequate support and resources for health care facilities facing climate change events. At a broader level, government needs to focus on community resilience and

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ensure social services are adequately prepared for increasing extreme weather events. This includes resourcing for emergency services, transport, housing, and food and water security.

Proposed objective 4: Health in all policies

22. *What are the key areas in which a Health in All Policies approach might assist in addressing the health and wellbeing impacts of climate change and reducing emissions?*

The AMA supports a Health in All Policies (HiAP) approach. Health in all policies (HiAP) acknowledges that human health and health equity is influenced by more than the health system itself.[25] Environmental, social, cultural, and commercial determinants of health should be considered in policies, sectors, and services that influence the following; environment, agriculture, the economy, finance, transport, housing, urban planning, and education.[26] HiAP and One Health are both concepts that promote intersectoral action for mutual benefit.

Environmental policies and programs need to better consider the human health impacts that are associated with a loss in biodiversity, unhealthy ecosystems, and green and blue spaces in urban environments. Health impacts must be given greater weight when assessing new or expanded fossil fuel projects, and projects that impact on the environment. In addition to being central for a Health in all Policies objective, this is also important to achieve the One Health principle. In January 2021, the final report of the independent review of the Environment Protection and Biodiversity Conservation (EPBC) Act 1999[27] concluded that the EPBC Act is outdated and requires reform to stop it being a barrier to holistic environmental management. The report recommended the development of legally enforceable National Environmental Standards, which government agreed to. Further, at a Federal level under the EPBC Act, the environment minister cannot intervene on a proposal unless it has a significant impact on nine matters of national environmental significance (none of these include heath issues), even if there are other negative environmental impacts. This is because primary responsibility for the environment lies with the States and Territories. For example, the Minister would not have the power to regulate on matters of air quality.[28] While health is considered in some aspects of the Department of Climate Change, Energy, the Environment and Water work, there is an opportunity to improve outcomes through better collaboration under a One Health approach and integration of a HiAP approach across departments.

23. *What are the most effective ways to facilitate collaboration and partnerships between stakeholders to maximise the synergies between climate policy and public health policy? What are some successful examples of collaboration in this area?*

The strategy should outline a plan for a national high level multidisciplinary committee including members across government jurisdictions, and experts in climate change and health. Aboriginal and Torres Strait Islander representation at this multidisciplinary committee is essential.

As each Parliamentary Bill or legislative instrument requires a Statement of Compatibility with human rights, Bills should also consider and address the impact on the health of humans, animals, and the environment.

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The Australian CDC should incorporate a One Health department that works to protect human, animal, and environmental health. This department should work collaboratively with local and international environmental, animal, and human health organisations to collect and share data in a timely manner on diseases that have the potential to transmit to humans.

Enablers

24. How could these enablers be improved to better inform the objectives of the Strategy? Should any enablers be added or removed?

25. For each of these enablers:
- *a. What is currently working well?*
- *b. What actions should the Strategy consider to support delivery?*

The AMA supports increased awareness of the health impacts of climate change in the medical profession and the Australian public. The strategy must recognise that the medical workforce will require more support than just training to be able to initiate sustainability changes and prepare and respond to climate change events. The medical workforce is already significantly stretched and over capacity in many aspects. While many recognise the importance of climate change action, it will be difficult to do so without additional financing and support to recruit staff with expertise in sustainability, resilience, disaster preparedness and response.

Because of the way Australia's public hospitals are funded and operated, a whole of government approach is needed for their transitioning to an environmentally sustainable model. The AMA calls for the strategies and funding for mitigation and adaptation of public hospitals to be included in the National Health Reform Agreement Addendum 2025 onwards. Noting that there is great variation in the levels of mitigation and adaptation planning already occurring by hospitals, some of which have undertaken their own climate mitigation and adaptation activities, the AMA suggests that the funding is disbursed either through block funding for specific hospitals/health districts or as part of Activity Based Funding (ABF) National Efficient Price with relevant adjustments according to the needs of individual hospitals. This process must be equitable and not seen as punishing for those hospitals that have already progressed along the climate mitigation and adaptation path.

The AMA believes the research enabler is not strong enough to reflect the current health and climate crisis. While it is important to initiate a scan on current research activities, this is the bare minimum that could be done in this space. The strategy needs to outline a plan to urgently invest in climate change and health, and healthcare environmental sustainability research in the Australian context.

The AMA supports better, government-invested, collaboration to achieve the objectives of the strategy.

Monitoring and evaluation needs specific targets, goals, actions, timelines, and a governance framework outlining who is responsible and accountable for what. The AMA agrees that annual

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reports should be produced regarding the strategy's progress. The reports should also outline lessons learned and improvements as research and innovation evolves.

The AMA believes that there should be enablers for governance, financing, and implementation arrangements in the strategy. As the strategy will crossover several disciplines, it will be important for governance to be clearly outlined and communicated to ensure responsibilities and accountabilities are understood by all stakeholders.

Conclusion

The AMA supports the development of a National Health and Climate Strategy. However, the consultation paper does not adequately reflect the fact that climate change is a health emergency. The strategy needs a specific vision, purpose, and objectives that are underpinned by a governance system that ensures accountability. The strategy should also recognise that addressing the health impacts of climate change will require a whole-of-government approach, instead of focusing on environmental sustainability in the healthcare system alone. The AMA would like to participate in further consultation once a draft strategy is available.

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References

[1] The Global Climate and Health Alliance (2023) *2023 Healthy NDC Scorecard.* Retrieved 21/07/2023 from https://climateandhealthalliance.org/initiatives/healthy-ndcs/ndc-scorecards/

[2] NHS England (2023) *Greener NHS.* Retrieved 14/07/2023 from https://www.england.nhs.uk/greenernhs/

[3] Australian Medical Association (2021) *Joint statement: medical professionals call for emissions reduction in health care.* Retrieved 21/06/23 from https://www.ama.com.au/media/joint-statement-medical-professionals-call-emissions-reduction-health-care

[4] Australian Medical Association (2015) *Aboriginal and Torres Strait Islander Health revised 2015*. Retrieved 13/07/23 from https://www.ama.com.au/position-statement/aboriginal-and-torres-strait-islander-health-revised-2015

[5] Matthews, V et al (2021) *Climate change and Aboriginal and Torres Strait Islander Health*. Discussion paper. Retrieved 13/07/23 from https://www.lowitja.org.au/content/Image/Lowitja_ClimateChangeHealth_1021_D10.pdf

[6] Tennison, I et al (2021) *Health care's response to climate change: a carbon footprint assessment of the NHS in England.* The Lancet Planetary Health. Retrieved 13/07/2023 from https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196(20)30271-0/fulltext

[7] Malik, A et al (2018) *The carbon footprint of Australian health care*. The Lancet. Retrieved 14/07/23 from https://www.thelancet.com/journals/lanplh/article/PIIS2542-51961730180-8/fulltext

[8] NHS England (2023) *Delivering a net zero NHS.* Retrieved 21/06/23 from https://www.england.nhs.uk/greenernhs/a-net-zero-nhs/

[9] Global Green and Healthy Hospitals (2023) *Buildings*. Retrieved 14/07/23 from https://greenhospitals.org/buildings

[10] World Health Organization. Regional Office for Europe. (2017). *Environmentally sustainable health systems: a strategic document*. Retrieved 14/07/23 from https://apps.who.int/iris/handle/10665/340375

[11] Malik, A et al (2018) *The carbon footprint of Australian health care*. The Lancet. Retrieved 14/07/23 from https://www.thelancet.com/journals/lanplh/article/PIIS2542-51961730180-8/fulltext

[12] Malik, A et al (2018) *The carbon footprint of Australian health care*. The Lancet. Retrieved 14/07/23 from https://www.thelancet.com/journals/lanplh/article/PIIS2542-51961730180-8/fulltext

[13] Malik, A et al (2018) *The carbon footprint of Australian health care*. The Lancet. Retrieved 14/07/23 from https://www.thelancet.com/journals/lanplh/article/PIIS2542-51961730180-8/fulltext

[14] World Health Organization. Regional Office for Europe. (2017). *Environmentally sustainable health systems: a strategic document*. Retrieved 14/07/23 from https://apps.who.int/iris/handle/10665/340375

[15] Ahsan K and Rahman S (2017) *Green public procurement implementation challenges in Australian public healthcare sector.* Journal of Cleaner Production. 152(May):181-197. Retrieved 14/07/23 from https://www.sciencedirect.com/science/article/abs/pii/S0959652617304900

[16] Ahsan K and Rahman S (2017) *Green public procurement implementation challenges in Australian public healthcare sector.* Journal of Cleaner Production. 152(May):181-197. Retrieved 14/07/23 from https://www.sciencedirect.com/science/article/abs/pii/S0959652617304900

[17] Blue Environment Pty Ltd (2017) *Hazardous Waste in Australia*. Retrieved 14/07/23 from: https://www.dcceew.gov.au/sites/default/files/documents/hazardous-waste-australia-2017.pdf

[18] McGain F. *Hospital Waste*. Issues Magazine 2010;92(September).

[19] World Health Organization. Regional Office for Europe. (2017). *Environmentally sustainable health systems: a strategic document*. Retrieved 14/07/23 from https://apps.who.int/iris/handle/10665/340375

[20] Windfeld ED and Brooks MS (2015) *Medical waste management – a review*. Journal of Environmental Management 2015;Nov(63):98-108.

[21] The Treasury (2023) *Measuring what matters – second consultation process*. Retrieved 13/07/23 from https://treasury.gov.au/consultation/measuring-what-matters-2023

[22] Australian Medical Association (2022) *AMA position statement on system interoperability in healthcare 2022.* Retrieved 13/07/23 from https://www.ama.com.au/articles/ama-position-statement-system-interoperability-healthcare-2022

[23] Australian Medical Association and Doctors for the Environment Australia (2023) *AMA and DEA joint submission to the ACSQHC – Sustainable Healthcare Module.* Retrieved 13/07/23 from https://www.ama.com.au/articles/ama-and-dea-joint-submission-acsqhc-sustainable-healthcare-module

Released under the Freedom of Information Act 1982

[24] Australian Medical Association (2023) *AMA welcomes landmark funding agreement for Lismore health service providers.* Retrieved 14/07/23 from https://www.ama.com.au/media/ama-welcomes-landmark-funding-agreement-lismore-health-service-providers
[25] World Health Organization (2023) *Promoting Health in All Policies and intersectoral action capacities.* Retrieved 28/06/2023 from https://www.who.int/activities/promoting-health-in-all-policies-and-intersectoral-action-capacities
[26] Australian Medical Association (2022) *Social determinants of health – 2020.* Retrieved 28/06/2023 from https://www.ama.com.au/articles/social-determinants-health-2020-1
[27] Independent review of the EPBC Act (2020) *Final report.* Retrieved 21/04/23 from https://epbcactreview.environment.gov.au/resources/final-report
[28] Department of Climate Change, Energy, the Environment and Water (2021) *EPBC Act – Frequently asked questions.* Retrieved 21/04/23 from https://www.dcceew.gov.au/environment/epbc/publications/factsheet-epbc-act-frequently-asked-questions

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Australian Government
Department of Health and Aged Care

NATIONAL HEALTH AND CLIMATE STRATEGY

Detailed submission form

This form allows you to provide responses to the full set of questions in the Consultation Paper available here.

Alternatively, you may wish to complete the briefer online survey available here.

Please submit this form in Word format to Health.Climate.Consultation@health.gov.au.

Respondent details

What is your name?
[redacted]
What is your email address?
[redacted]
What is your organisation?
Monash Sustainable Development Institute
Have you read and agreed to the Privacy Statement? (NB we will not be able to use your submission unless you tick this box)
✓ I have read and agreed to the Privacy Statement
Do you identify as Aboriginal and/or Torres Strait Islander? (Yes/No/Prefer not to say)
[redacted]
Please select which applies to you: ✓ Individual citizen ☐ Health Service Provider ☐ Industry and Life Sciences Organisation or Representative ✓ Academic or Researcher ☐ Primary and/or Allied Health Peak or Advocacy Organisation or Representative ☐ Aged Care Service Provider ☐ First Nations Health Service Provider ☐ First Nations Community Group ☐ First Nations Peak or Advocacy ☐ Medical College or Peak professional body

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Questions for feedback from the Consultation Paper

Introduction

1. How could these objectives be improved to better support the vision of the Strategy?
The objectives are broadly appropriate and supported. We offer some suggestions regarding framing, ordering and refining as below. **a) Make the vision explicit:** While the vision can be reverse engineered from the preamble, it would be helpful if it were more clearly articulated. We take the vision of the strategy to be something like "a healthy community and a sustainable and resilient health service that is fit for current and future generations". Establishing this (or words to this effect) as a clear narrative to which the rest of the strategy can be linked will reduce ambiguity and minimise differences in interpretation. **b) Shift framing to patient/population health outcomes:** The primary goal of the health system is better and more equitable physical and mental health outcomes. This primacy should be reflected in the strategy: physical and mental health should be an objective of its own, and this objective should come first. Using patient and population health as the overall framing for the strategy will help with implementation, ownership and mainstreaming. A healthier and more equitable population also supports a resilient and sustainable service, which then results in better health outcomes, creating a virtuous cycle. Thus this strategy is absolutely fundamental to the primary goal of the health system, and the objectives integrated and interdependent. **c) Consider 'Health <u>for</u> all policies':** This form of words is gaining traction as the next iteration of 'health in all policies'. The change has its roots in the experience of the COVID pandemic, where impacts were experienced across all sectors, but it is also a recognition of the impact of a chronically unhealthy population on educational outcomes, welfare payments and productivity, and a sense that the prior framing paid little attention to benefits of a health lens to other sectors. This is especially relevant in terms of the two-way benefits of good climate policy. Given the significant gains to be had for health through actions in other sectors, we would suggest this is placed before objectives for health system resilience and greenhouse gas mitigation. **d) Objectives could usefully become aims:** Current framing of objectives is very broad, and thus not amenable to being SMART. It may be more useful if current objectives were framed as aims, and the next-level actions were converted to objectives that could be more easily assessed for achievement. Targets, while having some limitations, should be included as an important part of the strategy. **e) Make measurement an enabler:** Measurement is an important part of the strategy, but ought to be framed as a 'means to an end', rather than an 'end in itself'. It is therefore better placed as an enabler. Measurement will also be helpful for all objectives, not just emissions reduction, so we would suggest expanding its use and scope in the strategy. However, placing it first risks sending the wrong signals about the role it plays - it could be inferred that the focus of the strategy is measuring emissions, that measurement alone is sufficient, and could even be interpreted as providing tacit support to unhelpful behaviours like buying offshore carbon offsets.

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f) **Definitions will be helpful.** Language is always open to interpretation, and this is particularly the case where transdisciplinary approaches are taken (as they should be for complex challenges such as climate and health). The more the strategy can do to minimise ambiguity and vagueness, the more successful it will be in coordinating efforts by different actors. In particular, it is important to be clear what is meant by 'health' and 'health system'. A glossary could be useful.

Greater detail on many of these suggestions, alongside further recommendations, can be found in the Royal Australian College of Physicians' report Climate Change and Australia's Healthcare Systems – A Review of Literature, Policy and Practice, and the related review for the Australian Commission on Quality and Safety in Healthcare. MSDI and Behaviourworks played leading roles in the creation of both reports.

2. How could these principles be improved to better inform the objectives of the Strategy?

The principles already selected for the consultation paper are all important and worthy of inclusion. They align with the work already done in this area. Potential improvements to consider are:

a) **Be more explicit about social justice within and between generations:** The health inequities principle could more clearly articulate the need to tackle the structural causes of inequities, not just 'take account of them'. There could be more emphasis on rights-based approaches, noting the right to health and the right to a clean, healthy and sustainable environment.

b) **Consider 'value based' approaches,** perhaps as part of the population/prevention principle. For example, preventing illness and keeping people as healthy as possible for as long as possible provide best value by avoiding healthcare use and its associated costs and emissions.

c) **Ensure that 'one health' is understood in its broadest sense**: Human health is not just connected to the health of animals and the environment: it depends upon it. This includes all determinants of health, not just those related to pathogens. Pollution and loss of biodiversity must be considered alongside climate change as major drivers.

d) **Make it clear that the strategy embraces knowledge in many forms,** not just that from western or academic perspectives. There are important sources of knowledge and wisdom from Indigenous communities, practitioners and communities, and the strategy could benefit from acknowledging this value explicitly.

e) **Put patients and communities at the centre of the strategy:** This could be its own principle or be more clearly articulated, and include a commitment to true co-design/co-production with patients and communities. The health system is there to serve patients and the community, but because this is implicit it can sometimes get lost. Done well, empowering and involving service users can also improve uptake, outcomes and support for change, and reduce waste from inappropriate interventions. We have reviewed literature on the role of co-design in health research and have connections with co-design networks around the world.

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3. **Which of the various types of greenhouse gas emissions discussed above should be in scope of the Strategy's emission reduction efforts?**
All scopes should be included. This is a global problem. We should not restrict ourselves to acting only upon those things that we are obliged to report upon, particularly if we can also intervene elsewhere. The strategy should therefore also consider actions to reduce emissions associated with **patient and visitor transport**, and the **emissions generated overseas because of the demand from Australian health systems** (especially if that demand relates to low value healthcare, where lower carbon substitutes exist, or to treat disease that could have been prevented).
4. What existing First Nations policies, initiatives, expertise, knowledge and practices should the Strategy align with or draw upon to address climate change and protect First Nations country, culture and wellbeing?
We strongly support placing **First Nations' perspectives at the centre of the strategy** and commend the **strength-based** framing. Even aspects as fundamental as the definition of 'health system' could benefit from building in First Nations' perspectives. The key plans and agreements appear to have been identified and it is appropriate for the strategy to build upon these. Noting the links between physical and mental health and connection to Country, there may be benefit in drawing from **expertise beyond the health sector,** for example Traditional Owners working with environment sector organisations. The perspectives of First Nations peoples consulted on this question should be paramount. We understand that the Climate and Health Alliance (CAHA), with which MSDI partners, is working directly with First Nations members and stakeholders to formulate its response to this question and to Question 5. We suggest that this means the CAHA submission merits particular consideration on the topic of First Nations perspectives.
5. What types of governance forums should be utilised to facilitate co-design of the Strategy with First Nations people to ensure First Nations voices, decision-making and leadership are embedded in the Strategy?
We strongly support co-design of the strategy with First Nations peoples and recommend that they are best placed to answer this question. There may be benefit in seeking input from the: • the Expert Reference Panel for Aboriginal and Torres Strait Islander Health (ERPATSIEH) of enHealth • National Aboriginal and Torres Strait Islander Health Protection (NATSIHP) Sub-committee of the Australian Health Protection Principal Committee (AHPPC).

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Proposed Objective 1: Measurement

6. **Beyond the schemes already noted above, is your organisation involved in any existing or planned initiatives to measure and report on health system emissions and/or energy use in Australia?**
MSDI is not yet involved in any initiatives that measure or report on health system emissions or energy use. A consortium approach to creating measurement and reporting frameworks could be beneficial. Drawing together a variety of types of organisation from across the health system would enable the creation of a robust model that could be extrapolated from and adapted by other players. It's worth noting that Climateworks Australia (which is part of MSDI) does include emissions and energy use data from health sector buildings (as part of its work on commercial buildings) and can estimate future energy use and emissions under different scenario conditions (although we do not report on it at sector granularity). Climateworks' Net Zero Momentum tracker has assessed climate commitments of some ASX 200 health sector companies in the 'other services' sector, and future corporate engagement work on credible transition plans might include health sector corporates. We also have more general reports and frameworks that could be applied to different sectors, such as the net zero universities guide.
7. What additional data and information is required to support targeted emissions reduction efforts within health and aged care?
a) There may be concern from some quarters that efforts to reduce emissions will lead to increased financial costs or lower standards of care. We would therefore strongly recommend that **financial and patient outcomes** are measured alongside emission reduction data. b) Initiatives that make carbon footprinting of care pathways more accessible to clinicians and health service planners would be worth pursuing. These have already been pioneered by the NHS and could be replicated here. For instance, a series of guides with **emissions factors for various types of healthcare activity and procurement** was published by the NHS SDU in 2016. These are now available here: https://shcoalition.org/sustainable-care-pathways-guidance/. We understand these have been updated for the Greener NHS and now available to those with an nhs.net email address. The benefit of such accessibility is that it enables grass-roots innovation and testing of different ways of delivering care and making sustainable quality improvement. It also can democratise and demystify knowledge and encourage ownership and agency by front line staff who are making the day-to-day decisions that influence environmental and financial costs, as well as patient outcomes. Findings should be shared to reduce duplication and enable others to use knowledge generated in their practice.

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In ensuring that all relevant data and information is being captured, it is important to rapidly scale action. A key finding of the RACP report 'Climate Change and Australia's Healthcare Systems: A Review of Literature, Policy and Practice' was that there are not enough scaled up efforts across health systems (or even all health services within one network).

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Proposed Objective 2: Mitigation

8. What do you think of these proposed focus areas for emissions reduction? Should anything else be included?

These are all reasonable and appropriate focus areas. The final strategy would benefit from an explanation about why they were chosen and what impact acting upon them is expected to achieve.

Some further points to consider:

a) **Primacy of prevention and models of care:** Given the fact that the effectiveness of these aspects influences all other focus areas, we would strongly suggest this area takes precedence and the links with action in other sectors (primordial prevention, Health In/ For All Policies) be more clearly emphasised.

b) **Avoid 'carbon tunnel vision':** While we understand that the strategy is focused on climate change, it is important to note the triple threat context (climate change, loss of biodiversity and pollution). Where possible we should be trying to align efforts. Use of the 10 areas of the Global Green and Healthy Hospitals (GGHH) framework would assist with this. There would be benefits in aligning with a large global network, which thousands of Australian health services have already joined, although some limitations to this framework are recognised, particularly regarding to models of care.

c) Consider food as a dedicated focus area, because of impact, influence on all other areas and complexity. This could also provide a strong signal more widely to the community and industry about the importance of health/food interface, and is part of the GGHH framework.

d) Acknowledge interdependence with adaptation: There are synergies and trade-offs that have to be maximised/managed (eg air conditioning/urban greening). One possibility is to consider each focus area from both a mitigation and resilience lens to ensure a holistic approach and avoid unintended consequences.

9. Which specific action areas should be considered relating to the built environment and facilities (including energy and water), over and above any existing policies or initiatives in this area?

We welcome the focus on design, construction and operations.

From a process point of view, bearing in mind First Nations and other perspectives, the concern with picking action areas at the consultation stage is that we don't know what we don't know. It may therefore be worth convening health system and policy actors for a transparent and inclusive prioritisation exercise. This would ensure that all relevant factors are taken into consideration, that the criteria for selecting priorities are explicit, and that the evidence base supporting particular actions and ideas is understood.

Such an exercise could also empower actors who haven't had the opportunity to input into this consultation. MSDI helped lead a similar prioritisation exercise for the 30+ million investment of the MRFF in cardiovascular disease and diabetes with MTP Connect. This could provide a useful model.

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From a substance point of view, more consideration might be given to **passive cooling** and **ceiling fans**, to reduce the need for air conditioning and increase resilience. Changes to ventilation requirements (e.g. those resulting from COVID) should also consider how systems will reduce occupant exposure to bushfire smoke and thermal stress.

It would also be worth considering the **immediate environment around facilities** (e.g. greening can have multiple health and environmental benefits, as well as providing staff with restful environments for breaks)

10. Which specific action areas should be considered relating to travel and transport, over and above any existing policies or initiatives in this area?

This is an important area, and it is good to see its inclusion.

The current proposed actions seem to exclude **patient, staff and visitor travel**, which are amenable to change for some trips and have health co-benefits (e.g., incentives for active or public transport) and so might be a missed opportunity. We recognise this area is not usually accounted for, but it can be significant and there could be merit in the signal it sends to staff and communities.

There is an opportunity here to link with:

- models of care focus area (potential reduction in travel/transport with increased telehealth)
- built environment and facilities (e.g. bus stops, cycle racks, greening car parks to reduce urban heat island effect around facilities, videoconferencing).

11. Which specific action areas should be considered relating to supply chain, over and above any existing policies or initiatives in this area?

The UK NHS roadmap for supply chain emissions is an excellent model and we agree with the proposal that the Australian system ought apply these approaches wherever possible. There is likely to be merit in greater collaboration between all Australian governments to **leverage joint purchasing power**, and mechanisms to achieve this should be explored. This should apply to overseas as well as domestic procurement.

There is also likely to be benefit in drawing the links with other frameworks relevant to procurement such as **procurement for social benefit** and **abolition of modern slavery. Increasing the transparency of supply chains** is particularly important: a greater understanding of the complexity, resilience and vulnerability by end users could engender better resource stewardship.

12. Which specific action areas should be considered relating to medicines and gases, over and above any existing policies or initiatives in this area?

Anaesthetic gases and inhalers are an appropriate place to start here, as there are models from overseas to follow and substitution is relatively easy.

Ultimately the **Pharmaceutical Benefits Scheme** should consider the carbon equivalent emissions of medication as part of their decision-making on which medications to fund.

The **Therapeutic Goods Administration** could require this information, and formularies and patient information sheets could provide it as standard. Consideration could be given to applying antibiotic/opiate stewardship models to other medicines to reduce over-prescription and reviewing validity of use-by dates to reduce waste.

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13. Which specific action areas should be considered relating to waste, over and above any existing policies or initiatives in this area?

The focus here is on material waste, which is an important focus, particularly for health care staff.

It would be good to see **circular economy principles** clearly articulated here, including the primary principle of designing out waste. This then also provides an opportunity to link with **avoiding waste** created through overdiagnosis and overtreatment, and also research waste in healthcare settings (e.g., the funding of low quality or duplicate studies).

Success in this area will be contingent upon the repair of the soft plastics recycling system. We suggest that the Circular Economy Ministerial Advisory Group could usefully be brought into this conversation if this has not already been done.

The transition of hospital energy supplies to renewable sources is an opportunity to consider the cost-benefit equation of a shift from single-use/disposable items to reusable/sterilisable items (e.g. surgical drapes/gowns/PPE).

14. Which specific action areas should be considered relating to prevention and optimising models of care, over and above any existing policies or initiatives in this area?

As noted above, this area is key to emissions from all other areas, so should take precedence. Reference to the National Preventive Health Strategy and the different types of prevention is welcome; we suggest that the **minimum 5% investment in prevention** also be noted here.

You may wish to reference the Centre for Sustainable Health Care's **principles for sustainable quality improvement** at this point as an accessible way to discuss the expansion of quality improvement to include areas such as prevention, patient empowerment, lean models of care, and lower carbon substitution.

References to initiatives such as choosing wisely and evolve and the importance of strengthening/incentivising action would be of benefit in this section. Reducing low value care creates a win-win-win of better patient outcomes, lower costs and better environmental sustainability.

15. What can be done to involve private providers within the health system in the Strategy's emissions reduction efforts?

Private providers must be included in efforts to reduce emissions (and develop resilience). Strategies to involve them could involve organisational or individual levers such as tax and other financial incentives, accreditation, training, resources. And platforms for connection between public and private providers.

Medical insurance companies are also key stakeholders and potential drivers of professional/organisational behaviour towards environmental sustainability and climate resilience.

16. Where should the Strategy prioritise its emissions reduction efforts?

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a. **How should the Strategy strike a balance between prioritising emissions reduction areas over which the health system has the most direct control and prioritising the areas where emissions are highest, even if it is harder to reduce emissions in these areas?**

b. **Which of the six sources of emissions discussed above (on pages 13 to 18 of the Consultation Paper) are the highest priorities for action?**

Focusing on prevention and models of care is the highest priority for action. Get that right and it will have positive impacts on all others.

This is not, however, a quick win, so decarbonising wherever possible in the other areas should be pursued in parallel, noting that every fraction of a degree matters.

We would recommend the strategy takes a **dual approach:** focusing on the quicker wins within the health systems' own control, while also developing the evidence, relationships and mechanisms to include those outside its direct control but with greater impact. It is important to **avoid the trap of only acting on the low-hanging fruit**.

A formal assessment of likely impact and feasibility of various interventions would be of benefit, drawing on the literature and experience of health systems in Australia and overseas. This should be followed by **a prioritisation exercise to involve health system and policy actors** in a transparent and inclusive prioritisation exercise to ensure that all perspectives including First Nations are heard, all possible interventions are considered and that t**he criteria for selecting priorities are explicit.**

17. What 'quick wins' in relation to emissions reduction should be prioritised for delivery in the twelve months following publication of the Strategy?

We recognise quick wins are important to demonstrate value, but note the risk that they can create opportunity costs by distracting from harder but more impactful actions. We therefore reiterate the point made above about the importance of a **dual approach** and the benefit of a **rapid but systematic assessment of impact and feasibility followed by a prioritisation exercise** as above.

Quick wins could evaluate actions already underway (e.g. through CAHA, the GGHH network, MSDI's own contacts) or be symbolic of direction and/or foundational for future action.

Possible examples are:

- Join WHO's Alliance for Transformative Action on Climate and Health
- Embed climate and health into existing Ministerial and senior official health Australian and States and Territories governance mechanisms
- Commission modelling on the costs of inaction, to serve as a benchmark
- Publish an implementation plan/route map
- Publish a monitoring and evaluation framework
- Establish a small-scale innovation grant program for frontline clinicians
- Provide a suite of educational tools and resources for frontline clinicians
- Provide platforms for sharing experience/demonstration projects
- Expand the role of the multidisciplinary workforce

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Proposed Objective 3: Adaptation

18. What health impacts, risks and vulnerabilities should be prioritised for adaptation action through the Strategy? What process or methodology should be adopted to prioritise impacts, risks and vulnerabilities for adaptation action?

Ideally, prioritisation should follow a **systemic and systematic risk assessment,** which includes an assessment of vulnerability and adaptive capacity. We recommend such an assessment as a priority.

However some immediate areas for focus can be identified from recent experiences of the 2019-20 bushfires and the subsequent findings of the Royal Commission. These include **focused support for regional and rural areas, better integration of primary care,** and **greater attention to cultural safety, in all phases of emergency response.** This should be considered alongside the **El Nino alert** declared by the BOM for the forthcoming summer which raises the risk of drought, heatwaves and bushfires in the east of Australia, and the concomitant health risks.

We would also recommend that **adaptation is considered alongside the focus areas for mitigation** as all are relevant, and this would assist an integrated response. Again, we are keen to see a focus on **population and patient health outcomes.**

In terms of methodology, there is **guidance available from the WHO on vulnerability and adaptation assessments** and risk assessments from other Australian jurisdictions (e.g., Victoria, Queensland) and countries (e.g., UK) that could be used. Ideally an Australian climate health risk assessment would **build on existing work** and be undertaken **in parallel with risk assessments in other sectors** (particularly where there are interdependencies e.g., built environment, agriculture, transport, energy, water).

19. Should the Australian government develop a National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan? If yes:

a. What are the key considerations in developing a methodology?

b. How should their development draw on work already undertaken, for example at the state and territory level, or internationally?

c. What are the key areas where a national approach will support local/jurisdictional vulnerability assessment and adaptation planning?

Yes, we would agree that such an assessment and plan is necessary.

a. **Key considerations** include:

- obtaining best health outcomes
- achieving social justice and equitable support and outcomes
- building on strengths in communities and services
- focusing on resilience to shocks as well as incremental change to the systems upon which health depends (eg shelter, safe drinking water, safe and sufficient food) - not just extreme weather events or the health system in isolation
- going beyond single-hazard planning
- assessing and identifying resourcing needed
- undertaken in parallel with immediate, agreed high-priority action

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b. Draw on work already done

It is likely that a review of existing work will help identify themes and solutions that can be applied, although there will need to be flexibility that enables local application

There may be merit in taking categorising approaches by climate region type to enable better applicability.

c. Areas where a national approach will assist

- Providing a 'one stop' shop of resources and evidence that is searchable may be of benefit to the sector and enable sharing of what works. Examples include living evidence reviews and evidence-gap maps e.g. https://www.sjweh.fi/article/4087
- A coordination function that builds on existing work at State and Territory level but also enables national reporting on adaptation and harmonisation of approaches, as appropriate.
- Standardisation of case definitions/exposure metrics
- Establishing a funding mechanism for knowledge generation, interventions and evaluations.
- Decision of what support (scale and type) Australia provides to our neighbouring countries, particularly Small Island Pacific States

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20. Would there be value in the Australian government promoting a nationally consistent approach to vulnerability assessment and adaptation planning for the health system specifically, for instance by issuing guidance and associated implementation support tools for states, territories and local health systems? If yes, what topics should be covered to promote a nationally consistent approach? What examples of existing guidance (either from states/territories or internationally) should be drawn from?

Yes. There are substantial resources already in place, but they are not always shared or easy to locate/access. A National 'Health Adaptation' Commons resource that could be drawn upon and tailored to context would be of enormous benefit.

Topics could include:

- Climate projections that are sufficiently granular for local geography and meteorology
- Selection of possible health and vulnerability indicators to monitor
- Evidence reviews of possible interventions (what works and what works in practice)
- Guidance on monitoring and evaluation
- Risk communication to encourage action to improve resilience of community, services and local decision-makers
- Case studies and demonstration projects
- Sources of funding
- Training resources and courses

21. What immediate high-priority health system adaptation actions are required in the next 12 to 24 months?

As for emissions reduction, there would be benefits in undertaking a **systematic impact/feasibility assessment and inclusive prioritisation exercise.**

Possible early actions, **building on existing work and with an awareness of the current 70% chance of an El Nino event of this summer,** include:

- Expanding the current focus on indoor air quality for COVID to bushfire smoke and thermal stress. Work should embrace residential settings as well as settings that serve more vulnerable population groups including aged care, hospitals, relief centres, schools and places of detention.
- Strengthening the primary care sector to enable it to play a more expansive role in individual and community resilience, and in response to disasters. This should include expanding the role of community multidisciplinary workforce.
- Creating a dedicated program to increase emergency-resilience of aged care facilities. This should include robust facility planning, staff training and incident response and recovery exercises.
- Placing greater focus on application of First Nations knowledge and cultural safety and more focus on resilience of regional and rural communities and services.

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Proposed Objective 4: Health in All Policies

22. What are the key areas in which a Health in All Policies approach might assist in addressing the health and wellbeing impacts of climate change and reducing emissions?

We welcome the focus of the strategy on sectors outside of health. The focus of the consultation document is particularly on the heath co-benefits of emissions reduction in these sectors, but it is also important to consider the interaction with these sectors from an adaptation/resilience perspective.

Please note earlier comments in response to questions 1, 8 and 14, as well as the following suggestions for consideration.

a) **Economy:** Economic analyses of the costs of action and inaction often only include a limited analysis of health impacts. An improved evidence base to support these analyses would strengthen the case for climate action in terms of adaptation and mitigation further.

b) **Energy:** The health costs of the continued extraction, consumption and export of fossil fuels needs greater emphasis, including extending beyond local health impacts and taking a precautionary approach where data is lacking. Full health impact assessments of energy transitions to renewables should be undertaken, including the impacts on communities whose livelihoods will be most affected by the transition and how they may be best supported.

c) **Waste:** Waste management is of significant concern to healthcare providers, as well as to wider communities. As well as emissions created, there are many real and perceived health risks in relation to contaminated land, water and soil from healthcare waste e.g. heavy metals and emerging contaminants such as PFAS, microplastics, pharmaceuticals. This is likely to become an increasing health concern as we increase use of recycled water and biosolids. Circular economy principles are important for protecting community health, as well as reducing emissions and over consumption.

d) **Built environment**: We welcome the focus on housing, and suggest this could be extended to all buildings, particularly those that host priority groups (eg schools), and to urban planning (eg walkable neighbourhoods, urban cooling)

e) **Transport:** We would suggest that the narrative here includes mass urban transit as well as electrification of private vehicles.

f) **Agriculture and Food:** As well as the co-benefits and One Health context described, we suggest consideration might also be given to issues of food security (at micro and macro levels) and the impact on health of loss of livelihood (e.g. following extreme weather events).

g) **Natural environments**: Including the protection of natural ecosystems, which provide spaces for recreation and relaxation, connection to Country, drinking water sources, and protect biodiversity.

23. What are the most effective ways to facilitate collaboration and partnerships between stakeholders to maximise the synergies between climate policy and

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public health policy? What are some successful examples of collaboration in this area?
Collaboration and partnerships are critical to success. Identifying shared agendas with portfolio areas is important for optimising efficiency and maximising impact - particularly where health considerations are built into work already being pursued by specific portfolios rather than identifying *de novo* projects. To flourish, they will need engagement and commitment from senior leaders including Ministers and senior officials from all sectors. We would suggest exploring evaluations of efforts to establish a health-in-all-policies approach to better understand barriers and enablers, which include the need for long term vision, commitment and resourcing. eg Health in All Policies: From rhetoric to implementation and evaluation – the Finnish experience - Timo Ståhl, 2018 (sagepub.com), Implementing health in all policies.pdf This could be considered alongside more recent publications with case studies of approaches that are framed as health for all policies. eg Making Health for All Policies: Harnessing the co-benefits of health | European Observatory on Health Systems and Policies (who.int) Another more specific example relates to housing interventions to improve energy efficiency, which also have health benefits as demonstrated in the The Victorian Healthy Homes Program Research findings | Sustainability Victoria.

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Enablers

24. How could these enablers be improved to better inform the objectives of the Strategy? Should any enablers be added or removed?

We support the enablers outlined in the consultation document, but believe they need more elaboration regarding how they would be applied and how potential barriers would be overcome.

We would also add the following suggestions, risks and considerations:

a) **Include governance, resourcing, and tools/instruments as enablers.**
   - **Governance**: For the strategy to achieve its aims, governance and accountability mechanisms need to be clearly described, implemented and evaluated. In the complex and federated Australian health system, these mechanisms should include decision-makers from all jurisdictions, with specialist technical advice representing the diversity of elements of the system.
   - **Resourcing**: Effective health system responses to climate change require financing. There is good evidence that inaction now will be significantly more costly in the longer term from many perspectives. This should be accounted for in investment decisions. The purchasing power of large industries, such as the health system, can be a powerful influence on the supply chain, as has been demonstrated by the actions taken by the National Health Service in England
   - **Tools and instruments:** Action is enabled through a combination of tools such as high quality and accessible guidance, best practice models and incentives to encourage behaviour change, and instruments such as legislation and regulation to require it.

b) **Create a dedicated enabler for leadership:** Leadership at all levels of the workforce, both positional and personal, is essential to embed sustainability and resilience as key functions of the health system. However, change is likely to be more effective and embedded with visible leadership from governments and policymakers.

c) **Recognise diversity in workforce appetite and capacity:** As the consultation paper notes, the workforce has a key role in the transformative change needed and many are very supportive of a greater focus on climate and health (e.g., by petitioning their boards or taking action themselves). Some healthcare organisations are seeing a clear commitment to climate action as a recruitment and retention strategy. However, even where there is appetite, there may be limited capacity in a system under chronic strain. Care will be needed in how this is presented to avoid this being seen as 'just another unrealistic demand', including clear actions for how workforce capacity will be increased. The same caveat could be applied to expectations for incorporating climate change perspectives into health professional training curricula and continuous professional development - while some institutions are already doing this (e.g. RACGP), others may be less receptive.

d) **Frame the research enabler broadly:** Ensure research is understood to include diverse sources of knowledge, including Indigenous knowledge, systems approaches, social learning, implementation science, demonstration projects and evaluations. A transdisciplinary and pluralist approach would be expected to better

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address complexity and lead to better and faster outcomes, than more traditional biomedical research approaches.

e) **Shift 'communication and engagement' enabler towards 'dialogue, active listening and inclusive spaces for connecting':** The limitations of one-way communication and tokenistic engagement to change behaviour and influence decision making are well-established. While we recognise that this was unlikely to be intended in the current formulation of this enabler, we note that transforming systems often requires changes in worldviews, supported by ongoing genuine dialogue, active listening and places where people with differing perspectives can connect in safe, respectful and inclusive spaces.

f) **Frame the collaboration enabler more specifically:** Collaboration is critical for enabling transformation, but in its current formulation this enabler is more a statement of ambition than a description of how it could be applied. We also note that there is a difference between governance and collaboration, and the benefit of a dedicated enabler on governance as above. In terms of collaboration, we would recommend a focus on working across usual boundaries within and beyond the health sector to make the most of synergies and manage trade-offs.

g) **Convert and expand the measurement objective to an enabler:** Intelligence, monitoring and evaluation are key enablers to drive policy and practice for all elements of the strategy. ie not just for emissions reduction, but also to improve understanding of risk and vulnerability and how it is changing.

25. For each of these enablers:

a. **What is currently working well?**
b. **What actions should the Strategy consider to support delivery?**

a) In the absence of national leadership from the previous government, there has been progress at State and Territory level, as well as within individual professions and health care organisations. As a result there is much **expertise and goodwill** available, but **insufficient legislative, financial and cultural incentives** to embed the system change necessary. There are **pockets of good practice**, but these are **not scaled or systematised**. Australia is not starting from scratch but there is a need for a convening function that connects and coordinates existing and developing knowledge across the country. We would suggest that the enablers identified in the consultation paper and those we have outlined above are at a **nascent** stage currently in the Australian health system as a whole.

b) Possible actions have been included in response to question 24.

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Thank you for taking the time to complete this survey – your feedback is greatly appreciated!

Please submit this form in Word format to Health.Climate.Consultation@health.gov.au.

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HCCA Submission:
National Health and Climate Strategy

The Health Care Consumer's Association (HCCA) appreciates the opportunity to provide feedback on the draft National Health and Climate Strategy. We consulted with HCCA members and our extended networks in preparing this submission.

The Health Care Consumers' Association recognises the importance of considering the impact climate change, as well as the importance of a sustainable environment on the provision of healthcare. Climate change is one of the most complex issues we face. It is challenging to address as it cuts across all ecological, social or economic systems and affects human health at a global and local level.

Climate action needs to achieve mitigation, adaptation and equity. We need to:

- reduce emissions and stabilise levels of greenhouse gases in the atmosphere (mitigation);
- adapt to the climate change already set by (adaptation);
- protect the most vulnerable people from adverse effects of global warming (equity).

From our perspective there are three clear areas for action for the health system:

- keep people healthy so their need for healthcare reduces
- reduce low value care.
- decarbonise the health system to reduce greenhouse gas emissions and the carbon footprint.

Adaptation is important but we cannot prioritise this over mitigation. The climate is changing and we are seeing heatwaves, bushfires impacting the environment and human health, and rain bombs resulting in devastating floods. We need to respond to this but also do what we can to stop further damage.

We need to be able to answer the question: how do we continue to deliver health care in a changing environment?

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HCCA is a member of Consumers Health Forum and Climate and Health Alliance and support their advocacy for action on climate change, including their respective submissions to this consultation.

To achieve the level of change across the health system needed to respond to the challenge of climate change there has to be consumer involvement. We need to work with consumers, to learn from their experiences and to bring them with us on this journey. Working with consumers will be a vital component of an effective Climate and Health Strategy. Consumers will need to be willing participants in changing the way we deliver health care in response to the climate crisis and be reassured that such change will not negatively impact on their health outcomes.

As we write this submission climate change is making its presence felt, with record-breaking temperatures across the world, posing health risks for people and the environment. This is important work that must be prioritised. We cannot wait.

The health of people and the planet deserve our full attention and effort. We have been disappointed at the pace of change towards climate resilient and environmentally sustainable health services. We have struggled with the prioritisation of the economy and many in our membership have expressed a sense of despair, believing that only when the financial sector experiences impacts on investment portfolios we will see action to manage climate risk and a commitment to reduce carbon emissions. We are pleased to see a growth in participation across Australia in the Global Green and Healthy Hospitals Network. This suggests there is an increased appetite for support, information and guidance on how to decarbonise health services.

As one of our members said, "*climate change can feel like a problem for the future, but it is a problem we are living with now*".

We would welcome an opportunity to contribute further to this important work.

Yours sincerely



Darlene Cox

Executive Director

24 July 2023

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HealthCare Consumers

SUBMISSION

National Health and Climate Strategy

24 July 2023

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About HCCA

The **Health Care Consumers' Association (HCCA)** is a health promotion agency and the peak consumer advocacy organisation in the Canberra region. HCCA provides a voice for consumers on local health issues and provides opportunities for health care consumers to participate in all levels of health service planning, policy development and decision making.

HCCA involves consumers through:

- consumer representation and consumer and community consultations;
- training in health rights and navigating the health system;
- community forums and information sessions about health services; and
- research into consumer experience of human services.

HCCA is a Health Promotion Charity registered with the Australian Charities and Not-for-profits Commission.

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HCCA's approach to this submission

HCCA is a member-based organisation and we draw on the views and experiences of our membership and networks to advocate for consumers.

In preparing our feedback on the National Health and Climate Strategy (the Strategy) we have drawn on the knowledge and experience of our members and their specific feedback on the Strategy. The feedback we received is collated and contextualised below.

We have not addressed all the questions proposed for feedback and have focussed on what our members view as priorities for action. For ease of reference we have presented our feedback using the provided question number and brief descriptor.

We have also included additional comments about areas of concern to consumers that we did not view as a natural fit under the categories provided.

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1. Objectives

HCCA supports the intent of the objectives outlined in the Strategy but we **need plain language** to communicate these objectives. Mitigation, adaptation and resilience mean many different things to people.

For example, Mitigation: Accelerate the reduction of greenhouse gas emissions from the health system. There is confusion for some people about the relationship between greenhouse gas emissions and carbon emissions. We talk to consumers about decarbonising the health system.

HCCA has long advocated for Health in All Policies (HiAP). We have supported this approach as it integrates and articulates health considerations into policymaking across sectors to improve the health of all communities and people. This is consistent with addressing the impacts of climate change on the health of people and our planet through government actions in all sectors including the health system.

We would like to see equity as an objective for this Strategy in addition to a principle. We know that climate change has disproportionate effects on marginalised communities. It has profound risks and impacts on health, particularly for vulnerable populations such as older people, people with chronic conditions, those who are socio-economically disadvantaged, people with a disability, women, girls, and people who are from a Culturally and Linguistically Diverse background. Climate change impacts social determinants of health, including housing, food, and water. We would like to see the inclusion of an equity focus to acknowledge that environmental changes can have differing social, economic, public health, and other adverse impacts on vulnerable populations and their capacity for resilience and to engage in reduction and mitigation strategies is more limited.

We wonder why can't we have an objective to have a net zero health care system? While we appreciate that this may not be achievable in the early stages, this should be a recognised and formalised goal set to guide ongoing actions.

4. First Nations

In recent months we have been speaking with consumers about woodfire smoke. In the ACT we are moving to reduce woodfire smoke through the removal of woodburning heaters. It has raised an interesting point about balancing cultural needs with public health, including reducing particulate matter to improve air quality as well as reducing carbon emissions as a mitigation strategy for climate change.

We know of the importance of fire to many Aboriginal people. Smoking ceremonies are used by many communities across Australia. This ceremony involves gathering people around a fire that has high levels of smoke. The smoke serves to protected people while visiting their hosts' country.

Fire has been central to many aspects of traditional Aboriginal and Torres Strait Islander life, including cooking, storytelling, ceremonies and rituals and medicinal practices.

Aboriginal people on mainland Australia also used fire extensively for land management to promote productive ecosystems. We are seeing a re-emergence of traditional Aboriginal burning in modern day land management.

We encourage more, and ongoing, discussion with Aboriginal and Torres Strait Islander people to understand their connection to land and environment and work out ways to preserve their cultural needs and balance these with public health needs. This applies to all aspects of the Strategy.

8. Emissions reduction

We need to reduce emissions now to avoid climate change impacts decades into the future.

A Global Roadmap to Health Care Decarbonisation has been developed by Arup and Health Care Without Harm. This Roadmap[1] identifies seven high-impact actions across three intersecting pathways which are key to achieving healthcare decarbonisation. We need to be sure all 7 are adequately reflected and acted upon in the Strategy.

9. Built environment and facilities

Our building and urban planning designs need to change in response to a changing climate. It is important that health facilities are electrified in line with other commercial spaces and people's homes. There must be changes to the way building and facilities are designed and constructed.

In our discussions with consumers the following issues were raised around how best to adapt to a changing climate. We believe that green and healthy hospitals promote good health and wellbeing by reducing their environmental impact. For example

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- buildings should include active solar protection such as operable external shading mechanisms to keep places cooler in summer or enable them to be warmed by the sun in winter.
- there must be appropriate back up power to manage potential power outages that may occur, especially during heat waves.
- health campuses and buildings should include well designed and cared for green spaces. Green space has a localised cooling impact, improved neighbourhood biodiversity and is also important for mental health and wellbeing.
- Buildings should have ventilation systems to filter particulates so staff and consumers are not breathing air that is dangerous to our health – this is important for environmental (eg fire, smog, dust) and infection (pathogens) reasons in a health care setting.

Consumers also raised a range of questions about how these issues are being addressed more broadly in Australian Government policy and guidelines:

- How are the Australia Health Facility Guidelines changing to address these issues?
- How are warmer temperatures affecting assumptions for energy modelling?
- How are hospital campuses being designed to respond to heavy rain fall in short periods that lead to inundation and flooding?

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10. Travel and transport

We are interested in how the Strategy will account for emissions from transportation and distribution activities across the health system.

We note that patient and visitor transport fall outside the traditional definition of scope 1, 2 and 3 emissions. What action is being taken to address this when we know it is a significant contributor to greenhouse gas?

Changes to the delivery of health care can be effective at creating sustainable change, particularly through methods already adopted and preferred by consumers. This includes the use of telehealth and delivery of care that is closer to home, promoting more sustainable transport options, making commitments to reducing unnecessary business trips and providing charging stations for electric vehicles.

We do not consider patients walking to hospital to be a reasonable expectation to reduce greenhouse gases. This is not a helpful suggestion for mitigation and places the onus on consumers in their moment of need when meaningful change must be achieved at a system level.

13. Waste

If we are to mitigate the negative impacts of pollution and climate change on public health, then we must address the issues relating to medical waste. Dealing with medical waste involves transportation, autoclaves and incineration – significant

contributors to greenhouse gas emissions and release of toxic particles into the air. Other waste ends up in landfill and this poses environmental and public health risks as material decomposes slowly and accumulates overtime.

The consumption of single-use items has increased during the COVID-19 pandemic. We appreciate there is a balance between the use of personal protective equipment to decrease the risk of infection and the environmental impact. The pandemic is not over and there is risk of further pandemics with a changing climate, so there is an urgent need to change the way medical waste is created and managed. Our approach to single use medical supplies must include consideration of the entire product lifecycle and solutions must include the development and deployment of less resource intensive product options (such as in the case of alternative inhalers), more deliberate utilisation of products (ie only in circumstances where need is established, there is a clear benefit and potential alternatives are not viable), and innovation in waste management. Medical suppliers, producers and end users must be cognisant and responsible for the use, disposal and carbon footprint of medical waste.

14. Prevention and optimising models of care

Social prescribing

We are pleased to see a focus on social prescribing in the Strategy. This demonstrates the challenge of changing practice. Social prescribing is not a new concept and has been in place in the UK for twenty years. It has a focus on encouraging and supporting health professionals to refer people to a range of local, non-clinical services to support overall health and wellbeing. In Australia the take up has been slow and consumers remain hesitant.

Prophylactic social interventions and social treatments hold promise for reducing the disease burden that creates demand for medical consumption – medications, implements, personal protective equipment, power and transport.

Beyond social prescribing, deploying these sorts of interventions at a population level will have a protective factor which reduces demand for traditional health care and demonstrates a concomitant reduction in its carbon and greenhouse footprint.

Private sector

The private sector plays a large role for consumers. Beyond private operation of public and private hospitals, pharmacies and medical practices are key to the consumer experience of health care and important for us to maintain our health and wellbeing. We think the private sector must be required to engage meaningfully with the climate change agenda and their important role in health care and its environmental and resource impact needs to be reflected in the Strategy.

We suggest there may be levers relating to corporate governance and mandatory climate reporting standards which could be employed to drive private sector

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participation and compliance. For example, the introduction of International Sustainability Standards Board (ISSB) issued its finalised sustainability and climate standards, IFRS S1 and S2.

Diagnostic and pathology services

If we are committed to low-carbon health services then this needs to encompass diagnostic and pathology services as well as health technology.

Although the carbon footprint of pathology testing is relatively small, the scale of testing undertaken makes it a significant contributor to the environmental impact of healthcare.

Reducing unnecessary testing is the most viable approach to reducing the footprint of diagnostic and pathology services[2]. Overservicing and unnecessary testing have potential negative health impacts for consumers and for both these reasons clinicians should be supported to make more judicious choices about when and what to test for.

Developing clear guidelines for evidence-based use of these services could help to reduce the risk of low value care/services and contribute to climate change mitigation. It will be imperative to engage with health care professionals and consumers to progress changes to the way in which these services are utilised while maintaining equity in accessing necessary diagnostic and monitoring processes.

Health Technology Assessment

We want to understand how we will integrate carbon emissions into health technology assessment. The approval of health technology should reflect its effectiveness and cost but also its safety - at an individual but also a societal level. Consumers feel strongly that evaluation processes for new and existing health technologies need to include carbon emissions. We know that there are technical and implementation challenges in incorporating carbon emissions into the assessment process but this needs to be addressed.

Currently, health technology assessments focus on whether the economic cost of new pharmaceuticals and medical devices, or model of care can be justified. The process does not include consideration of environmental impacts such as carbon emissions. This Strategy should commit to this change. We need health technology to be environmentally and economically sustainable, and this means the assessment process must take account of carbon emissions,

Primary care

Primary care is a vital element of our health system. Just as primary care is at the forefront of responding to increasing risk to health from global warming, it is also a contributor to carbon emissions and environmental harm. We are very interested in the reduction of the carbon footprint in primary care practice as we do not see that this is

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getting the same level of focus as the hospital sector. Primary care is a significant part of the health care system and we think much more needs to be done to address its carbon footprint.

The Royal Australian College of General Practitioners[3] and the World Organization of Family Doctors[4] have declared climate emergencies. There is an increasing appetite to act.

Mitigation of the activities of primary care practice needs to be addressed specifically and on both a regional and national level. There is great variation between metropolitan, regional and rural practices. We are interested in the role of Primary Health Networks in supporting primary care to reduce carbon emissions through environmentally friendly changes to business models and premises but also through changes to clinical practice.

Most emissions generated by primary care occur indirectly through service use. Most patients travel to access primary care via private vehicle.

Switching from metered-dose inhalers to dry powder inhalers is an example of a change in clinical care that can reduce the environmental impact of treating a range of conditions. There has been increasing focus on this and it is important that the need to make changes such as this, and the safety of doing so, is communicated clearly with consumers and carers. Effecting these changes on a large scale will rely on consumer and clinician buy in. This change does not have an adverse impact on a person's health but it can have a positive impact on the health of our planet as it minimises the use of gases like nitrous oxide.

What are we doing to support the Greening Up [5]of General Practice in Australia? We know there are examples of practices who have embraced the challenge and are more environmentally friendly by recycling, reducing electricity use, and installing or simulating double glazing on windows. Not all practices are able to build a new facility and old buildings will require retrofitting. Still, we know there are design elements that reduce the environmental impact and are good for the health of patients, staff and the planet.

We think General Practitioners have a responsibility and an opportunity to address climate change by greening general practice.

We have been following the work of Pegasus Health in New Zealand which undertook a carbon audit and then has introduced a program to reduce carbon emissions[6].

There is much work in the National Health Service (NHS) in the United Kingdom in greening general practice and the toolkit, Green Impact for Health[7], is a useful example to demonstrate how general practices can be assisted to reduce their environmental impact.

The Doctors for the Environment have been strong advocates for this. They can see the way in which general practice is being affected by climate change. The GPs see impacts in their patients and the communities they are part of and this awareness should be harnessed to implement change. Primary care will need to be supported in making the changes necessary to reduce their carbon footprint while ensuring ongoing quality care for their patients.

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NGO health care sector

The Non-Government sector in the health system also needs to be included in any initiatives to measure and reduce carbon emissions.

NGOs provide excellent services on modest budgets. They deliver health and social care that is key to health and wellbeing. They also include peak bodies who through strong community connections can advocate for issues of importance to their representative groups. They are often innovative and flexible, with strong consumer and community participation in their governance, service design and policy work. Many NGOs work with people and communities living with disadvantage and people who are homeless or at risk of homelessness, alcohol and drug services, mental health services, people with intellectual disabilities and former prisoners. They also meet the needs of diverse communities including Aboriginal and Torres Strait Islanders, refugee and migrant communities and LGBTIQA+.

While this is a significantly smaller proportion of overall health funding it is an important element of the health system. For example, NSW Health invests about $150m a year in health services provided by community-based non-government organisations (NGOs). In the ACT NGO funding is around $50m per year.

Government funding makes up a large proportion of income for these organisations, enabling them to deliver essential services and alleviating the demand on public health services. Any work to measure and address the impacts of climate change will place an extra burden on NGOs and will need to be supported by Government.

Other comments

Mental health

We tend to focus on the direct threat and physical impact of drought, floods, bushfires and air quality, extreme heat, and coastal inundation. The impacts of climate change are not just physical. People share with us the challenges to their mental health. People hold painful feelings about the climate crisis. We need to acknowledge this and make room for the expression of uncomfortable feelings and concern for the future. We need to explore ways to cultivate hope, encourage action and manage the feelings of despair.

Health Literacy

There is no reference to health literacy in the consultation paper and we think this an issue that needs to be addressed.

There is a conceptual model of planetary health literacy[8]. We are very interested in how we can build community health literacy so that individuals understand the complex relationship between climate change and human health.

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There is an interesting study[9] published in the Journal of Climate Change and Health (2021) looking at climate-specific health literacy and medical advice.

This study found:

- a majority of respondents, while perceiving climate warming as causing global health risks, fail to recognise climate change as a serious threat to their own health.
- those participants who had received climate-specific medical advice had greater knowledge and awareness of health risks related to climate change. Around 70% of participants indicated they were prepared to engage in climate-friendly behaviour if physicians informed them about climate-related health risks. This included making strong efforts to reduce greenhouse gases in their everyday life.

It underscores the importance of health literacy as part of bringing about change in behaviour to support mitigation and adaptation and build resilience. Education and building health literacy can also contribute to addressing inequity in terms of health outcomes and can also help reduce over/under servicing and inefficient or inappropriate health care[10].

Preventive health

An important mitigation measure is keeping people healthy so our need for healthcare reduces. Yet, we do not see the strong alignment between preventive health measures and planetary health featured adequately in the Strategy.

We are keen to see more discussion about climate protection being described as good for our own health and good for the planet. For example,

- reducing over-consumption of meat in our diets and animal by-products has positive effects on reducing greenhouse gases and human health.
- active travel and increase used of public transport increases individuals' levels of physical activity and reduces air pollution.

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[1] NEW GLOBAL ROADMAP for Healthcare Decarbonization towards climate resilience and health equity | Health Care Without Harm (noharm-uscanada.org)
[2] The carbon footprint of pathology testing | The Medical Journal of Australia (mja.com.au)
[3] RACGP - Climate change is a health emergency, RACGP declares
[4] World Organization of Family Doctors (WONCA) (globalfamilydoctor.com)
[5] RACGP - Greening up – Environmental sustainability in general practice
[6] Pegasus Health signs OraTaiao 'Climate Change and Health' Call For Action - Pegasus Health | Primary Health Services
[7] Green Impact for Health | Green Impact | Students Organising for Sustainability (nus.org.uk)
[8] Jochem C, von Sommoggy J, Hornidge AK, Schwienhorst-Stich EM, Apfelbacher C. Planetary health literacy: A conceptual model. Front Public Health. 2023 Jan 16;10:980779. doi: 10.3389/fpubh.2022.980779. PMID: 36726624; PMCID: PMC9886088.

[9] Reismann, L. et al. (2021) Climate-specific health literacy and medical advice: The potential for health co-benefits and climate change mitigation. An exploratory study. *The journal of climate change and health*. [Online] 4100072–.

[10] Gibney S, Bruton L, Ryan C, Doyle G, Rowlands G. Increasing Health Literacy May Reduce Health Inequalities: Evidence from a National Population Survey in Ireland. Int J Environ Res Public Health. 2020 Aug 13;17(16):5891. doi: 10.3390/ijerph17165891. PMID: 32823744; PMCID: PMC7459493.

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National Health and Climate Strategy Consultation Paper

Submission from The George Institute for Global Health

July 24, 2023

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Acknowledgement of Country

The George Institute for Global Health acknowledges the traditional owners of the lands on which we work, and in particular the Gadigal people of the Eora Nation on which our Sydney office is situated. We pay our respects to Elders past, present and future.

We value and respect the ongoing connection of Aboriginal and Torres Strait Islander peoples to Country and seek to work in partnership with communities to deliver better health outcomes.

Executive Summary

The George Institute for Global Health commends the Australian Government on its efforts to protect the health and wellbeing of Australians from the effects of climate change by developing a National Climate and Health Strategy. We appreciate of the opportunity to contribute a submission on the Consultation Paper to inform the development of the strategy and stand ready to collaborate to address the evidence gaps and other considerations identified in this submission.

The George Institute for Global Health is broadly supportive of the Climate and Health Alliance's submission. Our submission identifies several recommendations we encourage the Australian Government to take into consideration in the development of the strategy:

- Considering the direct and indirect impacts of global heating are multidimensional and complex **the Strategy should set out a roadmap for the consideration of climate change impacts on health to be integrated into government decision making** and programmes across portfolios and jurisdictions.
- **The Strategy should set a clear vision, mission, and objectives**. We would recommend objectives focusing on four key areas to mitigate and adapt to climate change: health for all; a net-zero emissions health care system; accelerating innovation; and climate-positive public policy.
- **The George Institute is supportive of the four objectives overall. The Strategy must set ambitious goals, targets and time limits that are aligned with broader health and social policy goals.** It should include a plan to deliver the following:
    - **Health for all**: prioritise developing climate risk and vulnerability assessments for high-risk communities. The government can consider commissioning research to support the development of a framework of vulnerability indicators and using these to map the vulnerability of communities based on intersection of the risk of extreme weather events and social vulnerabilities. Efforts to strengthen resilience to climate impacts within the population should be prioritised, and adaptation plans need to explicitly address the social determinants of health such as housing, employment, education etc.
    - **Net-zero emissions health care system:** a decarbonisation plan needs to be developed for the health system in partnership with states and territories. The first steps should be to commission an emissions baseline report and develop a marginal abatement cost curve (MACC) for the health system, providing a clear indication of where to focus investment to ensure it is effective and efficient.
    - **Accelerating research and innovation:** to achieve transformational change, the health system itself will need to flex and change. This is also important in order to address the increasing costs of healthcare, the shift in burden of disease to non-communicable diseases (NCDs), global workforce challenges, and sustained inequities in health outcomes. Climate impacts are another source of pressure that will disrupt existing models of care in the health system. Investment and support are needed for research and innovation to develop new, future-focused models of care that meet multiple objectives as temperature rise and other changes to the climate are inevitable.
    - **Climate positive public policy**: the policy decision making architecture needs to be renovated to bring it up to speed with this complex and difficult challenge.

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Mechanisms need to be created for climate impacts to health to be formally considered in decisions led by other portfolios (for example vehicle emissions standards). Consideration of the impacts of climate change on health and wellbeing need to be brought into the centre of government policy making.

Furthermore, we would recommend the following changes within Government architecture:

1. **The Minister for Health should be added to the Net-Zero Cabinet Committee** and the impacts of climate change should be **considered in all Cabinet decisions** by requiring a statement to be prepared outlining the expected impacts of the decision on commitments to reduce emissions and build resilience and adaptation.
2. **A Ministerial Council or similar body should be created with the purpose of aligning the mission, objectives and actions of the Commonwealth and States and Territories.** The initial task of such a body must be to agree on a common set of objectives and actions that each jurisdiction will contribute to. This is necessary to deliver the goals of the strategy in a meaningful way, recognising the interdependence of health funding, service delivery, and ultimate health outcomes across jurisdictional boundaries.

In conclusion, to address the compounding impacts of climate change on health, the strategy needs to go beyond providing direction and support to the health system. The strategy needs to be interwoven with government policy making across portfolio and jurisdictional boundaries to ensure that just as climate impacts build on each other, responses are also cumulative and aligned.

Specific comments in response to the consultation questions

Q1: How could these objectives be improved to better support the vision of the Strategy?
The vision outlined in the consultation paper (page 4] could be further strengthened to provide a clear articulation of what success for implementing the Strategy looks like.

Proposed vision: *"the vision of the National Health and Climate Strategy is to set out a roadmap to achieving a healthy community where the impacts of climate change on health are avoided, mitigated, or minimised, and the healthcare sector achieves net zero emissions."*

The Consultation Paper suggests that rather than seeking to achieve agreement on actions across jurisdictions, the Commonwealth is aiming to facilitate a common approach. We strongly urge the government to recognise that cross-jurisdictional responsibilities within the health system render this approach ineffective. The Strategy must outline a pathway to achieving agreement between the Commonwealth and all States and Territories to common objectives, outcomes, targets, and the actions that jurisdictions will take to achieve agreed outcomes.

The four objectives that are set can be further strengthened through the inclusion of meaningful targets and key results so that achievement can be measured.

1. **Measurement and reporting**: suggest amending to "Develop an emissions baseline for the health system and implement a monitoring and reporting system to enable monitoring of emissions over time." Add a measurement objective related to adaptation, for example "Develop a set of indicators of vulnerability to climate impacts. Provide regular public reports tracking mitigation and adaptation indicators."
2. **Mitigation**: suggest amending to "Develop and implement a decarbonisation plan to achieve a net-zero health system by 2040."
3. **Adaptation**: suggest amending to "Identify communities at high risk of climate and health impacts and develop community-led adaptation plans to protect health, build resilience in communities and develop a climate-resilient health system"

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4. **Health in all policies**: suggest amending to "Establish a Ministerial Council or similar body tasked with aligning the mission, objectives and actions of the Commonwealth and States and Territories to ensure all portfolios and jurisdictions have responsibility and accountability for delivering on a common set of outcomes".

We would like to suggest a further objective is added on:

Research and innovation: finance research to quantify the health impacts of climate change and to generate new evidence on innovative measures which offer the greatest protection to health (with associated increased returns on investment), while supporting the overarching objectives on mitigation and adaptation.

In reference to the comments on Page 4: *For First Nations communities, climate change will exacerbate pre-existing high levels of ill-health; compound existing challenges in accessing safe water and appropriate housing, infrastructure, and health services; and affect cultural and spiritual connections to Country,* we suggest the following amendments:

- Suggest amending this to "…climate change will further disconnect First Nations peoples' cultural and spiritual connections to Country and exacerbate pre-existing…"
- The current framing places disconnection to Country at the end of the sentence, however this disconnection resulting from ongoing impacts of colonisation is what is exacerbating high levels of ill-health so should therefore come first.

Q2. How could these principles be improved to better inform the objectives of the strategy?

We are supportive of the principles. In addition, we make the following comments:

- **First Nations leadership**: this principle could be further strengthened by mentioning agency and self-determination (see examples provided in response to Q4 below). There should also be further explanation within the strategy of how this principle is adopted in practice i.e., what this looks like in developing the strategy and any decisions stemming from it.
- Suggest including an Aboriginal and Torres Strait Islander holistic definition of health t underpin the strategy which also strengthens the health in all policies framing.

  For example, the National Aboriginal Community Controlled Health Organization definition of health is "not just the physical well-being of an individual but refers to the social, emotional and cultural well-being of the whole Community in which each individual is able to achieve their full potential as a human being thereby bringing about the total well-being of their community." (NACCHO)

Q3. Which of the various types of greenhouse gas emissions discussed above should be in scope of the Strategy's emission reduction efforts?

The Strategy should include Scope 1, 2 and 3 emissions. It is vital that in developing a decarbonisation plan, the strategy does not rule out activities simply because they might be part of scope 3 emissions. Some scope 3 emissions reduction activities may prove to be more practical or cheaper to implement that reducing scope 1 or 2 emissions. It is also important to have a comprehensive picture of emissions to develop a cost-effective and feasible roadmap to achieve net zero emissions.

Q4. What existing First Nations policies, initiatives, expertise, knowledge, and practices should the Strategy align with or draw upon to address climate change and protect First Nations country, culture, and wellbeing?

First Nations excellence is pivotal to addressing climate change and protecting First Nations Country, culture, and wellbeing. One example is the development and sustained success of the Aboriginal Community Controlled Health Organisation (ACCHO) sector in providing communities holistic and integrated models of health and wellbeing that address social and cultural

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determinants of health[i]. Another example is the excellence of First Nations communities' responses to the COVID-19 pandemic planning, response, and management[ii].
There are several First Nations policies, initiatives, and practices that the Strategy can draw upon/align with:

- The forthcoming National Injury Prevention Strategy uses an Aboriginal definition of health and wellbeing and involves a cross cutting theme on climate and health which specifically references impacts on Aboriginal and Torres Strait Islander communities.
- The George Institute is collaborating with the Yuwaya Ngarra-li partnership[1] which is a partnership between the Dharriwaa Elders Group and University of New South Wales (UNSW) to work to improve the wellbeing, social, built, and physical environment, and life pathways of Aboriginal people in Walgett through collaborating on evidence-based initiatives, research, and capacity building. There are several communities led projects, papers and reports that provide examples of localised initiatives and expertise that the strategy could draw upon.
- Lowitja Institute published a Climate Change and Aboriginal and Torres Strait Islander Health Discussion Paper with relevant outcomes and recommendations to draw upon[iii].
- Recognition of articles from the UNDRIP relating to First Nations health and wellbeing relating to decision making and governance, the right to determining health and social programs, maintenance of cultural practices, rights to lands/territories and resources and decisions impacting these.

  Specifically, alignment with article 29.1 "Indigenous peoples have the right to the conservation and protection of the environment and the productive capacity of their lands or territories and resources. States shall establish and implement assistance programmes for indigenous peoples for such conservation and protection, without discrimination."

The Consultation Paper predominantly focuses at present on First Nations communities in remote areas and should highlight the impacts to Indigenous communities in urban areas as well, particularly as most Aboriginal and Torres Strait Islander people live in urban areas.

In essence, all the examples provided above take a community-first approach. The problems to be addressed are defined and prioritised by communities, and strategies to address the defined problems are co-designed with communities. This is what the principle of self-determination means in practice.

Q5. What types of governance forums should be utilised to facilitate co-design of the Strategy with First Nations people to ensure First Nations voices, decision-making and leadership are embedded in the Strategy?

Engagement with First Nations peoples should be considered from a local, state, and national context to ensure that issues can be addressed at the appropriate scale. Aboriginal community-controlled health services (ACCHS) should be considered a key partner in both identifying issues of concern to local communities, facilitating dialogue, and developing actions and solutions. Other groups that should be included are:

- The National Aboriginal Community Controlled Health Organisation (NACCHO)
- Coalition of Peaks
- Joint council on Closing the Gap
- Expertise from local groups, grassroots organisations, and local Aboriginal lands councils

Recognition of intergenerational knowledge and voice in these forums from youth to Elders/knowledge holders is important.

[1] See report for details https://www.dharriwaaeldersgroup.org.au/images/downloads/YuwayaNgarra-liFoodForumReport27June.pdf

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The George Institute's Guunu maana (Heal) program can provide further advice on ways to effectively engage Aboriginal and Torres Strait Islander was of being, thinking and doing to develop a strategy that appropriately responds to the needs of First Nations peoples and prioritises decolonisation and self-determination.

Q6. Beyond the schemes already noted above, is your organisation involved in any existing or planned initiatives to measure and report on health system emissions and/or energy use in Australia?

No comments on this question.

Q7. What additional data and information is required to support targeted emissions reduction efforts within health and aged care?

To achieve measurable and reliable emissions reductions from the health sector, the Strategy must commission experts in the estimation of emissions to develop a framework for estimating, measuring, monitoring, and reporting emissions in the healthcare sector. This framework would describe a methodology to obtain reliable emissions estimates, identify data sources and gaps, and develop a program to build the emissions inventory. This is a foundational step that must be taken to identify opportunities for emissions reduction that are cost-effective, feasible and appropriate.

The National Greenhouse Gas Inventory (NGGI) is not adaptable to this purpose in our view. The NGGI estimates emissions using the UNFCCC carbon accounting framework that is designed to report emissions by source. To measure the emissions by sector, it is necessary to determine the emissions from all relevant sources that can be attributed to that sector of the economy through life cycle assessment (LCA). There are a variety of methodologies and tools that have been developed to support LCA; however, in our view it is likely that any LCA tool would need to be augmented or modified to take into consideration all sources of emissions across the healthcare sector, and also deliver estimates that are sufficiently robust for public policy and program development and implementation.

Q8. What do you think of these proposed focus areas for emissions reduction? Should anything else be included?

We broadly agree with the sources of emissions but note that as hospitals are one of the largest purchasers of food. The emissions included attributable to foods and beverages need to be included in the supply chain component of emissions. The food and beverage industry contributes to around 1/3 of anthropogenic greenhouse gas emissions, and therefore is important and necessary in climate change mitigation strategies.

Q9. Which specific action areas should be considered relating to the built environment and facilities (including energy and water), over and above any existing policies or initiatives in this area?

The consultation paper does not refer to energy efficiency measures other than the use of the National Australian Built Environment Rating System (NABERS) to identify potential opportunities for emissions reduction. Energy efficiency measures are the most cost-effective way of reducing building emissions and should be considered a very high priority.

Actions that can be taken include:

- Upgrading lighting

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- Improving efficiency of heating, ventilation, and air conditioning systems, and commercial and industrial appliances such as motors through upgrades
- Installing smart energy usage systems to control usage and switch off appliances when not needed.

Energy efficiency measures can be applied to sites throughout the health and aged care system (including existing buildings) and should be supported with financial incentives to encourage their use. State governments have experience implementing energy efficiency strategies and would be well placed to provide advice on the development of appropriate programs.

The consultation paper neglects the importance of building thermal efficiency in its overall emissions. New buildings should be required to meet minimum, ambitious standards of thermal efficiency to minimise the energy required for heating and cooling.

The Strategy should set out timelines for purchase of 100% renewable energy for hospitals and engage with States and Territories to gain support for this measure.

Q10. Which specific action areas should be considered relating to travel and transport, over and above any existing policies or initiatives in this area?

No comments on this question.

Q11. Which specific action areas should be considered relating to supply chain, over and above any existing policies or initiatives in this area?

The Strategy should include emissions from food purchased by health and aged care facilities. Research conducted by the George Institute has shown that apart from meat products, fresh food is lower in emissions that processed and packaged foods. This is primarily due to the additional energy that is required in the processing of food adding to the emissions profile. Fresh, healthy food is better for patients and aged care residents, as well as having the co-benefit of lower emissions. The George Institute's FoodSwitch program includes calculations of greenhouse gas emissions associated with a large database of processed foods.

We recommend that greenhouse gas emissions of processed food and beverage products purchased by hospitals and residential aged care facilities are included in the emissions baseline and emissions reduction actions. The options made available should be higher in fresh fruits, vegetables and minimally processed nuts and legumes, and lower in meats, particularly red and processed meats. These changes can have substantial impacts on both human health and environmental impacts.

Q12. Which specific action areas should be considered relating to medicines and gases, over and above any existing policies or initiatives in this area?

Reducing low-value care is important in reducing overuse of medicines where it has been demonstrated they provide no benefit. This includes overprescribed scans, tests, and pathology; prescribing treatments that have been found to be less effective than alternatives, and prescribing medicines when other interventions such as diet, exercise and preventive medicine would be more effective.

Reducing overuse of medicines where they do not have a clinical benefit will also result in reduced emissions from the production, transport, storage, and distribution of medicines.

The Strategy should:

- Include actions to reduce low value care.

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- include actions to require pharmaceutical manufacturers to list the emissions associated with production.

Q13. Which specific action areas should be considered relating to waste, over and above any existing policies or initiatives in this area?

No comments on this question.

Q14. Which specific action areas should be considered relating to prevention and optimising models of care, over and above any existing policies or initiatives in this area?

Non-communicable diseases (NCDs), such as diabetes, cardiovascular disease, and stroke, are the leading cause of 89% of deaths in Australia, affecting over 50% of the population. People with chronic and complex illnesses are particularly vulnerable to health risks associated with climate change. By taking measures to prevent NCDs, we can enhance resilience to climate-related health issues and improve overall health outcomes.

The healthcare system must explore innovative models of care that alleviate the strain on hospitals, enhance primary care accessibility, and leverage digital and virtual healthcare solutions to overcome geographical and other barriers. Considering the health impacts of climate change, it becomes imperative to develop care models that target the root causes of mortality and morbidity, while also facilitating better access to healthcare services.

The George Institute, in collaboration with Oxford University has developed SmartHealth Pregnancy, a low-cost, smartphone-based system used by female community health workers to identify pregnant and postpartum women with high-risk conditions (including heart disease, stroke and diabetes), refer them to primary health care and facilitate two-way communication between primary care and the community to ensure timely follow-up and adherence to medications and lifestyle advice. These types of tools can improve the quality of care in rural and remote communities and should be considered more widely.

The Strategy should also specifically mention Aboriginal and Torres Strait Islander patients and models of care, the National Aboriginal and Torres Strait Islander Health Plan 2013–2023 makes specific reference to culturally safe models of care.

For First Nations communities the primordial prevention and primary prevention areas are most important as so much of the ill-health burden is impacted by social and cultural determinants of health and wellbeing stemming from ongoing impacts of colonisation.

Q15. What can be done to involve private providers within the health system in the Strategy's emissions reduction efforts?

No comments on this question.

Q16. Where should the Strategy prioritise its emissions reduction efforts?

a) **How should the Strategy strike a balance between prioritising emissions reduction areas over which the health system has the most direct control and prioritising the areas where emissions are highest, even if it is harder to reduce emissions in these areas?**

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b) Which of the six sources of emissions discussed above (on pages 16 to 21) are the highest priorities for action?

To identify priorities for emissions reduction it is necessary first to build a robust emissions baseline that can be monitored and reported on over time. The National Greenhouse Gas inventory (NGGI) is not suitable for this task, because the Inventory reports emissions by source using UNFCCC accounting. To build an emissions profile by sector, the emissions from each source need to be identified and attributed to the sector. This requires a life cycle assessment (LCA) methodology to be developed that is appropriate to the health system. While there are numerous LCA methodologies, including those developed specifically for hospitals, it is likely that these will need to be modified or augmented to provide a comprehensive picture of emissions in the Australian healthcare system, and ensure that estimates are sufficiently robust to be used for policy and program development and implementation.

It is recommended that the Department engage experts in the development of emissions baselines to develop one for the health system.

The second action that needs to be taken to inform prioritisation of emissions reduction actions is the development of a marginal abatement cost curve (MACC) for emissions reduction opportunities in the healthcare system. A MACC graphs the size of the potential emissions reduction in CO^2 equivalent against the estimated cost of delivering the reduction. In this way it presents a menu of emissions reduction opportunities from the least to highest cost, with an indication of the size of emissions reduction that will be achieved.

By developing an emissions baseline and the MACC, it is possible to map pathways to net zero.

It is recommended that following the development of an emissions baseline and MACC for the healthcare system, these form part of a decarbonisation plan for the sector.

Q17. What 'quick wins' in relation to emissions reduction should be prioritised for delivery in the twelve months following publication of the Strategy

To achieve some quick wins, the Department should engage with States and Territories to gain understanding of programs that have successfully delivered emissions reduction at the regional level that could feasibly be scaled up and applied nationally.

As discussed in response to Q9, energy efficiency measures are often the most cost effective and can deliver significant emissions reductions. These should be investigated as a high priority.

Other areas that present clear opportunities are:

- Phasing out desfluorane use
- Decommissioning oil, gas, and coal fuelled boilers in hospitals.

Q18. What health impacts, risks and vulnerabilities should be prioritised for adaptation action through the Strategy? What process or methodology should be adopted to prioritise impacts, risks, and vulnerabilities for adaptation action

The consultation paper identifies most of the key risks to health from climate change. Heat-related illness should include heat stress as well as cardiovascular events, as heat stress attributable to climate change already contributes to 30-35% of heat-related deaths[iv]

Measures to reduce injury resulting from climate impacts should be consistent with the National Injury Prevention Strategy which is under development.

Housing impacts should also include the impact of poor-quality housing as well as housing insecurity. Inadequate quality housing with low thermal efficiency also contributes to heat stress.

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The methodology for developing adaptation plans must explicitly consider social and commercial determinants of health. For example, in a community where there is a high prevalence of alcohol use, measures to address this may support reductions in alcohol-related illness and disease, increasing resilience to the health impacts of climate change.

Q19. Should the Australian government develop a National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan? If yes:

a) **What are the key considerations in developing a methodology?**
b) **How should their development draw on work already undertaken, for example at the state and territory level, or internationally?**
c) **What are the key areas where a national approach will support local/jurisdictional vulnerability assessment and adaptation planning?**

Yes, the Australian Government should develop a National Health Vulnerability and Adaptation Assessment. This should include developing indicators for risk and vulnerability to climate impacts at the community scale.

Adaptation planning should take a strengths-based approach to communities experiencing vulnerability. This involves working with the community to identify strengths and build adaptation strategies from those strengths, rather than applying a one-size-fits-all approach to communities with different climate risks and impacts, health issues and services.

It is critical that communities are included in development of methodology and any reporting, framing and decision making on adaptation planning.

Q20. Would there be value in the Australian government promoting a nationally consistent approach to vulnerability assessment and adaptation planning for the health system specifically, for instance by issuing guidance and associated implementation support tools for states, territories, and local health systems? If yes, what topics should be covered to promote a nationally consistent approach? What examples of existing guidance (either from states/territories or internationally) should be drawn from?

We believe there would be benefit to developing guidance on vulnerability assessment and adaptation planning. Many state and local governments have already conducted their own assessments which would be useful in informing guidance.

21. What immediate high-priority health system adaptation actions are required in the next 12 to 24 months?

We recommend that the Department develop a set of indicators of vulnerability to climate impacts to enable further work.

22. What are the key areas in which a Health in All Policies approach might assist in addressing the health and wellbeing impacts of climate change and reducing emissions?

It is essential that the impacts of climate change are considered in all government policy decisions to ensure that there is a joined-up and consistent approach to tackling global heating. To do the effectiveness of existing decision making structures need to re-consider, and we would recommend the following considerations:

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- The Commonwealth minister for Health is included in the membership of the Net Zero Cabinet Committee.
- the impacts of climate change should be considered in all Cabinet decisions by requiring a statement to be prepared outlining the expected impacts of the decision on commitments to reduce emissions and build resilience and adaptation.
- A Ministerial Council or similar body supported by an expert advisory group should be created with the purpose of aligning the mission, objectives and actions of the Commonwealth and States and Territories.
    - The initial task of such a body must be to agree on a common set of objectives and actions that each jurisdiction will contribute to achieve the objectives of the National Climate and Health Strategy.
    - This is necessary to deliver the goals of the strategy in a meaningful way, recognising the interdependence of health funding, service delivery, and ultimate health outcomes across jurisdictional boundaries.

A Health in all Policies approach is also important to address existing inequities faced by First Nations communities due to the ongoing impacts of colonisation impacting multiple social and cultural determinants of health that sit outside of direct health related policy. Siloed efforts, fragmented funding, and lack of First Nations involvement in decision making have impacted poorly on health outcomes.

23. What are the most effective ways to facilitate collaboration and partnerships between stakeholders to maximise the synergies between climate policy and public health policy? What are some successful examples of collaboration in this area?

As described above, we recommend that a Ministerial Council or similar body is established with representatives from the Commonwealth and all States and Territories to drive agreement on a national consistent approach to addressing the health impacts of climate change and achieving a net-zero healthcare system.

The Ministerial Council should be supported by an expert advisory group that incorporates First Nations representatives, community and consumer representatives including youth, climate scientists, experts in emissions reduction, public health experts, health system managers and other expertise to advise on priority setting, development of appropriate actions and implementation.

For decisions relating to First Nations communities, community governance mechanisms and self-determination are critical to ensuring that solutions are community driven and have broad community support.

Effective engagement and collaboration with First Nations communities must include cultural competency to respond to First Nations history, cultures and the diversity of communities; valuing the cultural skills and knowledge of community organisations and First Nations peoples; clarity about the purpose and the relevant scale for engagement; recognition of a holistic definition of health and wellbeing, particularly the importance of the connection to Country; relationships built on trust, respect and honesty; ongoing communication; effective governance mechanisms that build on existing community strengths and processes; appropriate time frames (including for deliberation and responsive funding, where applicable).

24. How could these enablers be improved to better inform the objectives of the Strategy? Should any enablers be added or removed?

- All enablers are essential from a First Nations perspective.

Research that is led by, for, with First Nations communities to produce meaningful evidence.

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Monitoring and evaluation should also be framed from a First Nations perspective and the principles of data sovereignty adhered to including what, why and how of any data collection and analysis.

About The George Institute for Global Health

The George Institute – a leading independent global medical research institute – was established in Sydney, with additional major centres in China, India, and the UK, and an international network of experts and collaborators. Our mission is to improve the health of millions of people worldwide by using innovative approaches to prevent and treat the world's biggest killers: non-communicable diseases (NCDs) and injury.

Our work aims to generate effective, evidence-based, and affordable solutions to the world's biggest health challenges. We research the chronic and critical conditions that cause the greatest loss of life and quality of life and the most substantial economic burden, particularly in resource-poor settings.

The George Institute's Planetary Health Initiative seeks to embody this ethos, by seeking to ensure that evidence informs the development and implementation of social, economic, and environmental policies to address and reverse the ongoing impacts of ecological change on human health and equity and improve planetary health outcomes. Learn more here.

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References

[i] Pearson, O., Schwartzkopff, K., Dawson, A. *et al.* Aboriginal community controlled health organisations address health equity through action on the social determinants of health of Aboriginal and Torres Strait Islander peoples in Australia. *BMC Public Health* **20**, 1859 (2020). https://doi.org/10.1186/s12889-020-09943-4 https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-020-09943-4

[ii] Crooks, K., Casey, D., and Ward, J.S. First Nations peoples leading the way in COVID-19 pandemic planning, response and management. *Medical Journal of Australiai* **213**, 4 (2020).

[iii] HEAL Network & CRE-STRIDE 2021, Climate Change and Aboriginal and Torres Strait Islander Health, Discussion Paper, Lowitja Institute, Melbourne, DOI: 10.48455/bthg-aj15 https://www.lowitja.org.au/content/Image/Lowitja_ClimateChangeHealth_1021_D10.pdf

[iv] IPCC 2022, 6th Assessment Report, Climate Change 2022: Impacts, Adaptation and Vulnerability, Chapter 11: Australasia, https://www.ipcc.ch/report/ar6/wg2/

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Public Health Association
AUSTRALIA

Public Health Association of Australia submission on the National Health and Climate Strategy Consultation Paper

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Preamble

The Public Health Association of Australia

The Public Health Association of Australia (PHAA) is recognised as the principal non-government organisation for public health in Australia working to promote the health and well-being of all Australians. It is the pre-eminent voice for the public's health in Australia.

The PHAA works to ensure that the public's health is improved through sustained and determined efforts of the Board, the National Office, the State and Territory Branches, the Special Interest Groups and members.

The efforts of the PHAA are enhanced by our vision for a healthy Australia and by engaging with like-minded stakeholders in order to build coalitions of interest that influence public opinion, the media, political parties and governments.

Health is a human right, a vital resource for everyday life, and key factor in sustainability. Health equity and inequity do not exist in isolation from the conditions that underpin people's health. The health status of all people is impacted by the social, cultural, political, environmental and economic determinants of health. Specific focus on these determinants is necessary to reduce the unfair and unjust effects of conditions of living that cause poor health and disease. These determinants underpin the strategic direction of the Association.

All members of the Association are committed to better health outcomes based on these principles.

Vision for a healthy population

A healthy region, a healthy nation, healthy people: living in an equitable society underpinned by a well-functioning ecosystem and a healthy environment, improving and promoting health for all.

The reduction of social and health inequities should be an over-arching goal of national policy and recognised as a key measure of our progress as a society. All public health activities and related government policy should be directed towards reducing social and health inequity nationally and, where possible, internationally.

Mission for the Public Health Association of Australia

As the leading national peak body for public health representation and advocacy, to drive better health outcomes through increased knowledge, better access and equity, evidence informed policy and effective population-based practice in public health.

Executive Summary

Climate change is the biggest challenge to public health in the 21st century.(1) The combination of more frequent and more damaging weather events occurring and the incremental temperature rise means that the Nation's health and health system need to be strengthened.(1)

Simultaneously, the health system needs to be reducing its own contributions to climate change. Accounting for 7% of Australia's emissions, the health sector has a responsibility to ensure the protection, preservation and promotion of Australian's health through mitigating its impact on climate change.(2)

PHAA applauds the Government for their creation of the National Health and Climate Strategy Consultation Paper and strongly urges robust commitment to following through with subsequent action plans, investment, implementation and progress monitoring.

In its current form, the National Health and Climate Strategy still requires significant development. The Consultation Paper lacks defined vision, governance, timeframes, cross-sectoral consideration, detail and First Nations leadership.

PHAA makes the following over-arching recommendations for the final National Health and Climate Strategy. For a full list of PHAA recommendations, please see appendix 1.

- A strong governance structure. Ideally, an Advisory Board on Health and Climate, supported by an interdepartmental committee on health and climate, a robust health workforce and the ACDC.
- Review First Nations research and current adaptation and mitigation practices, embed First Nations leadership within the Strategy and protect the intellectual property of First Nations people.
- Define a vision and reassess the current objectives (Objective 1. Promoting and protecting health and wellbeing, Objective 2. A climate resilient community, Objective 3. A net zero health and aged care system).
- Measurement should not just be of health system emissions, the scope should be far broader and include several health and climate impact issues.
- Clear emissions reduction targets for the health system should be set at a 75% reduction in greenhouse gas emissions below 2005 levels by 2030 and net zero greenhouse gas emissions by 2035.
- Create emissions targets for areas where the health system interacts/relies on another sector.
- Adaptation of both the health system and the factors which affect the community's health.
- Develop ambitious timeframes for emissions reduction and adaptation.
- Health in All Policies should become an enabler and can be achieved through intersectoral collaboration, like an interdepartmental committee on health and climate.

Please do not hesitate to contact PHAA if you have any further questions.

Introduction

PHAA welcomes the opportunity to provide input to the Consultation Paper on the National Health and Climate Strategy. Particularly at this time, where the world has just experienced consecutive record-breaking hottest days and the hottest month ever recorded on Earth.[3] The resulting deaths of which are still being counted, but for perspective, in Europe's 2022 summer (the former hottest summer on record) over 61,000 people perished.[4]

Simultaneously, South Korea is experiencing stronger than usual monsoon season.[5]At least 40 people have already died from extreme flooding and landslides, and countless more have been displaced.[5] In Canada, there are currently 880 fires raging, with 25 million acres of land already destroyed.[6] Over 70 million Americans will be breathing in smoke filled air for days to weeks.[7] Two firefighters have already been killed, with deaths from secondary health impacts, like worsened asthma, still being identified.[7]

None of this is normal. We can no longer say "impending effects of climate change", the effects are here, and human and environmental health is suffering due to minimal attempts at climate mitigation and adaptation.

Climate change is a serious threat to human life and health, and is the biggest public health threat of the 21st century.[8] From direct impacts like heat stress and drowning, to indirect impacts, like decreased mental health and unreliable food sources, to environmental impacts like an increase in infectious diseases.[9]

We are too late to stop climate change completely, but we can stop it from becoming worse.[10] The 2020s are a pivotal time to reduce emissions, decrease reliance on unsustainable practices and energy resources and prepare communities for the changes that are occurring in the climate.[10]

In the Honourable Mark Butler MP's own words:

"Climate change poses a serious threat to the living standards of future generations and to the quality of our natural environment. And the longer we delay action to combat climate change, the more serious those threats will be for our children and grandchildren to manage… Most governments, communities and corporate boardrooms around the world are no longer debating whether they should take action on climate change – they're now debating what action they should take, and how quickly" – Hon. Mark Butler MP *Climate Wars*[11]

PHAA welcomes the debate and fully supports the Government's creation of a National Health and Climate Strategy that has a dual focus on emissions reduction and population adaptation and resilience.

PHAA Response to the National Health and Climate Strategy Consultation Paper Inquiry Terms of Reference

Governance

With no clear definition of a governing structure, PHAA makes the following recommendations as to how the National Health and Climate Strategy (NHCS or "the Strategy") could be implemented through the Australian Centre for Disease Control (ACDC) and what changes need to occur to the public health workforce.

Australian Centre for Disease Control

The ACDC will have the core mission of protecting the health of Australians. Consistent with PHAA's submission on the *Role and Functions of an Australian Centre for Disease Control* and the functions we delineated for the ACDC, we believe the NHCS' implementation appropriately aligns with the ACDC's remit.

The focus on a One Health approach in both the NHCS and the ACDC should make planning and execution easier to coordinate for two main reasons: cross over of workforce skills and of functions/needs.[12]

Aligned workforce skillset

One Health is an integrated, unifying approach that aims to sustainably balance and optimize the health of people, animals and ecosystems.[13]

To achieve this, the ACDC workforce will need to have a diverse range of expertise for emergency response and regular surveillance tasks. ACDC would need experts in public health, medicine, veterinary medicine, social science, engineering, immunology, etymology, ecology, environmental health, economics etc.

These skills are also required for the mitigation and adaptation challenges presented by climate change. Particularly regarding monitoring, disaster response, implementation management and workforce training. Implementation of the NHCS will rely on these abilities of the ACDC. The ACDC's multi-disciplinary structure could allow for easier collaboration internally and externally with other agencies.

Should the ACDC not become the delivery agency for the NHCS, the alternative might the Department of Health and Aged Care (DoHAC) or a smaller advisory board collaborating with agencies and departments.

Alignment of workforce functions and requirements.

Considering the ACDC's potential functions, there are responsibilities that crossover with the implementation needs of the NHCS, including:

- Managing and preventing biosafety emergencies.
- Collaborating with research institutions and laboratories.
- Designing and implementing national public health programs.
- Disease prevention and control (including infectious disease).

- Disease surveillance, evaluation, and data analysis.
- Emergency preparedness and response.
- Expert advice and guidance.
- Health promotion.
- Health workforce education and development.
- International collaboration.

The aligning skillset and functions of the ACDC and the NHCS provides an opportunity to effectively and efficiently protect the health of all Australians from climate change.

Recommendation: PHAA supports the placement of the NHCS within the remit of the ACDC.
Recommendation: The NHCS must take full advantage of the breadth of health specialities internally within the ACDC and externally.

Implementation

PHAA notes that the consultation paper does not consider how the NHCS should be implemented.

Responsibilities

PHAA recommends an Advisory Board on Health and Climate be established (perhaps by legislation) to advise the Health and Climate Change Ministers on the implementation of the Strategy. The Advisory Board should include representatives of hospitals, general and allied health professionals, Aboriginal Community Controlled Health Services, public health specialists, emergency disaster co-ordinators, climate scientists, consumers and climate and health experts and national climate agencies.

The Advisory Board should be supported by an interdepartmental committee on climate change made up of senior health officials and climate change coordination representatives from all jurisdictions. As well as representatives from different departments who may be involved in that department's climate initiatives. The committee should produce for the Board an annual report on climate and health mitigation and adaptation progress. This report and recommendations should then be presented to the Ministers.

The Advisory Board should be responsible for setting research agendas, and approving grants and research programs outside of existing structures, such as the National Health and Medical Research Council. The Advisory Board function should be linked into the ACDC to ensure alignment on strategy and initiatives. There should also be coordination with EnHealth and the Australian Health Protection Principal Committee, with shared implementation objectives on key areas of the Strategy.

Appropriate governance structures means efficient action and structured intersectoral collaboration.

Recommendation: An Advisory Board on Climate and Health should be established to oversee the implementation of the NHCS. The Board should report directly to the relevant Ministers.
Recommendation: The Advisory Board on Climate and Health must have public health, First Nations, clinical health, emergency response and climate officials as members.
Recommendation: Annual progress reports on implementation should be created by the intersectoral committee on climate and health and presented to the Advisory Board.

Timeframe

The NHCS needs timeframes. Climate change is already threatening the lives of many Australians and decreasing the health sector's ability to care for the public.[14,15]

PHAA supports a three-year timeline, however, the NHCS is going to require much longer-term action, monitoring, reporting and revision. An initial three-year plan is needed for completing the National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan, creating the governance infrastructure, developing the workforce and initial implementation of action items.

Also, the NHCS' actions should all have measurable goals and timelines for achievement. An action plan to accompany the Strategy should set clear timelines for targets in the short, medium and long-term. Monitoring of these achievements would be in the annual progress report presented to the Advisory Board.

Another timeframe that impacts on the NHS is the establishment of the ACDC in January 2024 with an initial focus on health emergencies.[16] As climate change is a health emergency,[17] implementing the NHCS should form one of the ACDC's first priorities.

Recommendation: The NHCS requires a timeframe for implementation. The timeframe should include short, mid and long-term actions and measurable indictors.
Recommendation: Implementing the NHCS should form one of the ACDC's first priorities

Public Health Workforce

To implement this Strategy it is essential that the staff of the national public health workforce (PHW) be taken into account. In particular, the Strategy must focus on workforce development and co-ordination.

Public Health Workforce Development

There is a pressing need for the Australian PHW to grow in size. It must also develop in disciplinary diversity, rather than focusing only on medico-centric public health. The PHW also needs to grow across jurisdictions, as currently there are significant variations between states and territories. Enhancing the public health workforce with a wide skillset and experience is essential to prepare for future emergencies.

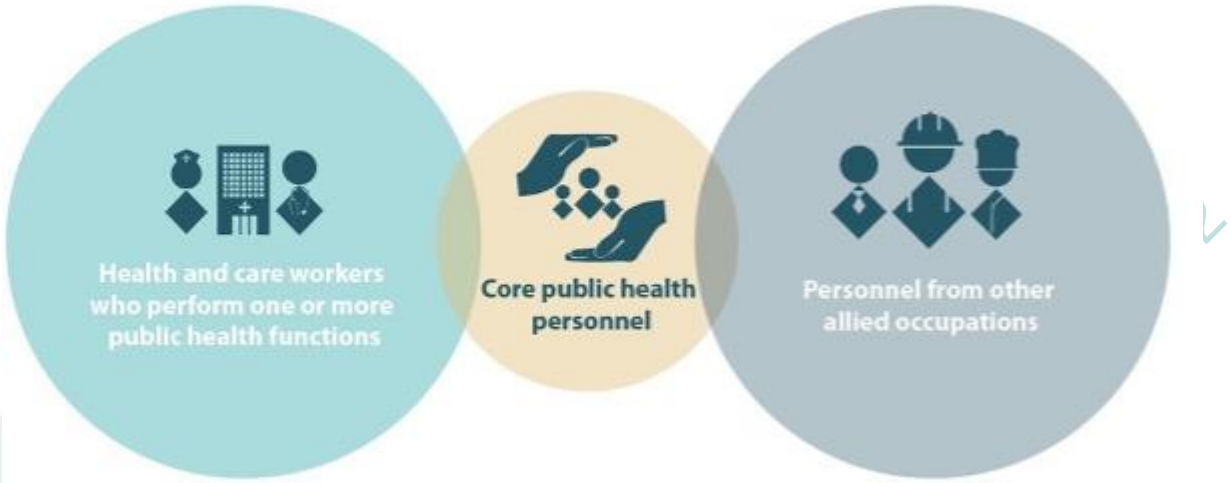
In the most recent WHO evaluation of Australia's capabilities under the International Health Regulations, which commit signatory nations to developing capabilities to respond to and manage acute public health threats and events, several areas for improvement were observed:

- Develop the public health workforce both generally and for surge capacity, but particularly in areas with limited specialists (including radiation and toxicology specialists and clinical virologists).
- Harness the use of genome data in disease surveillance.
- Conduct training and exercises across Australian Government agencies and jurisdictions to identify areas requiring improvement, sharing and implementation of lessons.
- Greater coordination between the human and animal health sectors, including integration of laboratory networks across sectors.[18]

The WHO report noted that although Australia had training opportunities, there was a concerning shortage in number of workforce and a shortage of essential specialists.[18]

Recently the WHO has defined the PHW as including people who are trained and work entirely in public health as a core but relatively small profession, distinct from other parts of the health and care workforce.

Figure: Composition of the workforce which delivers the essential public health functions (WHO)



During the 2019-20 Black Summer Bushfires, pharmacists exercised emergency public health measures, like promoting mental health awareness. However, pharmacists reported feeling inadequately trained to deliver effective mental health promotion considering the scale of the disaster.(19) Developing the PHW requires public health emergency training that includes climate emergencies.

Australia should professionalize its PHW through accreditation of core public health education programs, enabling graduates to become registered as public health practitioners. Furthermore, the need to maintain continuing professional development can be delivered through an associated credentialing program for regular re-registration.

Assigning responsibility of the NHCS within the ACDC ensures the ACDC can play a clear role in developing the skills of the PHW. The ACDC should also be responsible for specialty fellowship training, as well as traineeship and mentorship exchange programs in areas related to emergency preparedness and response, such as Public Health Leadership and Public Health Informatics programs, noting that this training can apply to both the adaptive and mitigative fields.

Public Health Workforce Co-ordination

The ACDC should foster the multi-sectoral involvement required to implement, measure and monitor the NHCS. The ACDC can take on a coordination role to support public health responses and cross sector collaboration, with real-time data sharing, better planning and building relationships across jurisdictions.

As seen in previous climate disasters, responsibilities between federal, state and local levels are often poorly demarcated. The NHCS provides an opportunity to assign both adaptation and mitigation responsibilities within the public health and emergency workforce across the various levels of government.

Recommendation: Define the public health workforce.
Recommendation: Public health workforce training must be included in the ACDC.
Recommendation: The implementing body of the NHCS must assign health system and public health adaptive and mitigative responsibilities across the jurisdictions.

First Nations Leadership

Q4. What existing First Nations policies, initiatives, expertise, knowledge and practices should the Strategy align with or draw upon to address climate change and protect First Nations country, culture and wellbeing? & Q5. What types of governance forums should be utilised to facilitate co-design of the Strategy with First Nations people to ensure First Nations voices, decision-making and leadership are embedded in the Strategy?

The Strategy as it stands does not adequately speak to First Nations concepts, knowledge, initiatives, or policies.

The NHCS requires further revision of the knowledge already available. Also, writing on this part of the Strategy must be led by a First Nations person in order to properly convey key concepts and expertise. Acknowledging that there should be First Nations voice core to the production of each part of the NHCS.

Further, while the Strategy acknowledges the importance of First Nations peoples understanding of the environment to its success, it does not recognise the need for legislation to protect Indigenous Knowledges to ensure First Nations peoples are not further subjugated through this process.

First Nations peoples currently do not feel safe to share their wisdom around land management and native plants/animals, due to ongoing misappropriation of their knowledge. The NHCS recognises the importance of this knowledge, however there is no mention of Intellectual Property (IP) and the need for appropriate benefit-sharing with First Nations communities. Indeed, the knowledge that First Nations peoples have from over 65,000 years of land management, cultivation of native plants and sustainable practices, will benefit all Australian's health. However, until this wisdom is acknowledged and protected through appropriate legislation and benefit-sharing, it is important that policies include a call for this protection, acknowledge First Nations IP, and include appropriate benefit-sharing.

Recommendation: Ensure that this section of the NHCS is developed, and to the extent possible written, by First Nations people.
Recommendation: Include a section around First Nations IP and benefit-sharing with community that acknowledges First Nations peoples, by design, as the owners of native plant/animal and land management practice IP.
Recommendation: First Nations governance groups should be able to provide high-level guidance on the Strategy at key points in its development, implementation planning, implementation rollout and monitoring.
Recommendation: First Nations governance to consist of a convened group of First Nations peoples, including experts, and key sector representatives of First Nations health and wellbeing (e.g., NACCHO and the Lowitja Institute).

Concepts of health and wellbeing

The Australian Institute for Health and Wellbeing states that, "good health is … a holistic concept that includes physical, social, *emotional, cultural, spiritual and ecological wellbeing*, for both *the individual and the community*. This concept of health emphasises the connectedness between these factors and recognises the impact that social and cultural determinants have on health".[20]

Wellbeing is shaped by culture, experience and beliefs, therefore will be defined differently for everyone. The NHCS must demonstrate nuance about the negative impacts climate change are having and will continue to have on First Nations cultural practices.

For example, during PHAA's consultation for this submission with a Pakana woman and PHAA member, we were informed of her community's experience creating an adaptation to climate change to preserve cultural heritage and wellbeing for both community and individual. She articulates the impact of climate change, which forced the community to develop solutions:

"*in Tasmania the rise in acidity of the oceans is having devastating impacts on our marine life. The higher acidity of the ocean is stopping the kelp from being able to grow, this reduces the amount of kelp for molluscs to live on. These molluscs have the shells that are used in our practice called kanalritja. The high acidity is also resulting in the shells being very thin and fragile. This has resulted in the shells needed to practise kanalaritja being much fewer in number and being so fragile that they are more likely to break. Kanlaritja, which is one of our oldest cultural practices that have been passed down through our matriarchal lines since time immemorial, is under threat due to the extinction of these shells*."

Through the collection, cleaning and stringing together of shells, an emotional and meaningful bond is made between the women as they work on the kanalaritja.[21] Importantly, the women also use this time to connect with each other and the Elders pass down stories, culture and knowledge. The flow on positive effects for health and wellbeing to the individuals and community are unquantifiable: sense of belonging, socialisation, feeling of connection to your ancestors, purpose, to list a few.

The intrinsic link between cultural, spiritual and ecological health and wellbeing is unique and must be part of the NHCS.

Recommendation: Revisit the language used around First Nations health and wellbeing. The Lowitja Institute's *Climate Change and Aboriginal and Torres Strait Islander Health Discussion Paper* is useful for direction as to the unique climate change impacts for First Nations people.

Current First Nations led adaptation and mitigation leadership

The kanalaritja story provides a clear example of a First Nations led approach to adaptation and mitigation. The threat of losing kanalaritja has led to the adaptive measure of 3D printing shells, which has been received as a positive way to ensure continued cultural practice.[21] However, there were concerns that this could mean less interest in mitigating climate change.[21] A concern shared in public health also.

Through discussion, there was agreement that mitigation must have ongoing attention, but if the changes needed to stymie climate change fail, then there is an option available for people to continue kanalaritja.

Recommendation: Mitigation and adaptation need equal and urgent action. We should continue mitigating climate change and we need to be protected from the harms already occurring.

Co-design to ensure First Nations voices, decision-making and leadership

In a recent study, six key principles were identified as foundational to effective co-design with Australian First Nations people: First Nations leadership, Culturally grounded approach, Respect, Benefit to community, Inclusive partnerships, and Transparency and evaluation.[22,23] Please note that there are accompanying best-practice approaches that support these principles (refer to recommended sources).

Recommendation: Review all First Nations led initiatives and projects already achieving mitigation and adaptation work. Then can provide feedback and endorsement on the findings and ensure the Strategy is community informed.

Recommendation: A First Nations governance group or review team should conduct case-studies with the First Nations individuals and groups acting on mitigation and adaptation.

PHAA recommends the following research materials for the drafting team to consider:

- Garvey, G., Anderson, K., Gall, A., Butler, T. L., Cunningham, J., Whop, L. J., Dickson, M., Ratcliffe, J., Cass, A., Tong, A., Arley, B., & Howard, K. (2021). What Matters 2 Adults (WM2Adults): Understanding the Foundations of Aboriginal and Torres Strait Islander Wellbeing. *International Journal of Environmental Research and Public Health*, *18*(12), 6193. https://doi.org/10.3390/ijerph18126193
- Garvey, G., Anderson, K., Gall, A., Butler, T. L., Whop, L. J., Arley, B., Cunningham, J., Dickson, M., Cass, A., Ratcliffe, J., Tong, A., & Howard, K. (2021). The Fabric of Aboriginal and Torres Strait Islander Wellbeing: A Conceptual Model. *International Journal of Environmental Research and Public Health*, *18*(15), 7745. https://doi.org/10.3390/ijerph18157745
- Butler, T., Gall, A., Garvey, G., Ngampromwongse, K., Hector, D., Turnbull, S., Lucas, K., Nehill, C., Boltong, A., Keefe, D., & Anderson, K. (2022). A Comprehensive Review of Optimal Approaches to Co-Design in Health with First Nations Australians. *International Journal of Environmental Research and Public Health*, *19*(23), 16166. https://doi.org/10.3390/ijerph192316166
- Anderson, K., Gall, A., Butler, T., Ngampromwongse, K., Hector, D., Turnbull, S., Lucas, K., Nehill, C., Boltong, A., Keefe, D., & Garvey, G. (2022). Development of Key Principles and Best Practices for Co-Design in Health with First Nations Australians. *International Journal of Environmental Research and Public Health*, *20*(1), 147. https://doi.org/10.3390/ijerph20010147
- https://www.lowitja.org.au/content/Image/Lowitja_ClimateChangeHealth_1021_D10.pdf

Vision, Objectives, Principles

Q1. Do these objectives support the vision of the Strategy?

The National Health and Climate Strategy draft does not offer an overall vision statement.

Recommendation: PHAA supports the Climate and Health Alliance's (CAHA) suggested vision statement, "A climate resilient community and net zero healthcare system", and the following proposed purpose: "To support the development and coordination of initiatives that ambitiously minimise the impacts of climate change on the health of the population, and on the health system, and to guide efforts to reduce the health sector's contribution to climate change."

The objectives provided in the draft NCHS are non-descriptive and require refining. For instance, *measurement* is not an objective, but an enabler. Similarly, Health in All Policies (HiAP), is a mechanism to achieve better health objective, but is not an objective itself.

Recommendation: PHAA supports the CAHA's suggestion of renaming and merging the four objectives down to three:

- Objective 1. Promoting and protecting health and wellbeing. (*Instead of Health in All Policies)*
- Objective 2. A climate resilient community. (Instead of *adaptation*)
- Objective 3. A net zero health and aged care system. (Instead of *Measurement* and *Mitigation*)

Q2. How could these principles be improved to better inform the objectives of the Strategy?

We offer the comments made in the table below.

Principle	PHAA Recommendation
1. First Nations leadership	Support is dependent upon transparency of what First Nations leadership will look like.
2. Tackling health inequities	Principle title and subsequent explanations seem contradictory. Use of "tackling" seems to suggest DoHAC wants to decrease presence of health inequities, however description applies more to additional protections required for people who are susceptible to these inequities. A vision would help to identify where the focus will land regarding promotion, protection and prevention. We support protection in this Strategy.
3. Population health and prevention	Support.
4. One Health	Support. PHAA also recommends use of Planetary Health principles as well. This will assist in principle 2 also.
5. Evidence -Informed Policy making	Support. Also acknowledge that lived experience of patients, pilots, experiments, demonstration sites, data from organisations undertaking their own climate adaptation and environmental sustainability activity, and grey literature are important evidence to consider.
6. Partnership-based working across all levels of government and beyond	Public health workforce also to be included into this principle.

Objective 1: Measuring Health System Greenhouse Gas Emissions

Q.7 What additional data and information is required to support targeted emissions reduction efforts within health and aged care?

Australia should meet its emission reduction promises in line with The Paris Agreement.[24] This does not involve the expansion of the fossil fuel industry, nor the use of gas as a "transitional" product.

There are many health-related climate concerns that require measuring, not just health sector emissions. For instance, the various health impacts of climate change (e.g., morbidity, mortality, epidemiological studies, social surveys, recognising and monitoring heat stress presentations), occurrence of insurance pay-outs and fee increases and their drivers. Additionally, progress on the strategy's performance indicators will need to be monitored as well.

Recommendation: Measurement should not be limited to the greenhouse gas emissions of the health sector, but should include all health impacts from climate change.
Recommendation: Establish a capability to report on carbon emissions of the public *and* private health systems.

Objective 2: Mitigation

Q8. What do you think of these proposed focus areas for emissions reduction? Should anything else be included?

The health sector accounts for 7% of Australia's emissions.[2] Without action to reduce emissions, health facilities will be overburdened by extreme weather, staffing issues, increased infectious diseases and supply chain issues with food and water.[9] The health sector should not be approached as a 'silo' distinct from other parts of the economy. Along with the emissions of built environment, waste, etc., the health system intersects with other sectors that it could influence to reduce emissions. The NHCS must create an encompassing but health driven vision for mitigation and set clear goals for emissions targets.

Setting clear targets

Currently, the world is on track to warm by 3.2 degrees Celsius.[10] The Intercontinental Panel on Climate Change have been clear that the 2020s are a crossroads for driving that temperature rise down.[10]

Leading nations have made substantial emissions reduction pledges. The USA has pledged to reduce health sector emissions by 50% by 2030 (baseline no earlier than 2008) and achieve net-zero by 2050, publicly accounting for progress on this goal every year.[25] As well as designate an executive-level lead for their work on reducing emissions by 2023 and conduct an inventory of Scope 3 emissions by the end of 2024.[25]

The UK has committed to delivering the first net zero health service.[26] They aim to decrease the emissions the health sector control to net zero by 2040 and the emissions it can influence to net zero by 2045.[26]

Both nations have clear targets and have committed to reduce emissions of sectors which interact with the health sector. Australia's Strategy will need to set similar targets accompanied by an implementation timeline, frequent and transparent progress measuring and reporting, and key performance indicators.

Recommendation: NHCS should outline how the Department of Health can support emissions reductions that benefit health outcomes across all sectors, particularly those it directly interacts with.
Recommendation: The Government should set national targets of a 75% reduction in greenhouse gas emissions below 2005 levels by 2030 and net zero greenhouse gas emissions by 2035,[27] in line with best-evidence from the Intergovernmental Panel on Climate Change.[28]
Recommendation: Health system (and adjacent sectors) emissions target will need to be established along with strategies for communicating reduction targets, identifying carbon hotspots within and adjacent to the health system, prioritisation of mitigation actions, effective governance and accountability structures, appropriate resource allocation and policy development and set a common pathway for decarbonisation of the Australia's health and aged care system.
Recommendation: The Government should establish an applied research program for health institutions and organisations to develop mitigation measures along the model of the Australian Research Council Industry Partnership research grants.

Q9-17

PHAA does not have expertise in the hospital, clinical or transport energy usage and emissions of the healthcare sector. We support the recommendations of the Climate and Health Alliance on these matters.

Objective 3: Adaptation

What is this Strategy's scope for adaptation?

PHAA strongly encourages broad HiAP thinking. But it is unclear what the adaption vision is in this draft NHCS and how that differs from the adaption vision of the National Adaptation Plan.

The Strategy should consider what is the DoHAC's role in adapting the health system and community health, what is the goal and how do these differ/correspond to what might be included in the National Adaptation Plan.

Q.18 What health impacts, risks and vulnerabilities should be prioritised for adaptation action through the Strategy? What process or methodology should be adopted to prioritise impacts, risks and vulnerabilities for adaptation action?

PHAA would support a plan that has consulted broadly and diversly and keeps the interests of health at its core. We support the development of a National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan.

PHAA supports the need to adapt the health system and agrees with the identified areas in the Strategy. However, the Adaptation section is mono focused on adapting the health system against crisis situations.

The health system is broader than facilities, supply chain and ability to treat. The health system relies on people being well, otherwise it would be overburdened. It would be a missed opportunity to overlook community climate and health adaption alongside health system climate adaption.

Recommendation: Re-assess the NHCS objectives and use health in all policies as a mechanism for mitigation and adaptation.
Recommendation: Focus adaptation on both the protection of the health system and the protection of the community's health against the impacts of climate change.
Recommendation: Fully funded and implemented National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan less than 5 years after the National Health and Climate Strategy is finalised.

Health System

How to protect the health system from climate change

The implementation timeline for the NHCS should include systemic analysis by all health services, to determine their most likely impacts from climate change. A deadline should be set for all health services to develop a *Climate Change Adaptation Plan* outlining preparation requirements for climate challenges.

A *Climate Change Adaptation Plan* would include emergency preparedness, infrastructure assessment, health warning communication, and workforce management and training. This work could be conducted between jurisdictional representatives working on adaptation, the National Health Emergency Management Standing Committee and health promotion/communication experts. Production of *Climate*

*Change Adaptation Plan*s could be mandated in the Australian Council of Healthcare standards, and a performance measure in the National Healthcare Agreement.

Factors to protect the health system from climate change

The *Change Adaptation Plan*s would need to account for two overarching types of climate impacts: *acute* and *incremental* (such as steadily hotter days).

Acute challenges in the health system to consider:

- Damage to facilities during weather events, including loss of power, flooding and fire.[14]
- Increase in acute presentation due to heatwaves, smoke, or injuries from floods/cyclones.[9,29]
- Health workforce ability to meet demand, workers ability to access facilities and populations, preventing workforce mental ill-health.[14]
- Supply chain disruption medicines, gases, personal protective equipment, tools etc.[30]
- Health workforce exposed to extreme heat during heatwaves, e.g., Ambulance workers when responding to emergencies.

Incremental challenges in the health system to consider:

- Increase in health system burden due to increased number of infectious diseases.[9,31]
- Increase in health system burden of non-communicable diseases like mental ill-health,[19] (asthma, cardiac stress, and high blood pressure (decreased air quality, overheating and stress).[9,29]
- Transportation of patients via public transport requiring shaded or inside bus/train/taxi shelters for people to wait due to increased number of hot days.

Recommendation: Australian Council of Healthcare standards should mandate all health services to create *Change Adaptation Plan*s.
Recommendation: Include requirements for the development and implementation of *Change Adaptation Plan*s in the National Healthcare Agreement.
Recommendation: Consider and plan for potential risks to every part of the health system: public, private, clinic, laboratory, hospital, specialty facility, transport, supply chain, vaccination, workforce, and others.

Community Health

Who is the community at risk from climate change

Everyone in Australia will be impacted by the health effects of climate change. Each community will have their own unique challenges and strengths. With rural and remote communities currently at the forefront of climate change,[32] and the First Nations population having a particularly profound connection between their health and wellbeing and the land they and their ancestors have been/are custodians of.[33] Such unique challenges need to be considered during the National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan processes.

Consider urban, coastal, rural, regional, remote, highlands and high countries, children and babies, elderly persons, culturally and linguistically diverse populations, people who work outdoors, levels of health literacy pregnant women and persons, low-socioeconomic persons, people with pre-existing health conditions, people with disabilities, First Nations peoples, people whose livelihood depends on the land; the variety of unique challenges are endless.

Recommendation: When actioning the National Health and Climate Strategy, the National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan, ensure diverse representation when seeking adaptation advice.

How to protect the community's health from climate change

PHAA believes that this Strategy is necessary to provide direction on emissions reduction and adaptation, standardise emissions and health impact measurements and set goals for commonwealth and jurisdictions to achieve. PHAA supports the Australian Government working with states and territories to create timelines and potential criteria for the National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan.

However, local governments and non-governmental organisations will be essential in providing accurate vulnerability assessments for the people who live in the locality and in producing achievable and relevant adaptation planning.

Local government should be supported during assessment, planning and implementation. By financial assistance and/or with personnel, like adaptation planners (some states already have people working in such a position), environmental health workers, universities and non-profit organisations.

Local governments are best positioned to ensure that the community they represent are properly included in the entire adaptation process. Local level could also allow more accurate representation of community input, like hearing ideas from children and young peoples, who aren't often part of submission making, yet will be most impacted by climate change. Further adhering to principle one of this Strategy, learning from First Nations work in co-design could be particularly instrumental at local level.

Recommendation: Set deadlines for when local governments should complete vulnerability assessments and adaption plans. These should be completed using contextually adapted co-design methods with support from State government and/or health disaster response representatives/organisations.
Recommendation: During design, increase number of avenues for children and young people to contribute towards a climate change vulnerability assessment and adaptation plan.

Factors to protect the community's health from climate change

As mentioned previously, Health in All Policies can be easily applied to adaptation strategies. PHAA highlights the below considerations to be addressed to protect the health and safety of all Australians. It should be noted the breadth of sectors that DoHAC will need to communicate with to ensure adaptation protects people's health. Our recommendations as to cross-sectoral communication are under Objective 4.

Challenges for community health to consider:

- Food insecurity due to supply chain disruption (production, transport, processing),[34,35] or inability to safely walk or catch public transport to grocery stores due to excess heat.
- Disrupted access to clean and safe water due to drought, flooding or cyclone damage.[36]
- High temperatures in classrooms and during lunch breaks.[37]
- Plans for continuing education after a disaster impacts school facilities, staff and students.[37]
- Availability of mental health and wellbeing resources during and after climate events.[38,39]
- Town planning adjustments for walkability, shade, urban heat island effect, drought resistant plants, cooling centres, indoor facilities for some sports, etc.

- Better public warning systems for hot days, heat waves, asthma storms, water safety, flood, fire.
- How to encourage safe recreational and health focused physical activity during hotter/wetter days.
- Adapt housing standards to ensure houses are not being built in flood/fire zones and reinforcing those that are already built, or excess rain.[40]
- Health promotion tools which educate on health risks and provide instruction without inciting fear.
- Ecological methods of mitigation, like regenerating mangrove ecosystems to minimise sea surge.[41]
- Health promotion campaigns around health protection on key issues, like heat stress, smoke in the air, flooding and community resilience.
- Evacuation of people who may not have access to a car (e.g., people with low incomes, children, people with disabilities or the elderly)

Recommendation: Apply a health in all policies approach and consider broad impacts on health. The Strategy should lay out a plan of relevant sectors and key actions that will protect health.

Q.19 Should the Australian government develop a National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan? Yes.
b) How should their development draw on work already undertaken, for example at the state and territory level, or internationally?

There are many examples of local, state and international governments completing work on this. DoHAC should seek to converse with relevant government representatives who action their jurisdictions' adaptation strategy. Useful examples include:

- City of Melbourne Climate Change Adaptation Strategy Refresh 2017
- Queensland Human Health and Wellbeing Climate Change Adaptation Plan
- Queensland Climate Risk Strategy 2021-2026
- Western Australia Health impacts of climate change: Adaptation strategies for western Australia
- South Australia State Public Health Plan 2019-2024
- Canada HealthADAPT
- United Kingdom Climate and health: applying All Our Health
- Quadripartite One Health Joint Plan of Action (2022-2026)

Recommendation: Review current adaptation plans and consult with relevant stakeholders and community members.

c) What are the key areas where a national approach will support local/jurisdictional vulnerability assessment and adaptation planning?

A national approach would provide guidance in terms of goal setting for outcomes, benchmarking of when outcomes need to be delivered and standardising types of measurement and support. The support would be beneficial for local governments, as not all have the capacity to conduct assessment and planning. Personnel from appropriate national or state bodies, or public health/ environmental protection officers would be required, as well as financial investment. Noting that the cost of preparing is often minimal compared to healthcare costs and disaster costs.[42]

Recommendation: Provide Commonwealth and State financial and personnel support to local government.

Objective 4: Health in all policies

Q.22 What are the key areas in which a Health in All Policies approach might assist in addressing the health and wellbeing impacts of climate change and reducing emissions?

What is Health in All Policies?

PHAA is very supportive of the Health in All Policies approach. The DoHAC should be a leader in climate mitigation and adaptation, so should have a plan with how to engage with other sectors.

HiAP is a mechanism to promote and achieve better health and wellbeing through all sectors that impact the health of the community.[43] In action, HiAP would mean that when policy makers in other sectors are creating policy, they are required to consult with a public health representative. Ideally, this eventuates in policy that is co-beneficial for multiple sectors. Simply put, its health getting a seat at the table.

We encourage the NHCS to create an expanded list of the various relevant non-health sectors as part of the implementation strategy. However, for immediate action, PHAA supports the three areas outlined in the NHCS. We also encourage town planning policy to be a priority and that equity is part of decision making.

Recommendation: Incorporate HiAP throughout other objectives and make it an enabler/principle.
Recommendation: Consider creating a map of where other sectors interact with the health sector and derive co-beneficial climate and health actions from there, as well as from intersectoral consultation.
Recommendation: Review the below examples of how to incorporate healthy policy into other sectors. Each example is co-beneficial to health and the relevant sector, but also can reduce emissions.

Transport

There are two public health concerns with fossil fuel powered vehicles: air pollution which is hazardous to human health,[44] and emissions which contribute to climate change.[45] Also, the extensive reliance on private motor vehicles is a major contributor to the lack of physical activity in Australia.[46]

Creating a national low emissions active transport policy would improve environmental and health outcomes.[44,46] Key actions included in a national policy could include:

- Quality and safe infrastructure for walking and cycling (safe, connected cycle and walkways)
- Workplace facilities for bike storage and showering, and provision of weather proof cycle parking
- Improved availability of green space
- Encourage active and public transport options (subsidies and tax rebates for people and businesses that support active transport and public transport, phasing out diesel vehicles for electric vehicles).

Food, Agriculture and Trade

Australian food and nutrition policy should support producers to provide consumers with access to food that is nutritious and promotes ecological sustainability. Sustainable diets protect the climate, ecosystems and biodiversity whilst also ensuring nutritious food reliability for human health.[47] Food production (type and amount of food), processing, availability, waste are critical parts of emission reduction policy.

Two complementary approaches are required to foster ecologically sustainable production and consumption of food. The first is to change consumer demand for a more sustainable food supply. The second is to work with primary producers, the food industry and government to lead changes in the food system to make its processes and outputs ecologically sustainable and socially equitable.[48]

Policy actions which co-benefit human and environmental health and reduce emissions include:

- Development of National Nutrition Strategy addressing the entire food system to reduce emissions, increase resilience and provide sustainable, reliable sources of nutritious food.
- National Nutrition Strategy should include a focus on rural and remote First Nations food security, with particular care and consideration applied to cultural dietary practices.
- Promotion of a diet in keeping with the Food Climate Research Network evidence-based characteristics of a healthy and sustainable diet. This diet should be accessible to all Australians.

Housing

Right to housing is a human right.[40] However, houses must be built in safe locations, must be reinforced if they are vulnerable, energy efficient (for affordability and emissions reduction) and fitted with health promoting installations, like proper ventilation to prevent mould during persistent rains. Similarly, building homes must have sustainability and emissions reductions targets as a standard.

Policy actions with environment and health co-benefits include:

- Establish energy efficiency standards for all buildings (including hospitals, schools, and social housing) to be thermally efficient, renewably powered and climate resilient.
- Ensure health and community services have access to data and information to develop their understanding of the likely impacts and associated costs of climate change on social determinants of health (e.g. gender, cultural and socio-economic status, rurality, housing, employment, food security, built environment).
- Encouraging interdisciplinary research to identify relationships between human health and urban design, energy, housing, food, and water security, transport and other sectors and strategies to respond.

Town planning

Climate disasters and incremental climate change are having/will have a range of effects on how and where people live. For instance, urban heat island may decrease physical activity for urban dwellers and people in coastal communities may have growing anxiety about storm surge.

Risk and emission reduction tools used in town planning that have co-health benefits ensuring that the built environment can withstand a range of natural disasters, preservation of natural ecosystems to protect communities and promoting ecological measures for adaptation.[49]

Examples of co-beneficial town planning and health policy actions include:

- Cool roofs, planting trees, installing shades, creating cooling centres.[50]
- Improving public transport services for people in outer suburbs, regions and rural people.
- Creating and/or expanding car free pedestrian and cyclist only zones.[51]
- Creating safer regulations for buildings constructed in risk prone areas.

Q.23 What are the most effective ways to facilitate collaboration and partnerships between stakeholders to maximise the synergies between climate policy and public health policy? What are some successful examples of collaboration in this area?

Examples of Health in All Policies

PHAA welcomes the inclusion in the draft NHCS strategy of a HiAP approach. HiAP is also consistent with the idea of a wellbeing economy and the global drive to understand the wellbeing of populations as a foundation for economic success, policies which the current Government is also developing through the Treasurer's *Measuring What Matters* initiative. After all, healthy populations are able to contribute more economically.[5,52]

Countries/Jurisdictions using a Health in All Policies approach:

- Finland – Health in All Policies
- South Australia - Health in All Policies
- California, USA - Health in All Policies Task Force

HiAP has had difficulty being implemented in other countries/jurisdictions and there has not been sufficient research to present clear examples. The difficulty stems from lack of governance and lack of funding.

How Australia could achieve Health in All Policies

Good governance will be essential. Due to the breadth of sectors that climate and health cross, it would be appropriate for a national high level interdepartmental committee on climate change and health to be established. This committee should include jurisdictional health and emergency officials as well as representatives from different departments who may be involved in that department's climate initiatives. This committee would be supporting the Climate and Health Advisory Board.

The agenda for this committee could be informed by EnHealth, the ACDC and the Climate and Health Advisory Board. They should be responsible for creating annual progress reports for climate and health mitigation and adaptation strategies and targets. This committee could consider how to progress an agenda for action, which could include:

- Strengthening surveillance of mosquito borne disease
- Food safety and food security
- Energy and transport emissions and air quality
- Urban planning guidelines to address heat islands
- Guidance for community support and mental health services
- Appropriate housing design

Recommendation: Create an interdepartmental committee on climate change, staffed with varied specialities related to climate, but also health specialised staff, to support the Climate and Health Advisory Board. The committee should produce an annual progress report for the Climate and Health Advisory Board, the board should present this to the relevant ministers.

Conclusion

PHAA supports the broad directions of the National health and Climate Strategy. However, we are keen to ensure the necessary changes are made in line with this submission. We are particularly keen that the following points are highlighted:

- A strong governance structure. Ideally, an Advisory Board on Health and Climate, supported by an interdepartmental committee on health and climate, a robust and diverse health workforce and the ACDC.
- Review First Nations research and current adaptation and mitigation practices, embed First Nations leadership at each stage and protect the intellectual property of First Nations people.
- Define a vision and reassess the current objectives.
- Broaden the scope of health and climate issues to measure further than emissions reduction.
- Create clear emission reduction targets for both the health system and sectors adjacent to health.
- Make adaptation about the health system and factors which affect community help. Create a timeline for adaptation with key performance indicators.
- Health in All Policies can be achieved through an interdepartmental committee on health and climate.

The PHAA appreciates the opportunity to make this submission and the opportunity to further impress upon the Department of Health and Aged Care just how critical it is to act now on mitigating and adapting to climate change for the sake of the Nation's health.

Please do not hesitate to contact me should you require additional information or have any queries in relation to this submission.



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24/07/2023

References

1. World Health Organization. Newsroom. 2021 [cited 2023 Jul 17]. Climate change and health. Available from: https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health
2. Malik A, Lenzen M, McAlister S, McGain F. The carbon footprint of Australian health care. Lancet Planet Health [Internet]. 2018 Jan [cited 2023 Jul 17];2(1):e27–35. Available from: https://doi.org/10.1016/S2542-5196(17)30180-8
3. Whiting K. World's hottest day and month recorded – plus other nature and climate stories you need to read this week. World Economic Forum: Forum Agenda [Internet]. 2023 Jul 11 [cited 2023 Jul 20]; Available from: https://www.weforum.org/agenda/2023/07/world-hottest-day-nature-and-climate-stories/
4. Giuffrida A, Smith H. Extreme temperatures recorded across northern hemisphere. The Gaurdian [Internet]. 2023 Jul 18 [cited 2023 Jul 20]; Available from: https://www.theguardian.com/world/2023/jul/17/extreme-temperatures-recorded-across-northern-hemisphere
5. Yoon J, Young JY. South Korea's Monsoon Rains Set Off Deadly Landslides and Flooding. The New York Times [Internet]. 2023 Jul 17 [cited 2023 Jul 20]; Available from: https://www.nytimes.com/2023/07/14/world/asia/south-korea-floods-rain.html
6. Newton P. As wildfires gobble more Canadian acreage, crews struggle to even keep up. CNN [Internet]. 2023 Jul 18 [cited 2023 Jul 20]; Available from: https://edition.cnn.com/2023/07/17/weather/canada-wildfires-shatter-burning-records/index.html
7. Cooney C. Canada wildfires: Second firefighter dies amid record blazes. BBC News [Internet]. 2023 Jul 17 [cited 2023 Jul 20]; Available from: https://www.bbc.com/news/world-us-canada-66218679
8. World Health Organization. World Health Organization. 2021 [cited 2023 Jul 20]. Climate change and health. Available from: https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health
9. Australian Academy of Science. THE RISKS TO AUSTRALIA OF A 3°C WARMER WORLD [Internet]. Canberra; 2021 Mar [cited 2023 Jul 17]. Available from: https://www.science.org.au/files/userfiles/support/reports-and-plans/2021/risks-australia-three-deg-warmer-world-report.pdf
10. Working Group III. Intercontinental Panel on Climate Change. 2022 [cited 2023 Jul 11]. The evidence is clear: the time for action is now. We can halve emissions by 2030. Available from: https://www.ipcc.ch/2022/04/04/ipcc-ar6-wgiii-pressrelease/
11. Butler M. Climate Wars. Melbourne University Press; 2017.
12. Department of Health and Aged Care. Role and Functions of an Australian Centre for Disease Control [Internet]. Canberra; 2022 Nov [cited 2023 Jul 6]. Available from: https://www.health.gov.au/sites/default/files/documents/2022/11/role-and-functions-of-an-australian-centre-for-disease-control_0.pdf
13. FAO, OIE, UNEP, WHO. ONE HEALTH HIGHLEVEL EXPERT PANEL ANNUAL REPORT 2021 [Internet]. [cited 2023 Jul 19]. Available from: https://www.who.int/publications/m/item/one-health-high-level-expert-panel-annual-report-2021
14. Loosemore M, Mirti A V. BARRIERS TO BUILDING RESILIENCE TO EXTREME WEATHER EVENTS IN AUSTRALIAN HOSPITALS. In: ARCOM 2016 [Internet]. Manchester; 2016 [cited 2023 Jul 18]. Available

from: https://www.researchgate.net/publication/312157976_BARRIERS_TO_BUILDING_RESILIENCE_TO_EXTREME_WEATHER_EVENTS_IN_AUSTRALIAN_HOSPITALS

15. Climate and Health Alliance. Healthy, Regenerative and Just: Framework for a national strategy on climate, health and well-being for Australia [Internet]. Melbourne; 2021 Oct [cited 2023 Jul 12]. Available from: https://d3n8a8pro7vhmx.cloudfront.net/caha/pages/1947/attachments/original/1639623234/caha-framework-2.0-FA.pdf?1639623234
16. Department of Health and Aged Care. Australian Government. 2023 [cited 2023 Jul 20]. Australian Centre for Disease Control. Available from: https://www.health.gov.au/our-work/Australian-CDC#:~:text=international%20counterparts.-,Status,of%20the%20interim%20Australian%20CDC.
17. Kammila S. The climate crisis is a health crisis. United Nations Development Programme [Internet]. 2022 Jun 7 [cited 2023 Jul 20]; Available from: https://www.undp.org/blog/climate-crisis-health-crisis
18. World Health Organization. JOINT EXTERNAL EVALUATION OF IHR CORE CAPACITIES AUSTRALIA [Internet]. Geneva; 2018 [cited 2023 Jul 10]. Available from: https://apps.who.int/iris/handle/10665/272362
19. Moss A, Green T, Moss S, Waghorn J, Bushell MJ. Exploring Pharmacists' Roles during the 2019–2020 Australian Black Summer Bushfires. Pharmacy [Internet]. 2021 Aug 19 [cited 2023 Jul 10];9(3):142. Available from: doi: 10.3390/pharmacy9030142
20. Australian Institute of Health and Welfare. Australia's Health 2018 [Internet]. Canberra; 2018 [cited 2023 Jul 7]. Available from: https://www.aihw.gov.au/getmedia/110ef308-c848-4537-b0e7-6d8c53589194/aihw-aus-221-chapter-6-2.pdf.aspx#:~:text=For%20Aboriginal%20and%20Torres%20Strait,the%20individual%20and%20the%20community.
21. Moran A. How 3D printing can help preserve this sacred jewellery practice. National Indigenous Television: SBS [Internet]. 2023 Mar 1 [cited 2023 Jul 10]; Available from: https://www.sbs.com.au/nitv/article/how-3d-printing-can-preserve-culture-in-the-face-of-climate-change/h481mj97e
22. Butler T, Gall A, Garvey G, Ngampromwongse K, Hector D, Turnbull S, et al. A Comprehensive Review of Optimal Approaches to Co-Design in Health with First Nations Australians. Int J Environ Res Public Health [Internet]. 2022 Dec 2 [cited 2023 Jul 10];19(23):16166. Available from: https://doi.org/10.3390/ijerph192316166
23. Anderson K, Gall A, Butler T, Ngampromwongse K, Hector D, Turnbull S, et al. Development of Key Principles and Best Practices for Co-Design in Health with First Nations Australians. Int J Environ Res Public Health [Internet]. 2022 Dec 22 [cited 2023 Jul 10];20(1):147. Available from: https://doi.org/10.3390/ijerph20010147
24. United Nations. PARIS AGREEMENT [Internet]. United Nations Framework Convention on Climate Change. Paris: United Nations; 2015 [cited 2022 Dec 1]. p. 3. Available from: https://unfccc.int/sites/default/files/english_paris_agreement.pdf
25. US Department of Health and Human Services. Government of the United States of America. 2023 [cited 2023 Jul 11]. Health Sector Commitments to Emissions Reduction and Resilience. Available from: https://www.hhs.gov/climate-change-health-equity-environmental-justice/climate-change-health-equity/actions/health-sector-pledge/index.html

26. United Kingdom National Health Service. Greener NHS. 2020 [cited 2023 Jul 17]. National ambition. Available from: https://www.england.nhs.uk/greenernhs/national-ambition/

27. Rights of Future Generations. Maastricht Principles on the human rights of future generations [Internet]. [cited 2023 Jul 20]. Available from: https://www.rightsoffuturegenerations.org/the-principles

28. Aldunce P, Armour K, Blanco G, Calvin K, Cheung W, Dasgupta D, et al. AR6 synthesis report: Climate change 2023 [Internet]. 2023 [cited 2023 Jul 20]. Available from: https://www.ipcc.ch/report/sixth-assessment-report-cycle/

29. Zhang Y, Beggs PJ, McGushin A, Bambrick H, Trueck S, Hanigan IC, et al. The 2020 special report of the *MJA–Lancet* Countdown on health and climate change: lessons learnt from Australia's "Black Summer." Medical Journal of Australia [Internet]. 2020 Dec 2 [cited 2023 Jul 18];213(11):490. Available from: doi: 10.5694/mja2.50869

30. Duckett S, Mackey W, Stobart A. Climate change and health: Preparing for the next disaster [Internet]. Canberra; 2020 Dec [cited 2023 Jul 18]. Available from: https://grattan.edu.au/wp-content/uploads/2020/12/Climate-change-and-health-2020.pdf

31. Daszak P, Amuasi J, das Neves CG, Hayman D, Kuiken T, Roche B, et al. IPBES Workshop on Biodiversity and Pandemics Report [Internet]. Bonn; 2020 Jul [cited 2023 Jul 18]. Available from: https://www.ipbes.net/sites/default/files/2020-12/IPBES%20Workshop%20on%20Biodiversity%20and%20Pandemics%20Report_0.pdf

32. Hughes L, Steffen W, Rice M, Stock P. ON THE FRONTLINE: CLIMATE CHANGE & RURAL COMMUNITIES [Internet]. Potts Point; 2016 Aug [cited 2023 Jul 18]. Available from: https://www.climatecouncil.org.au/uploads/564abfd96ebac5cbc6cf45de2f17e12d.pdf

33. Matthews V, Atkinson A, Lee G, Vine K, Longman J. Climate Change and Aboriginal and Torres Strait Islander Health [Internet]. Carlton South; 2021 Nov [cited 2023 Jul 18]. Available from: DOI: 10.48455/bthg-aj15

34. Pachauri RK, Meyer LA. limate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Internet]. Geneva; 2014 [cited 2023 Jul 19]. Available from: https://www.ipcc.ch/report/ar5/syr/

35. Ericksen PJ, Ingram JSI, Liverman DM. Food security and global environmental change: emerging challenges. Environ Sci Policy [Internet]. 2009 Jun [cited 2023 Jul 19];12(4):373–7. Available from: https://doi.org/10.1016/j.envsci.2009.04.007

36. Climate Council. Feeding a hungry nation: Climate change, food and farming in Australia, Climate Council of Australia. Canberra; 2015.

37. Environmental Protection Agency. United States Environmental Protection Agency News Releases. 2023 [cited 2023 Jul 19]. EPA Releases Report Showing Health Impacts of Climate Change on Children in the United States. Available from: https://www.epa.gov/newsreleases/epa-releases-report-showing-health-impacts-climate-change-children-united-states

38. Bergstrand K, Mayer B, Brumback B, Zhang Y. Assessing the Relationship Between Social Vulnerability and Community Resilience to Hazards. Soc Indic Res [Internet]. 2015 Jun 16 [cited 2023 Jul 19];122(2):391–409. Available from: https://pubmed.ncbi.nlm.nih.gov/29276330/

39. Kais S, Islam M. Community Capitals as Community Resilience to Climate Change: Conceptual Connections. Int J Environ Res Public Health [Internet]. 2016 Dec 6 [cited 2023 Jul 19];13(12):1211. Available from:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5201352/#:~:text=A%20community's%20resilience%20depends%20on,how%20well%20it%20identifies%20its

40. United Nations Human Rights. United Nations. 2022 [cited 2023 Jul 19]. Climate change and the right to housing. Available from: https://www.ohchr.org/en/special-procedures/sr-housing/climate-change-and-right-housing

41. Moolna A. How mangroves protect people from increasingly frequent and powerful tropical storms. UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE: Race to Resillience [Internet]. 2021 Jul 26 [cited 2023 Jul 19]; Available from: https://climatechampions.unfccc.int/how-mangroves-protect-people-from-increasingly-frequent-and-powerful-tropical-storms/

42. European Environment Agency. European Environment Agency. 2023 [cited 2023 Jul 19]. Assessing the costs and benefits of climate change adaptation. Available from: https://www.eea.europa.eu/publications/assesing-the-costs-and-benefits-of

43. US Center for Disease Control. Office of Policy, Performance, and Education. 2016 [cited 2023 Jul 12]. Health in All Policies. Available from: https://www.cdc.gov/policy/hiap/index.html

44. Watts N, Amann M, Arnell N, Ayeb-Karlsson S, Belesova K, Boykoff M, et al. The 2019 report of The Lancet Countdown on health and climate change: ensuring that the health of a child born today is not defined by a changing climate. The Lancet [Internet]. 2019 Nov [cited 2023 Jul 12];394(10211):1836–78. Available from: https://doi.org/10.1016/S0140-6736(19)32596-6

45. Department of Industry Energy and Resources. Australian Government. 2019 [cited 2023 Jul 12]. Quarterly Update of Australia's National Greenhouse Gas Inventory. Available from: Quarterly Update of Australia's National Greenhouse Gas Inventory

46. Brown V, Barr A, Scheurer J, Magnus A, Zapata-Diomedi B, Bentley R. Better transport accessibility, better health: a health economic impact assessment study for Melbourne, Australia. International Journal of Behavioral Nutrition and Physical Activity [Internet]. 2019 Dec 22 [cited 2023 Jul 12];16(1):89. Available from: https://doi.org/10.1186/s12966-019-0853-y

47. Burlingame B, Dernini S. Sustainable diets and biodiversity: Directions and solutions for policy, research and action [Internet]. Rome; 2012 Nov [cited 2023 Jul 12]. Available from: https://www.fao.org/3/i3004e/i3004e.pdf

48. Dixon J. Diverse food economies, multivariant capitalism, and the community dynamic shaping contemporary food systems. Community Dev J [Internet]. 2011 Dec 3 [cited 2023 Jul 12];45(1). Available from: https://www.jstor.org/stable/44258250

49. Climate Adapt. The European Climate Adaptation Platform Climate-ADAPT. 2023 [cited 2023 Jul 12]. Integration of climate change adaptation in land use planning. Available from: https://climate-adapt.eea.europa.eu/en/metadata/adaptation-options/adaptation-of-integrated-land-use-planning

50. Kolokotsa D, Lilli K, Gobakis K, Mavrigiannaki A, Haddad S, Garshasbi S, et al. Analyzing the Impact of Urban Planning and Building Typologies in Urban Heat Island Mitigation. Buildings [Internet]. 2022 Apr 23 [cited 2023 Jul 19];12(5):537. Available from: https://doi.org/10.3390/buildings12050537

51. Roberts D. A fascinating new scheme to create walkable public spaces in Barcelona. Vox News [Internet]. 2017 Apr 22 [cited 2023 Jul 19]; Available from: https://www.vox.com/2016/8/4/12342806/barcelona-superblocks

52. Yasir S, Kumar H. Landslide Kills at Least 10 in Western India. The new York Times [Internet]. 2023 Jul 20 [cited 2023 Jul 24]; Available from: https://www.nytimes.com/2023/07/20/world/asia/india-flood-maharashtra-monsoon.html

Appendix 1

Governance

Recommendation: PHAA supports the placement of the NHCS within the remit of the ACDC.
Recommendation: The NHCS must take full advantage of the breadth of health specialities internally within the ACDC and externally.
Recommendation: An Advisory Board on Climate and Health should be established to oversee the implementation of the NHCS. The Board should report directly to the relevant Ministers.
Recommendation: The Advisory Board on Climate and Health must have public health, First Nations, clinical health, emergency response and climate officials as members.
Recommendation: Annual progress reports on implementation should be created by the intersectoral committee on climate and health and presented to the Advisory Board.
Recommendation: The NHCS requires a timeframe for implementation. The timeframe should include short, mid and long-term actions and measurable indictors.
Recommendation: Implementing the NHCS should form one of the ACDC's first priorities
Recommendation: Define the public health workforce.
Recommendation: Public health workforce training must be included in the ACDC.
Recommendation: The implementing body of the NHCS must assign health system and public health adaptive and mitigative responsibilities across the jurisdictions.

First Nations Leadership

Recommendation: Ensure that this section of the NHCS is developed, and to the extent possible written, by First Nations people.
Recommendation: Include a section around First Nations IP and benefit-sharing with community that acknowledges First Nations peoples, by design, as the owners of native plant/animal and land management practice IP.
Recommendation: Revisit the language used around First Nations health and wellbeing. The Lowitja Institute's *Climate Change and Aboriginal and Torres Strait Islander Health Discussion Paper* is useful for direction as to the unique climate change impacts for First Nations people.
Recommendation: Mitigation and adaptation need equal and urgent action. We should continue mitigating climate change and we need to be protected from the harms already occurring.
Recommendation: First Nations governance to consist of a convened group of First Nations peoples, including experts, and key sector representatives of First Nations health and wellbeing (e.g., NACCHO).
Recommendation: First Nations governance groups should be able to provide high-level guidance on the Strategy at key points in its development, implementation planning, implementation rollout and monitoring.
Recommendation: Review all First Nations led initiatives and projects already achieving mitigation and adaptation work. Then can provide feedback and endorsement on the findings and ensure the Strategy is community informed.
Recommendation: A First Nations governance group or review team should conduct case-studies with the First Nations individuals and groups acting on mitigation and adaptation.

Measurement

Recommendation: Measurement should not be limited to the greenhouse gas emissions of the health sector, but should include all health impacts from climate change.
Recommendation: Establish a capability to report on carbon emissions of the public *and* private health systems.

Mitigation

Recommendation: The Government should set national targets of a 75% reduction in greenhouse gas emissions below 2005 levels by 2030 and net zero greenhouse gas emissions by 2035,(27) in line with best-evidence from the Intergovernmental Panel on Climate Change.(28)

Recommendation: NHCS should clearly outline strategies for the health sector to support the reduction of emissions across all sectors.

Recommendation: Health system (and adjacent sectors) emissions target will need to be established along with strategies for communicating reduction targets, identifying carbon hotspots within and adjacent to the health system, prioritisation of mitigation actions, effective governance and accountability structures, appropriate resource allocation and policy development and set a common pathway for decarbonisation of the Australia's health and aged care system.

Recommendation: The Government should establish an applied research program for health institutions and organisations to develop mitigation measures along the model of the Australian Research Council Industry Partnership research grants.

Adaptation

Recommendation: Re-assess the NHCS objectives and use health in all policies as a mechanism for mitigation and adaptation.

Recommendation: Focus adaptation on both the protection of the health system and the protection of the community's health against the impacts of climate change.

Recommendation: Fully funded and implemented National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan less than 5 years after the National Health and Climate Strategy is finalised.

Recommendation: Australian Council of Healthcare standards should mandate all health services to create *Change Adaptation Plans*.

Recommendation: Include requirements for the development and implementation of *Change Adaptation Plans* in the National Healthcare Agreement.

Recommendation: Consider and plan for potential risks to every part of the health system: public, private, clinic, laboratory, hospital, specialty facility, transport, supply chain, vaccination, workforce, and others.

Recommendation: When actioning the National Health and Climate Strategy, the National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan, ensure diverse representation when seeking adaptation advice.

Recommendation: Set deadlines for when local governments should complete vulnerability assessments and adaption plans. These should be completed using contextually adapted co-design methods with support from State government and/or health disaster response representatives/organisations.

Recommendation: During design, increase number of avenues for children and young people to contribute towards a climate change vulnerability assessment and adaptation plan.

Recommendation: Apply a health in all policies approach and consider broad impacts on health. The Strategy should lay out a plan of relevant sectors and key actions that will protect health.

Recommendation: Review current adaptation plans and consult with relevant stakeholders and community members.

Recommendation: Provide Commonwealth and State financial and personnel support to local government.

Health in All policies

Recommendation: Create an interdepartmental committee on climate change, staffed with varied specialities related to climate, but also health specialised staff, to support the Climate and Health Advisory Board. The committee should produce an annual progress report for the Climate and Health Advisory Board, the board should present this to the relevant ministers.

24 July 2023

Department of Health and Aged Care
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To whom it may concern,

Ramsay Health Care Australia (RHCA) appreciates the opportunity to provide comment on the *National Health and Climate Change Strategy* consultation paper and thanks the Department of Health and Aged Care for referencing our work in this space.

Ramsay Health Care (RHC) provides quality healthcare through a global network of clinical practice, teaching, and research. RHC's global network extends across ten countries, with over eleven million admissions and consumer interactions across more than 530 locations. In Australia, RHC is the largest private hospital operator in the country, with more than 70 hospitals, day surgeries and clinics; approximately 100 pharmacies; 20 psychology clinics; hospital-in-the-home and virtual hospital services contributing ≈$5 billion annually to the Australian economy.

RHCA **advises** the Australian Government it is the market leader in healthcare responding to climate change, as evidenced in its early adoption, and embedding cultural change in everything it does, including a sustainability linked loan (Refer to https://www.ramsayhealth.com.au/News/General-News/Ramsay-completes-a-1bn-refinancing-with-a-sustainability-linked-loan-facility). RHCA continues to lead in this space and has undertaken much of its work to date with little government support. RHCA's net zero strategies include:

- Maximising energy efficiency: continue to invest in energy efficiency projects such as low energy lighting and heating and cooling upgrades;
- Greener theatres: reduce anaesthetic gas emissions by using low flow and environmentally friendly options;
- Increasing recycling and reducing waste: reduce unnecessary use of single-use items, where safe to do so; improve recycling and reduce waste in facilities;
- Optimising onsite renewable energy and storage: continue to invest in onsite renewable electricity generation. Focus on reducing fossil fuel use in facilities, as new technologies come online;
- Switching to renewable and cleaner energy sources: increase sourcing of renewable and less carbon-intensive electricity supply;
- Understand scope 3 emissions: work with partners to understand and address emissions across a large and complex supply chain;
- Engaging suppliers: work with suppliers to take a science-based approach to setting targets;
- Embedding ESD in developments: continuously improve and maintain development performance standards through Environmentally Sustainable Design. Develop climate adaption and net zero plans so developments are future fit; and
- Strategic transformation: grow and transform business sustainability, adapt and be resilient to a changing climate.

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Further information on RHCA's sustainability efforts, including the Sustainability Strategy and Impact Report 2022 can be found here: https://www.ramsayhealth.com/en/sustainability/.

At the outset, RHCA **broadly supports** the Australian Governments efforts to develop a National Health and Climate Change Strategy to protect the health and wellbeing of Australians from the impacts of climate change. However, RHCA is of the view the healthcare industry should self-regulate, rather than the Australian Government intervening through additional burdensome regulation.

Firstly, RHCA **strongly recommends** this Strategy aligns with the Australian Government's broader policy platform including the work being undertaken by the Department of Climate Change, Energy, the Environment and Water; The Department of Treasury; the Climate Change Authority; and the newly established Net Zero Authority. It is particularly important the Government ensures the various types of sector specific strategies being developed also align (such as the First Nations Clean Energy Strategy) to ensure Australia continues to work consistently towards net zero emissions by 2050.

It is also critical relevant departments and agencies (National Indigenous Affairs Agency, Aboriginal Community Controlled Health Organisations) that may be involved to address climate change work closely with the Department of Health and Aged Care. This will ensure there is a consistent approach across government to address the key actions and principles of this Strategy. The Australian Government may wish to establish an interdepartmental committee (across government departments) as well as an interorganisational committee (federal government, state/territory governments, private, not-for-profit) to ensure the successful implementation of this Strategy.

Secondly, RHCA **recommends** the Australian Government harmonise and simplify existing legislation and regulations (Commonwealth, State, Territory) to ensure there is a consistent approach to climate change, including related obligations and reporting requirements, noting there are several schemes in place. Streamlining and simplifying regulation to promote its effectiveness should be a priority for the Government, rather than introducing additional regulations to an already complex and burdensome system for the private sector. As such, any reporting and monitoring measures need to be consistent with mandatory climate disclosures being led by the Department of the Treasury. This may enable business to 'tell government once' and report on the same measures, rather than varying degrees of measures for similar purposes.

With this, RHCA **emphasises** better data and transparency is required from all stakeholders to ensure effective reporting can be undertaken to measure scope 3 emissions. It is clear further work is required to identify the required data before businesses can be expected to report on the specific measures. The pandemic highlighted several vulnerabilities and Australia's reliance on global supply chains, with work continuing to build our nations supply chain resilience.

Thirdly, RHCA **strongly recommends** the Australian Government considers incentives and rebates to reward and support the transition to renewable energy, particular to the private sector, such as the Powering Australia Plan. For example, the Australian Government may consider incentives to support organisations through the installation of renewable energy (solar panels) or the electrification process (electric vehicle uptake, installation of electric vehicle chargers). Currently, private hospital operators do not receive specific funding to reduce emissions from private health insurers or the Government.

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Furthermore, RHCA **recommends** the Australian Government considers incentives to support the uptake of digitisation within the private healthcare system, such as tax incentives or budgetary measures to support investment. The recent Australian Budget 2023-2024 provided significant investment for general practitioners to update their practice systems, with many practices being private, and even owned by private health insurers. There is no reason as to why the Government should only invest in specific components of the healthcare system, when the private hospital system continues to manage two-thirds of elective surgery and has strong relationships with the primary care system. Significant digital investment in the private healthcare sector will further support reducing waste, such as the duplication of diagnostic tests.

Fourthly, RHCA **urges** the Australian Government to consider strengthening health measures and models of care such as telehealth, hospital-in-the-home and preventative healthcare to reduce emissions. The COVID-19 pandemic demonstrated the effectiveness of telehealth to address individual healthcare needs, and the strong uptake from all Australians. Concerningly, default benefits for hospital-in-the-home/outreach were withdrawn in 2007, as such, patients are required to attend appointments in person. These alternative measures will not only avoid and/or reduce rates of hospitalisation but also reduce emissions from travel.

Lastly, RHCA **reminds** the Australian Government that all sectors (public, private, not-for-profit) must be a part of policy discussions and decision-making to ensure the successful implementation of the Strategy, rather than expecting organisations up the supply chain that are disconnected from healthcare provision which have the expertise and capability to efficiently promote the objectives. The Australian Government may look to the recent inefficient duplication and overreach of private health insurers, in their engagement with hospitals as part of them seeking to fulfill their Modern Slavery obligations.

In addition, RHCA **asks** the Australian Government to amend the National Health Reform Agreement (NHRA) to include the private hospital system as part of the partnership with Commonwealth, State and Territory Governments. It is acknowledged the NHRA was originally established as a mechanism to fund public healthcare services between the Commonwealth and State and Territory Governments. However, overtime, the scope of the NHRA has broadened through the addition of addendums which address non-financial matters, including integration between different health systems and chronic health conditions.

Please do not hesitate to contact me on governmentpolicy@ramsayhealth.com.au should you require any further information.

Thank you for the opportunity to provide a submission.

Kind Regards,

[redacted]

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Australian Government
Department of Health and Aged Care

NATIONAL HEALTH AND CLIMATE STRATEGY

Detailed submission form

This form allows you to provide responses to the full set of questions in the Consultation Paper available here.

Alternatively, you may wish to complete the briefer online survey available here.

Please submit this form in Word format to Health.Climate.Consultation@health.gov.au.

Respondent details

What is your name?
[redacted]
What is your email address?
[redacted]
What is your organisation?
Emerging Minds National Workforce Centre for Child Mental Health https://emergingminds.com.au/about/who-we-are/
Have you read and agreed to the Privacy Statement? (NB we will not be able to use your submission unless you tick this box)
☒ I have read and agreed to the Privacy Statement
Do you identify as Aboriginal and/or Torres Strait Islander? (Yes/No/Prefer not to say)
[redacted]
Please select which applies to you: ☐ Individual citizen ☐ Health Service Provider ☐ Industry and Life Sciences Organisation or Representative ☐ Academic or Researcher ☒ Primary and/or Allied Health Peak or Advocacy Organisation or Representative ☐ Aged Care Service Provider ☐ First Nations Health Service Provider ☐ First Nations Community Group ☐ First Nations Peak or Advocacy ☐ Medical College or Peak professional body

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Questions for feedback from the Consultation Paper

Introduction

1. How could these objectives be improved to better support the vision of the Strategy?
2. How could these principles be improved to better inform the objectives of the Strategy?
Principle 2 Principle 2 on 'tackling health inequities' states 'A health equity approach recognises some populations are more vulnerable to and have less capacity to adapt to the health impacts of climate change, and that responses to climate change need to take account of disparities in health outcomes.' This principle could be improved to acknowledge that some populations, namely infants and children and young people, will be impacted by changes in climate more than any other age group across their lifetime. This at risk population also rely on adults for support to mitigate risks and adapt to the physical and mental health impacts of climate change. Infants and children will need support to develop capacity to adapt to the health impacts of climate change and eventually become leaders in designing and delivery Australia's climate mitigation and adaption strategies and approaches. **Principle 3** Principle 3 on 'population health and prevention' states 'the response of the health system, and society more generally, to climate change must be underpinned by a public health perspective. This recognises that prevention of disease and maintenance of good health across the lifespan, in combination with optimal secondary and tertiary prevention, assists both mitigation and adaptation.' Throughout the consultation paper, a number of at risk populations are described or mentioned, however there is very little mention of infants, children, and young people. Without specifically addressing their needs and including their voices, this significant proportion of the Australian population who is at risk will be invisible within the strategy and action areas. This principle could be improved by specifically describing the age groups across the lifespan to ensure the younger generation are not missed and their needs are made visible e.g. with a focus across the lifespan from pregnancy and infancy, to childhood, adulthood, and older adulthood. Including the physical and mental health of infants,

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children, and young people is a preventative approach by focusing on health during the early years of life. To prevent health and mental health difficulties in adulthood, it is important to invest in support and healthcare early in the life of a child, early in the life of the problem experienced by infants, children and families, and early in their engagement with health care or other services.

Principle 6

Principle 6 on 'Partnership based working across all levels of government and beyond' could be improved by including children and young people who are already experiencing health problems related to the impacts of a changing climate and will continue to do so in their future.

Children and young people have a voice, and the right to agency in decisions that affect their lives. This right to participate and be heard in discussions and decisions that will affect them (when they are capable of forming their own views) is reflected in the United Nations Convention on the Rights of the Child (CRoC; United Nations, 1990) – which Australia adheres to. When they're asked and listened to, children often have very clear ideas about their engagements with healthcare professionals and services and other adults who are trying to help them – and on how best to meet their needs. They are the generation who will be most impacted by the effects of climate change in their lifetime, and will have to find innovative solutions to adapt to and mitigate the risks during their childhood and adolescence and into adulthood. Thus, it is essential that their voices are heard in decision making on climate and health policy at all levels and they have a critical role of informing how Australia can address the problem of climate change.

This principle could be improved by specifically including the voices of children and young people. Partnership based working with this at risk group is going to be key to craft and implement a holistic and nationally consistent response to climate change that meets the needs of the whole population – of children and young people as well as adults.

3. Which of the various types of greenhouse gas emissions discussed above should be in scope of the Strategy's emission reduction efforts?

4. What existing First Nations policies, initiatives, expertise, knowledge and practices should the Strategy align with or draw upon to address climate change and protect First Nations country, culture and wellbeing?

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5. What types of governance forums should be utilised to facilitate co-design of the Strategy with First Nations people to ensure First Nations voices, decision-making and leadership are embedded in the Strategy?

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Proposed Objective 1: Measurement

6. Beyond the schemes already noted above, is your organisation involved in any existing or planned initiatives to measure and report on health system emissions and/or energy use in Australia?
7. What additional data and information is required to support targeted emissions reduction efforts within health and aged care?

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Proposed Objective 2: Mitigation

8. What do you think of these proposed focus areas for emissions reduction? Should anything else be included?
9. Which specific action areas should be considered relating to the **built environment and facilities (including energy and water)**, over and above any existing policies or initiatives in this area?
10. Which specific action areas should be considered relating to **travel and transport**, over and above any existing policies or initiatives in this area?
11. Which specific action areas should be considered relating to **supply chain**, over and above any existing policies or initiatives in this area?
12. Which specific action areas should be considered relating to **medicines and gases**, over and above any existing policies or initiatives in this area?
13. Which specific action areas should be considered relating to **waste**, over and above any existing policies or initiatives in this area?
14. Which specific action areas should be considered relating to **prevention and optimising models of care**, over and above any existing policies or initiatives in this area?

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15. What can be done to involve private providers within the health system in the Strategy's emissions reduction efforts?
16. Where should the Strategy prioritise its emissions reduction efforts? a. How should the Strategy strike a balance between prioritising emissions reduction areas over which the health system has the most direct control and prioritising the areas where emissions are highest, even if it is harder to reduce emissions in these areas? b. Which of the six sources of emissions discussed above (on pages 13 to 18 of the Consultation Paper) are the highest priorities for action?
17. What 'quick wins' in relation to emissions reduction should be prioritised for delivery in the twelve months following publication of the Strategy?

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Proposed Objective 3: Adaptation

18. What health impacts, risks and vulnerabilities should be prioritised for adaptation action through the Strategy? What process or methodology should be adopted to prioritise impacts, risks and vulnerabilities for adaptation action?
It is important to consider the mental health impacts of climate change. The potential impacts of climate change - from changes to biodiversity, disasters, air pollution, disease patterns or social issues such as displacement from rising sea levels - will cause stress and could lead to mental health problems. For instance, even the physical health impacts of climate change increase the risk of mental health impacts. Supporting mental health across the lifespan through early intervention and prevention approaches as well as secondary and tertiary intervention should be prioritised for adaptation action through the strategy. However, infants, children, and young people are significantly at risk of experiencing the health impacts of climate change due to their age and developmental stage, but also due to their dependence on the adults around them. Infants, children, and young people make up a significant percentage of the overall population of Australia who are and will continue to disproportionally experience the health impacts of climate change. Further, the impacts of climate change on the functioning and capacity of the health system to meet their needs will disproportionately affect infants, children, and young people. Of note, on page 25, some communities who are significantly more susceptible to negative health effects from climate related disasters and extreme weather events are listed. This list doesn't mention infants, children, and young people who are significantly more susceptible to negative health effects from climate change. Throughout the consultation paper, this at risk population is rarely mentioned and their needs and capacities to contribute to solutions are relatively invisible. The mental health impacts, risks and vulnerabilities experienced by infants, children, and young people should be specifically prioritised for adaption action through the strategy. This could also include a lens on the impact on parents and families, and other adults who infants and children rely on primarily to buffer them from the impact of stress and mental health impacts of climate change. The impacts of climate change on the mental health of infants, children, and young people could include: - Anxiety, depression, and intense emotions related to concerns about the impact of climate change - Psychosocial and mental health impacts due to direct exposure to changes caused by climate change (e.g. exposure to more severe, frequent, and longer weather events that result in disasters) - Indirect impacts from environment or ecosystem changes (e.g distress caused by exposure to disease due to shifts in patterns of disease or increased disease) - Indirect impacts mediated through societal systems (e.g. distress experienced by children and families from parental loss of employment caused by altered agricultural production, child exposure to violence related to displacement and housing instability, stress related to food and water insecurity, lack of access to mental health care due to workforce shortages). These impacts during infancy and childhood will affect the physical and mental health of Australian infants and children in the short term, but have the potential to lead to lifelong consequences for their health and wellbeing. Further, infants and children will

disproportionately experience the impact of changes related to climate change more than any other age group as they will have more exposure across their lifetime.

Investing in the mental health of infants, children, and young people delivers significant returns for this population at risk of experiencing the many impacts of climate change, their families, and their communities. However, it is well recognised that considered investment in the mental health of the younger generation generates many economic, health, social, and fiscal benefits. Investing in children is investing in the future of Australia – and our national capacity to adapt to climate change in the short term and the long term. Specifically taking action to support infants, children, and young people will be important in strengthening their productivity and contributions in the future as the next generation of leaders, workforce, parents, consumers, and members of communities who will need to continue to be better prepared and respond to the effects of climate change.

In summary, ensuring the needs of infants, children, and young people are visible in this strategy, and other adaptation policies, is critical to building a climate resilient and sustainable healthcare system which protects Australians of all ages.

19. Should the Australian government develop a National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan? If yes:
    a. What are the key considerations in developing a methodology?
    b. How should their development draw on work already undertaken, for example at the state and territory level, or internationally?
    c. What are the key areas where a national approach will support local/jurisdictional vulnerability assessment and adaptation planning?

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20. Would there be value in the Australian government promoting a nationally consistent approach to vulnerability assessment and adaptation planning for the health system specifically, for instance by issuing guidance and associated implementation support tools for states, territories and local health systems? If yes, what topics should be covered to promote a nationally consistent approach? What examples of existing guidance (either from states/territories or internationally) should be drawn from?
21. What immediate high-priority health system adaptation actions are required in the next 12 to 24 months?
Ensure provision of infant and child and family centric guidance for public health and health organisations on developing emergency response plans for climate-related disasters and extreme weather events, including consideration of potential direct impacts on service delivery related to infants, children, parents and families. We need to be better prepared for responding to the specific needs of infants, children, and families. Develop mental health guidance and capacity building focused on mitigating distress and supporting mental health and resilience before, during, and, after disasters for health services who support infants, children, and/or parents. Ensure this training aligns with other sectors who have the opportunity to support infants, children, and families including emergency, education, social and community services.

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Proposed Objective 4: Health in All Policies

22. What are the key areas in which a Health in All Policies approach might assist in addressing the health and wellbeing impacts of climate change and reducing emissions?
When considering the key areas in which a Health in All Policies approach might assist in addressing the health and wellbeing impacts of climate change on infants, children, and young people, the role of education, social, and community services should be considered as well as emergency management and services. These services and systems will be crucial to finding ways to collaborate to design and implement joint public policy for improved health and wellbeing outcomes.
23. What are the most effective ways to facilitate collaboration and partnerships between stakeholders to maximise the synergies between climate policy and public health policy? What are some successful examples of collaboration in this area?

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Enablers

24. How could these enablers be improved to better inform the objectives of the Strategy? Should any enablers be added or removed?
25. For each of these enablers: a. What is currently working well? b. What actions should the Strategy consider to support delivery?
a. What is currently working well? The Australian Government Department of Health funded Emerging Minds National Workforce Centre for Child Mental Health to undertake a number of initiatives which aim to support workforce capacity building across health, social, and community services, as well as education and emergency services to respond to the needs of infants, children, parents, and families in preparation for and response to disasters. This includes: - Developing, publishing, and promoting the Community Trauma Toolkit which has become a widely referenced, award winning resource that supports the capacity of the workforce to respond to the mental health needs of infants, children, and families in the context of disasters and community trauma. - Developing and publishing resources and guided-self help for families and practitioners who work with families to support infant and child mental health in the context of disasters. Some examples include these resources which aim to help parents and carer to support children in preparing for, experiencing and recovering from floods, bushfires and drought. This will be expanded upon over the next four years. - Developing and delivering practice guidance and training for health, social, and community services and professionals to support the mental health of infants and children in preparation for and response to disasters. - Establishing and progressing the National Infant & Child Disaster Mental Health Advisory Committee which can provide policy and operational guidance and advice regarding the needs of infants, children, and young people in relation to disasters. b. Consider the following actions to tackle climate change:

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- Enabler 1: ensure the health workforce understand the health impacts of climate change on infants, children, and families and have the knowledge and capacity to respond to their needs.
- Enabler 2: Invest in coordinated climate and health research to improve the evidence base for responses to the needs of infants, children, and families, and build the capacity of the health system to respond to their needs.
- Enabler 3: Increase public awareness of the health impacts of climate change on infants and children and support families and communities to take action to support this younger population who is at risk.
- Enable 4: Ensure the needs of infants and children are visible in all collaborations with stakeholders.

c.

Thank you for taking the time to complete this survey – your feedback is greatly appreciated!

Please submit this form in Word format to Health.Climate.Consultation@health.gov.au.

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