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From the President

31 July 2023

Professor Paul Kelly FAFPHM
Chief Medical Officer
Australian Government Department of Health and Aged Care
GPO Box 9848
CANBERRA ACT 2601

Via Email: Health.Climate.Consultation@health.gov.au

Dear Professor Kelly

RACP feedback on the National Health and Climate Strategy Consultation

Thank you for the opportunity to provide a submission on the National Health and Climate Strategy Consultation Paper ('the Consultation Paper').

We commend the Australian Government and the Department of Health and Aged Care ('the Department') on its engagement with stakeholders across Australia to inform the development of the National Health and Climate Strategy ('the Strategy'). Within the Royal Australasian College of Physicians (RACP), we have worked closely with our lead climate change and health body and have also consulted a broad cross-section of RACP bodies and specialty societies.

Our submission is focused on the following key asks:

- The Strategy must be fully funded and resourced on an ongoing basis.
- National Cabinet must sign off on the Strategy and establish a governance framework and funding mechanisms that enable urgent, coordinated, and effective implementation of the Strategy.
- First Nations knowledge and leadership must guide all aspects of the Strategy through strong partnerships and co-design.
- The Strategy must focus on building healthy and climate resilient communities through whole of government and Health in All Policies approaches that mobilise sectors outside of health to address the environmental, cultural and social determinants of health.

A commitment to promoting health and climate resilience must guide the Strategy

The RACP would like to see a focus on the health and wellbeing of communities and populations alongside the Strategy's current health system focus. We would like this to be communicated through a clear vision that supports our suggested objectives:

1. Healthy and Climate Resilient Communities – Improve the health and wellbeing of populations and build the capacity of communities to thrive in the face of climate change through Health in All Policies and prevention.
2. Climate Resilient Health Systems – Build health system capacity to anticipate, respond to, cope with, recover from and adapt to climate change, including learning and transformation.
3. Environmentally Sustainable Health Systems – Integrate resource stewardship and climate mitigation across all health systems to ensure no cumulative harmful impacts on the natural environment or society.

We are supportive of the principles in the Strategy and would like to see them integrated throughout the Strategy. The principles could be strengthened by:

1. Prioritising First Nations leadership and approaches to health and connection to community and Country and including protections for intellectual and cultural property.
2. Tackling health inequities through addressing the social and wider structural determinants of health, acknowledging health as a human right, and addressing intergenerational inequity, just transition, and global climate justice.
3. Integrating a population health and prevention approach throughout the Strategy.
4. Considering models in addition to One Health, such as planetary health, that best reflect the connection between human health, environmental health, and the wider determinants of health within the Strategy.
5. Ensuring that the Strategy is informed by diverse types of evidence including Indigenous knowledge, qualitative evidence, lived experience of patients, pilots, experiments, demonstration sites, and grey literature.
6. Focussing partnerships on those that can support a Health in All Policies approach to human health through addressing the wider determinants of health.

We are pleased to see a focus on prevention and optimising models of care in the Consultation Paper. However, we recommend broadening this to consider other health reform measures that can contribute to more environmentally sustainable and climate resilient healthcare systems. We also commend the recognition that reducing low-value care can contribute to lowering emissions while improving patient care. We call for urgent funding to expand programs that minimise the use of low value care and encourage innovation such as the RACP's Evolve program.

Governance, leadership and funding are required for successful implementation

The RACP is pleased to see the inclusion of enablers within the Strategy. However, we consider that these need to be strengthened and expanded. Our suggested enablers are:

1. Governance and leadership to develop and fund a cross-sector implementation plan led by the Australian Government in partnership with states and territories.
2. Funding the Strategy on an ongoing basis including implementation and development of future iterations.
3. Human resourcing for all aspects of Strategy development and implementation.
4. Measurement of emissions and underlying risks to track emissions reductions and contribute to vulnerability assessments and adaptation planning.
5. Technology, tools and instruments for facilitating information sharing, measurement, innovation, and compliance.
6. Health in All Policies to ensure appropriate, tools, guidelines, training and support systems are in place for effective implementation.
7. Workforce and training to engage, support and build workforce capacity as agents of resilience and environmental sustainability within the health system.

8. Research to encourage innovation and expand the evidence-base for the Strategy's climate health actions.
9. Communication, engagement and collaboration to connect different sectors, bring together national, state, and territory governments.

Medical colleges are campaigning for a healthier, climate resilient future

We would like to draw your attention to the RACP's climate change and health policy and research work, which has guided our submission. RACP has positions statements on Climate Change and Health, Environmentally Sustainable Healthcare and the Health Benefits of Mitigating Climate Change. More recently we commissioned a report - Climate Change and Australia's Healthcare Systems – A Review of Literature, Policy and Practice, which was endorsed by nine other medical colleges.

We are continuing to work with medical colleges through our Healthy Climate Future campaign, which is now endorsed by 13 medical colleges including the RACP and six specialty societies.

The Healthy Climate Future campaign calls for the Strategy to include:

- A plan for equitably decarbonising healthcare, to achieve net zero emissions in healthcare by 2040
- The development of a rigorous and accessible online system to consolidate the evidence base for climate health action, along with guidelines and training to support locally led climate risk and vulnerability assessments, adaptation, and resilience planning.
- The Development and roll out guidelines and training to support locally led climate risk and vulnerability assessments, adaptation, and resilience planning. These must be co designed and guided by First Nations leadership.
- A health systems reform approach that centres prevention, optimising models of care, and reducing low value care and resource use.
- Establishment of a surge health and medical workforce for deployment in response to extreme weather events.
- Establishment of a monitoring and evaluation framework with indicators that show progress on health outcomes, health system resilience and capacity-building and targets that demonstrate a reduction in health system emissions.

The Australian Government should also:

- Invest in a national Climate Change and Health Resilience Research Fund to identify resilience strategies suited to our health system
- Establish a Climate Friendly Health System Innovation Fund to provide grants to local health services for emissions reduction and sustainability initiatives.

Our comprehensive response to the Department's questions on the Consultation Paper is attached. It expands on the above points and provides further direction and suggestions, with reference to useful resources and literature.

We hope to have the opportunity to provide input on the draft National Health and Climate Strategy before it is finalised.

We look forward to continuing to work with you on the development and implementation of the Strategy including through continued involvement with the Chief Medical Officer Advisory Group.

Please contact Ekta Sharma, Senior Policy & Advocacy Officer via email at ClimateChangeHealth@racp.edu.au if you require further information. We are happy to meet to discuss our feedback.

Yours sincerely

Dr Jacqueline Small

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?
Ekta Sharma
What is your email address?
ClimateChangeHealth@racp.edu.au
What is your organisation?
The Royal Australasian College of Physicians (RACP)
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)
☐ Yes ☒ No ☐ Prefer not to say
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

Questions for feedback from the Consultation Paper

Introduction

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

Recommendations

a. Outline an explicit vision and purpose that centre human and environmental health, Aboriginal and Torres Strait Islander justice, and health equity.
b. Reframe 'Measurement' as an enabler, not an objective and add 'Health in All Policies' as an enabler.
c. Rename the Health in All Policies objective to 'Healthy and Climate Resilient Communities' and make it the first objective with the following descriptor – Improve the health and wellbeing of populations and build the capacity of communities to thrive in the face of climate change through Health in All Policies and prevention.
d. Rename the Adaptation objective to 'Climate Resilient Health Systems' and make it the second objective with the following descriptor – Build health system capacity to anticipate, respond to, cope with, recover from and adapt to climate change, including learning and transformation.
e. Rename the Mitigation objective to 'Environmentally Sustainable Health Systems' and make it the third objective with the following descriptor – Integrate resource stewardship and climate mitigation across all health systems to ensure no cumulative harmful impacts on the natural environment or society.
f. Include a target to achieve net zero emissions in healthcare by 2040 under the 'Environmentally Sustainable Health Systems' objective.
g. Harness synergies between Health in All Policies, mitigation, and adaptation throughout the Strategy.
h. Include clear timeframes for the Strategy, including plans for future versions and a cross sector implementation plan.
i. Include key definitions in the Strategy.

The Strategy needs a Vision that centres people, planet, and Indigenous justice

An explicit vision for the National Health and Climate Strategy ('the Strategy') is not outlined in the Consultation Paper. We would like to see the inclusion of an explicit vision in the Strategy to guide the development and implementation of the Strategy and help to communicate the Strategy's aspirations. This vision should be distinct from the purpose of the Strategy, and a separate purpose statement should be included.

The vision should centre human and environmental health, Aboriginal and Torres Strait Islander justice, health equity, and the interconnectedness of climate health mitigation and adaptation and Health in All Policies.

We suggest the following vision for the Strategy:

A healthy climate resilient community and culturally safe, climate resilient, and environmentally sustainable healthcare systems for current and future generations.

We suggest the following purpose statement:

To promote health by addressing human and environmental health considerations in all policy areas, guided by Indigenous justice, strong community engagement, and a commitment to health equity in Australia and globally.

Measurement is an enabler, not an objective

We support objectives on Mitigation, Adaptation and Health in All Policies. We do not consider that 'Measurement' is an objective. However, it is an important process and enabler that requires resourcing and implementation.

Both Objectives 1 and 2 in the Consultation Paper speak to the same overarching goal, which is to reduce the healthcare sector's emissions. The 'Measurement' objective's is expressed as an enabler for achieving Objective 2 'Mitigation'. However, as acknowledged by the footnote to Objective 1 in the Consultation Paper, there are many other measurement challenges related to climate change and health.

Measurement of mitigation efforts needs to be included as part of a broader framework that enables the measurement and evaluation of the Strategy to ensure it is meeting its aims and should not be a standalone objective.

We have suggested a 'Technology, tools and instruments' enabler which can facilitate measurement relating both to cutting health sector emissions and to measuring changes in underlying climate risk.

Objectives should reflect human and environmental health outcomes

We support the goals of the Mitigation, Adaptation, and Health in All Policies objectives, but would like to see these framed as outcomes. We suggest that these be renamed and reordered as follows:

1. Healthy and Climate Resilient Communities – Improve the health and wellbeing of populations and build the capacity of communities to thrive in the face of climate change through Health in All Policies and prevention.
2. Climate Resilient Health Systems – Build health system capacity to anticipate, respond to, cope with, recover from and adapt to climate change, including learning and transformation.
3. Environmentally Sustainable Health Systems – Integrate resource stewardship and climate mitigation across all health systems to ensure no cumulative harmful impacts on the natural environment or society.

The descriptors for the above objectives have been developed based on the RACP's existing climate change and health work, member input and the definitions in the Australian Glossary on Health and Climate Change.[1]

We note that Health in All Policies is both an approach and an objective. We suggest that it be included in the first objective as part of the brief explanation/descriptor as outlined above.

Health in All Policies should also be added as an enabler that underpins the Strategy. Based on the WHO's Health in All Policies: framework for country action, the RACP's definition of Health in All Policies is:

"Health in All Policies is an approach to policy-making that places 'health' as a key decision-making factor in all areas of policy, by systematically taking into account the health and health-system implications of policy decisions, by seeking synergies between policy portfolios, and by avoiding harmful health impacts, in order to improve population health and health equity."[2]

[1] Zhang, Y., Barratt, A., Rychetnik, L., and Breth-Petersen, M. An Australian Glossary on Health and Climate Change. Prepared for: The Human Health and Social Impacts (HHSI) Node, The NSW Adaptation Hub; 2021 [cited 2023 Jul 21]. Available from: https://www.sydney.edu.au/content/dam/corporate/documents/faculty-of-medicine-and-health/research/centres-institutes-groups/sustainability,-climate-and-health-collaboration/australian-glossary-on-health-and-climate-change.pdf

[2] Health in All Policies Position Statement [Internet], p. 3. The Royal Australasian College of Physicians; 2016 [cited 2023 Jul 21]. Available from: https://www.racp.edu.au/docs/default-source/advocacy-library/health-in-all-policies-position-statement.pdf.

Health in All Policies covers all areas of policy, including those influencing, environmental social, and cultural determinants. It is an approach that can strengthen environmental social, and cultural determinants of health, which is outcome this Strategy can and should aim for. Accordingly, we suggest Health in All Policies is considered as an enabler.

We note that where we refer to 'wider determinants of health' or 'determinants of health' this includes, environmental, social, cultural, economic, and commercial determinants of health.

The health and wellbeing of communities and populations must be prioritised

We note that the Strategy focusses significantly on health systems. While health system climate resilience and climate mitigation efforts are important objectives, we consider that safeguarding and supporting the health and wellbeing of people and communities in Australia should be the primary driver of the Strategy. Accordingly, healthy and climate resilient communities should be included as the first objective in the Strategy.

Environmentally sustainable health systems can achieve net zero by 2040

We suggest broadening the mitigation objective to reflect environmental sustainability. It should reflect the need for a holistic, integrated approach that centres prevention, reducing low value care and resource use. It should also reflect the need to harness approaches that contribute to mitigation action in the healthcare system alongside broader human and environmental health outcomes.

It is important that there are clear SMART goals under each objective as part of a cross-sector implementation plan. For example, the 'Environmentally Sustainable Health Systems' objective should include a goal for the health sector to reach net zero by 2040. The Healthy Climate Future campaign,[3] supported by thirteen medical colleges including the RACP and seven specialty societies, calls for a plan to equitably decarbonize healthcare by 2040. This broader goal must be supported by short-term goals. Australia's National Determined Contribution (NDC) climate ambition of reducing greenhouse gas emissions to 43% below 2005 levels by 2030 provides a medium-term goal that the Strategy may seek to align with.[4] These goals must be supported by a clear framework for monitoring and reporting emissions.

'Resilience' is broader than adaptation and includes preparing for the unknown

We suggest that 'Climate Resilient Health Systems' replace the "Adaptation" objective. Resilience is a broader term which encompasses future proofing, preparing for the unknown, evolution and transformation as well as adaption.

All objectives must be integrated throughout the Strategy

We are pleased to see that the Consultation Paper recognises that mitigation and adaptation have an interdependent relationship. We would like to see this interdependence integrated more clearly throughout the Strategy, rather than limiting them to their respective sections.

We would also like to see Health in All Policies better integrated throughout the Strategy, and more clearly applied to adaptation and mitigation.

In turn this is based on Helsinki Statement Framework for Country Action; 2013. The World Health Organization [Internet], p. 3. Available from: https://apps.who.int/iris/bitstream/handle/10665/112636/9789241506908_eng.pdf

[3] Healthy Climate Future Campaign [Internet]. The Royal Australasian College of Physicians; 2023 [cited 2023 Jul 21]. Available from: https://healthyclimatefuture.org.au/

[4] Australian Government. Australia's Nationally Determined Contribution [Internet]. 2022 [cited 2023 Jul 21]. Available from: https://unfccc.int/sites/default/files/NDC/2022-06/Australias%20NDC%20June%202022%20Update%20%283%29.pdf

Timeframes should be clearly outlined

The Strategy should indicate the period it will cover. Further, plans for future versions should also be outlined in the current Strategy. Monitoring and evaluation activity should inform future iterations with the Strategy alongside broad stakeholder consultation.

Key terms should be defined

We would like to see key terms defined in the body of the Strategy, including 'Australian health system' and 'Health in All Policies'. Where relevant, we have put forward our own definitions, for example for Health in All Policies above.

We note that the Consultation Paper uses the term "emissions mitigation". Mitigation of climate change is focussed on reducing emissions. The phrase "emissions mitigation" seems to combine 'climate mitigation' and 'emissions reduction'. Its meaning is unclear, and we suggest that its use should be reconsidered. Instead, either 'climate mitigation' or 'emissions reduction' could be used as relevant. However, if 'emissions mitigation' is distinct from these related concepts, then it should be clearly defined within the Strategy.

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

Recommendations

a. Bring principles together to create a framework to guide the development and implementation of the Strategy.
b. Incorporate the principles throughout the Strategy.
c. Consider developing a visual representation of the principles and how they fit with each other and with the Strategy's objectives and enablers.
d. Strengthen the 'First Nations leadership' principle by stating why Aboriginal and Torres Strait Islander knowledge is important and committing to intellectual and cultural property protection.
e. Focus on the need to address the structural causes of inequity in the 'Tackling health inequities' principle.
f. Better articulate the connection between climate change and the health of people, animals, and the environment in the 'One Health' principle, with reference to Health in All Policies and other relevant approaches and frameworks.
g. Reflect that evidence can be in many forms in the 'Evidence-informed policymaking' principle and remove mention of cost-effectiveness analysis.
h. Clearly articulate the pivotal role of the Australian Government in engaging and mobilising sectors outside of health to address the environmental, cultural, economic and social determinants of health.

We support the current list of principles and have commented below on how the explanations and framing of these principles can be strengthened.

We would like to see the Strategy's principles brought together to form a framework that can guide the development and implementation of the Strategy. This would assist in ensuring that the principles are incorporated throughout the Strategy. A visual representation of the principles and how they fit with each other and with the Strategy's objectives and enablers would be useful to convey the relevance, importance and centrality of the principles. Such a visual aid could also be a tool to assist in integrating the principles throughout the Strategy.

First Nations leadership can provide a holistic foundation for the Strategy

We recommend strengthening this principle by stating why Aboriginal and Torres Strait Islander knowledge and experience is important. For example a holistic understanding and life course approach to health and wellbeing, a strong connection to the land and

sea,[5] and biocultural knowledge[6] are important for demonstrating Aboriginal and Torres Strait Islander perspectives on health, community and Country. This holistic approach is illustrated in the Social and Emotional Wellbeing from an Aboriginal and Torres Strait Islanders' Perspective[7] model. These principles, approaches, and knowledge are relevant to understanding and strengthening environmental, social and cultural determinants of health. The principle must also commit to appropriate intellectual and cultural property protection.[8]

Tackling health inequities requires addressing the determinants of health

We recommend rewording the explanation of this principle to reflect that addressing health inequities requires system-level action. Currently, this principle is framed in relation to the vulnerability and capacity of populations. However, it should reflect the structural causes of inequity that lead to vulnerability and social inequities, such as harmful policy choices and the wider determinants of health[9]. . We recommend that these wider determinants of health are reflected in the explanation of this principle.

Further, it would be useful to frame health as a human right within this principle, noting the importance of a human rights-based approach to health for addressing health inequality and improving Aboriginal and Torres Strait Islander people's health[10].

In addition it is preferable to use terminology that takes a strengths-based approach[11] to describe populations that are often labelled as 'vulnerable', rather than a deficits-based one. Impacted populations hold lived experience and knowledge that can guide strategies that aim to address the structural causes of climate change and a strengths-based approach should focus on these aspects of impact populations alongside addressing structural causes of inequity. 'Priority populations' can be used in this context to identify the harmful structures that need to be addressed to bring about more equitable health outcomes.

Intergenerational equity, just transition and global climate justice are all relevant to achieving health equity and should be considered. Australia has a responsibility to reduce emissions and support developing countries through its commitment to the United Nations Sustainable Development Goals[12] and this should be reflected in the Strategy.

[5] Aboriginal and Torres Strait Islander Health Position Statement [Internet]. The Royal Australasian College of Physicians; 2018 [cited 2023 Jul 21]. Available from: https://www.racp.edu.au/docs/default-source/advocacy-library/racp-2018-aboriginal-and-torres-strait-islander-health-position-statement.pdf

[6] Lowitja Institute. Climate Change and Aboriginal and Torres Strait Islander Health Healthy Environments and Lives (HEAL) Network & Centre for Research Excellence in Strengthening Systems for Indigenous Healthcare Equity (CRE-STRIDE) [Internet]. 2021 [cited 2023 Jul 21]. Available from: https://www.lowitja.org.au/content/Image/Lowitja_ClimateChangeHealth_1021_D10.pdf

[7] Dudgeon P, Milroy H, Walker R, editors. Working Together: Aboriginal and Torres Strait Islander Mental Health and Wellbeing Principles and Practice [Internet]. Telethon Kids Institute; 2014 [cited 2023 Jul 21]. Available from: https://www.telethonkids.org.au/globalassets/media/documents/aboriginal-health/working-together-second-edition/working-together-aboriginal-and-wellbeing-2014.pdf

[8] Lowitja Institute. Climate Change and Aboriginal and Torres Strait Islander Health Healthy Environments and Lives (HEAL) Network & Centre for Research Excellence in Strengthening Systems for Indigenous Healthcare Equity (CRE-STRIDE) [Internet]. 2021 [cited 2023 Jul 21]. Available from: https://www.lowitja.org.au/content/Image/Lowitja_ClimateChangeHealth_1021_D10.pdf

[9] Munari SC, Wilson AN, Blow NJ, Homer CSE, Ward JE. Rethinking the use of "vulnerable." Australian and New Zealand Journal of Public Health. 2021 Apr 5;45(3):197–9.

[10] Aboriginal and Torres Strait Islander Health Position Statement [Internet]. The Royal Australasian College of Physicians; 2018 [cited 2023 Jul 21]. Available from: https://www.racp.edu.au/docs/default-source/advocacy-library/racp-2018-aboriginal-and-torres-strait-islander-health-position-statement.pdf

[11] Fogarty W, Lovell M, Langenberg J, Heron MJ. Deficit Discourse and Strengths-based Approaches Changing the narrative of Aboriginal and Torres Strait Islander health and wellbeing [Internet]. Lowitja Institute; 2018 [cited 2023 Jul 21]. Available from: https://www.lowitja.org.au/content/Document/Lowitja-Publishing/deficit-discourse-strengths-based.pdf

[12] The 2030 Agenda for Sustainable Development was agreed by 193 Member States at the United Nations Sustainable Development Summit in New York in September 2015, including Australia. They are available at the www.sdgs.org.au website, hosted by the Global Compact Network Australia, with the support of the Australian Government.

One Health must connect to Health in All Policies and other relevant approaches

We would like to see this principle better articulate the connection between climate change and the health of people, animals, and the environment. The principle should also reflect the importance of designing policies with a holistic outlook, considering Health in All Policies, and leveraging co-benefits of climate action.

We note that there are several frameworks and approaches that connect human health, healthcare systems, and environmental health that would be useful for expanding on this principle. A biopsychosocial ecological framework has been considered recently in relation to Covid-19[13] as has the related One Health approach[14], demonstrating the relevance of such approaches to addressing human and environmental health challenges. The Dahlgren-Whitehead model of health determinants[15], ecological public health approaches[16] and the concept of planetary health[17] are also useful frameworks that should be considered. Given the differences between these approaches[18], there would be value in taking a combined approach, for example a principle that draws on both One Health and planetary health[19].

Evidence-informed policymaking must look to all forms of evidence

It is important that this Principle recognises that 'evidence' can be in different forms, including Indigenous knowledge, qualitative evidence, lived experience of patients, pilots, experiments, demonstration sites, data from organisations undertaking their own climate adaptation and environmental sustainability activity, and grey literature. These forms of evidence must inform the Strategy.

While the principles of cost-effectiveness analysis are important, we consider that it should not be specifically called out here as it is just one aspect of a suite of evidence-informed policymaking. Further, cost-effectiveness analyses often include a level of discounting which prioritise the short term over the longer term and intergenerational equity. However, cost effectiveness and similar analytical tools should be included as enablers for the Strategy as outlined in our response to question 24. The principle should reflect reliance on the best available evidence to help make climate and health policy decisions that are relevant to the Australian context.

A partnership-based model must facilitate a Health in All Policies approach

This principle should capture the pivotal role of the Australian Government in engaging and mobilising sectors outside of health to address the environmental, cultural and social

[13] Persad-Clem R, Hoerster KD, Romano EFT, Huizar N, Maier KJ. Climate to COVID, global to local, policies to people: a biopsychosocial ecological framework for syndemic prevention and response in behavioral medicine. Translational Behavioral Medicine [Internet]. 2022 Apr 1 [cited 2023 Apr 4];12(4):516–25. Available from: https://academic.oup.com/tbm/article/12/4/516/6591611

[14] Mackenzie JS, Jeggo M. The One Health Approach—Why Is It So Important? Tropical Medicine and Infectious Disease [Internet]. 2019 May 31 [cited 2023 Jul 21];4(2):88. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6630404/

[15] Dahlgren G, Whitehead M. The dahlgren-whitehead model of health determinants: 30 years on and still chasing rainbows. Public Health [Internet]. 2021 Oct [cited 2023 Jul 21];199(1):20–4. Available from: https://www.sciencedirect.com/science/article/pii/S003335062100336X

[16] Bentley M. An ecological public health approach to understanding the relationships between sustainable urban environments, public health and social equity. Health Promotion International [Internet]. 2013 May 9 [cited 2023 Jul 21];29(3):528–37. Available from: https://academic.oup.com/heapro/article/29/3/528/762524

[17] Whitmee S, Haines A, Beyrer C, Boltz F, Capon AG, de Souza Dias BF, et al. Safeguarding human health in the Anthropocene epoch: report of The Rockefeller Foundation–Lancet Commission on planetary health. The Lancet [Internet]. 2015 Nov [cited 2023 Jul 21];386(10007):1973–2028. Available from: https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(15)60901-1/fulltext

[18] Thys S, Levine H, Lerner H, Berg C. A Comparison of Three Holistic Approaches to Health: One Health, EcoHealth, and Planetary Health. Vet Sci [Internet]. 2017 [cited 2023 Jul 21];4:163. Available from: https://pdfs.semanticscholar.org/4e3a/351c091a4bf67b3b2304f769cf888c0c23d7.pdf?_ga=2.157747130.1282405637.1573581729-577291969.1573581729

[19] Castañeda RR de, Villers J, Guzmán CAF, Eslanloo T, Paula N de, Machalaba C, et al. One Health and planetary health research: leveraging differences to grow together. The Lancet Planetary Health [Internet]. 2023 Feb 1 [cited 2023 Jul 21];7(2):e109–11. Available from: https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196(23)00002-5/fulltext

determinants of health. This connects to several of the above principles and is crucial for effectively implementing the Strategy.

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

Recommendations

a. Address Scope 1, 2, and 3 emissions in the Strategy.
b. Address emissions that do not fall within these scopes in the Strategy where relevant.

The RACP considers that Scope 2 and 3 emissions should be addressed by the National Strategy in addition to Scope 1 emissions. A useful resource about emissions is the ACT's Scope 3 Greenhouse Gas Emissions[20]. This looks at Scope 1,2 and 3 and details the importance of focusing on Scope 3 emissions.

We note that some emissions may not fall within the above categories, for example visitor and patient travel. However, we do not consider that this is a reason not to include such emissions within the Strategy. We cover patient and visitor travel in our response to question ten below.

The health sector is a significant part of the economy[21] and contributes 7% to Australia's carbon footprint[22]. Accordingly, the health sector has an opportunity to demonstrate leadership in mitigation, while also influencing supply chains, and broader action and advocacy to urgently transition to zero emission renewable energy.

We note the importance of reducing emissions generated overseas due to demand from Australia (e.g. pharmaceuticals). Climate change and health is a global issue, and our market is contributing to demand and the associated emissions overseas. Further, there is an opportunity for international collaboration to influence global supply chains. Accordingly, the Strategy should consider Australia's overseas emissions as part of its efforts to be more environmentally sustainable.

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?

Recommendations

a. Draw on expertise from across and beyond the health sector.
b. First Nations policies, initiatives, expertise, knowledge, and practices should guide all aspects of the Strategy and not just those that are seen as relating directly to First Nations Country, culture, and wellbeing.
c. Draw on the expertise of the Australian Indigenous Doctors' Association (AIDA), the National Aboriginal Community Controlled Health Organisation (NACCHO), and the Lowitja Institute.
d. Encourage engagement with established collaborations at the local level.

[20] Staff from the Office of the Commissioner for Sustainability and the Environment. SCOPE 3 GREENHOUSE GAS EMISSIONS IN THE ACT AN INVESTIGATION OF CURRENT SCOPE 3 EMISSIONS AND POTENTIAL FUTURE REDUCTIONS [Internet]. 2021 [cited 2023 Jul 21]. Available from: https://envcomm.act.gov.au/wp-content/uploads/2021/11/Scope-3-Greenhouse-Gas-Emissions-in-the-ACT-FINAL-Report-A30648089.pdf

[21] Australian Institute of Health and Welfare. Health expenditure [Internet]. Australian Institute of Health and Welfare. Australian Government; 2022 [cited 2023 Jul 24]. Available from: https://www.aihw.gov.au/reports/health-welfare-expenditure/health-expenditure

[22] Malik A, Lenzen M, McAlister S, McGain F. The carbon footprint of Australian health care. The Lancet Planetary Health [Internet]. 2018 Jan [cited 2023 Jul 24];2(1):e27–35. Available from: https://www.thelancet.com/journals/lanplh/article/PIIS2542-51961730180-8/fulltext

All aspects of the Strategy must be First Nations led

The Strategy should draw on the expertise of Aboriginal and Torres Strait Islander people, communities, and organisations both across and beyond the health sector. This expertise is relevant to all aspects of the Strategy and not just those that relate to First Nations people, Country, culture, and wellbeing. For example, we have suggested holistic approaches throughout our submission and this draws on Aboriginal and Torres Strait Islander principles and perspectives on social and emotional wellbeing and the connections between individuals, communities, and Country.

The RACP Aboriginal and Torres Strait Islander Health Committee has led the development of policy and strategy work that is relevant to both health and climate change as outlined below. Further, the RACP works closely with organisations such as the Australian Indigenous Doctors' Association (AIDA) and the National Aboriginal Community Controlled Health Organisation (NACCHO), who along with other organisations in the sector should be engaged in this work.

RACP key principles and positions can help inform the Strategy

The RACP Aboriginal and Torres Strait Islander Position Statement[23] and, the Indigenous Strategic Framework[24] outline key principles and positions that should be considered when developing the Strategy:

- Recognition that the ongoing history of colonisation, dispossession, and marginalisation, including the legacy of the stolen generations and the experience of institutional racism, has had a profound and lasting effect on Aboriginal and Torres Strait Islander people and their health and wellbeing across generations.
- Recognition that without self-determination it is not possible for Aboriginal and Torres Strait Islander people to fully overcome the legacy of colonisation and dispossession and its ongoing impacts on health.
- Understanding of the commonality across Aboriginal and Torres Strait Islander peoples with respect to the importance of family, community, and kinship networks; a holistic understanding and life course approach to health and wellbeing; and a strong connection to the land and sea.
- Acknowledgement of the importance of strengths-based discourse about Aboriginal and Torres Strait Islander health, and about social determinants of health, including for policymaking and advocacy.
- Emphasis on the importance of genuine partnership with Aboriginal and Torres Strait Islander peoples and their representatives to improve health outcomes and develop appropriate, sustainable, and effective health systems and services.
- Recognition that health strategies that involve Indigenous peoples in leadership, decision-making, and management roles, are most likely to result in improved outcomes, due to Indigenous empowerment and control.
- Bottom-up rather than top-down approaches, in which Indigenous culture is a key theme from the outset, and which incorporate holistic world views on health and well-being, have been shown to gain more Indigenous community support and lead to better outcomes.

The connection of Aboriginal and Torres Strait Islander people to Country is in turn connected to health and wellbeing. The work of Aboriginal Land Council and Indigenous

[23] Aboriginal and Torres Strait Islander Health Position Statement [Internet]. The Royal Australasian College of Physicians; 2018 [cited 2023 Jul 21]. Available from: https://www.racp.edu.au/docs/default-source/advocacy-library/racp-2018-aboriginal-and-torres-strait-islander-health-position-statement.pdf.
[24] Indigenous Strategic Framework [Internet]. The Royal Australasian College of Physicians; 2018 [cited 2023 Jul 24]. Available from: https://www.racp.edu.au/docs/default-source/default-document-library/indigenous-strategic-framework.pdf

land management practices[25] are examples of how this connection of Aboriginal and Torres Strait Islander people to Country continues to this day and creates health benefits, environmental, cultural, social, and economic benefits.

The Strategy must connect with First Nations communities and organisations

AIDA has a policy statement on climate change and Aboriginal and Torres Strait Islander people's health[26]. The Lowitja Institute Climate Change and Aboriginal and Torres Strait Islander Health Discussion Paper[27] outlines best practice principles, including the importance of "centering and leveraging the valuable biocultural knowledge of Aboriginal and Torres Strait Islander people with appropriate intellectual and cultural property protection." As a peak body and leader in Aboriginal and Torres Strait Islander health and peak body, it is important that NACCHO is consulted in the development of Strategy and engaged in implementing measures. Engagement with Aboriginal Community Controlled Health Services (ACCHS) more broadly is also key.

As noted in the Consultation Paper, the National Aboriginal and Torres Strait Islander Health Plan for 2021–2031, the National Aboriginal and Torres Strait Islander Health Workforce Plan and the National Agreement on Closing the Gap are all relevant to this Strategy. Connecting with local communities and collaborations already working in the health and environmental spaces, including those organisations supporting the implementation of the above plans and strategies is important. It provides an opportunity to recognise and learn from First Nations leadership.

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?

Recommendations

a. Governance forums for co-design of the Strategy with First Nations people should be determined in partnership with the First Nations people, communities, and organisations that the Australian Government engages with on this work.
b. Co-design approaches must be culturally safe, strengths based, First Nations led, and prioritise self-determination.
c. Ensure appropriate intellectual and cultural property protections and follow Indigenous data sovereignty principles and approaches.

Co-design approaches must be First Nations led

We commend the Government for taking a co-design approach and changes to the role of the Indigenous Advisory Committee. We consider that the types of governance forums that are utilised to facilitate co-design of the Strategy with First Nations people should be determined in partnership with the First Nations people, communities, and organisations that the Australian Government engages with on this work and be First Nations led. Regardless, we consider that active prioritisation of the co-design process is essential to ensure ongoing meaningful engagement.

[25] 2.14 Indigenous people with access to their traditional lands [Internet]. AIHW Indigenous Health Performance Framework. Australian Institute of Health and Welfare; [cited 2023 Jul 24]. Available from: https://www.indigenoushpf.gov.au/measures/2-14-indigenous-people-access-traditional-lands#references

[26] Policy statement Climate change and Aboriginal and Torres Strait Islander people's health [Internet]. The Australian Indigenous Doctors' Association; 2020 [cited 2023 Jul 24]. Available from: https://aida.org.au/app/uploads/2021/01/AIDA-Climate-Change-Final-December-2020-002.pdf

[27] Lowitja Institute. Climate Change and Aboriginal and Torres Strait Islander Health Healthy Environments and Lives (HEAL) Network & Centre for Research Excellence in Strengthening Systems for Indigenous Health Care Equity (CRE-STRIDE) [Internet]. Lowitja Institute; 2021 [cited 2023 Jul 24] p1. Available from: https://www.lowitja.org.au/content/Image/Lowitja_ClimateChangeHealth_1021_D10.pdf

The Strategy must prioritise how to work with the Voice to Parliament

The RACP is committed to the principles of the Uluru Statement from the Heart, including recognition of an Aboriginal and Torres Strait Islander Voice to Parliament in the Australian Constitution. A First Nations Voice to Parliament is a critical step towards genuine reconciliation and will lead to real health benefits for Aboriginal and Torres Strait Islander people and their communities. The right to self-determination is critical to addressing the disparities in health outcomes for First Nations people. A constitutionally enshrined Voice to Parliament will empower Aboriginal and Torres Strait Islander people to have greater agency over the decisions, laws and policies that affect their lives. Accordingly, it is crucial that any governance forum for integrating First Nations leadership in the Strategy prioritises how it will work with the Voice, if it is successful, to strengthen First Nations leadership of the Strategy and the goals of the Voice.

Prioritise self-determination and cultural safety

Given the ongoing existence of structures and approaches that continue the detrimental impacts of colonisation and dispossession faced by Aboriginal and Torres Strait Islander people and communities, the approach to facilitating co-design must be culturally safe, strengths-based, First Nations led, and prioritise self-determination. The RACP "recognises the cultural diversity among and within Aboriginal and Torres Strait Islander communities, and understands that languages, traditions, and spiritual and cultural beliefs vary[28]." Further, Aboriginal and Torres Strait Islander communities are likely to have different priorities relating to climate change and health both reflecting the diversity among and within communities and of the lands they are custodians of.

Further, governance frameworks must ensure appropriate intellectual and cultural property protection[29] and follow Indigenous data sovereignty principles and approaches[30].

While the concept of cultural safety has come about largely through clinical settings, it can be applied more broadly. A key part of cultural safety is critiquing power structures and challenging one's own biases, assumptions, and prejudices[31], and this is applicable and possible within clinical settings and beyond them. Accordingly, it should guide all aspects of the development and implementation of the Strategy.

[28] Aboriginal and Torres Strait Islander Health Position Statement [Internet]. The Royal Australasian College of Physicians; 2018 [cited 2023 Jul 21]. Available from: https://www.racp.edu.au/docs/default-source/advocacy-library/racp-2018-aboriginal-and-torres-strait-islander-health-position-statement.pdf.

[29] Lowitja Institute. Climate Change and Aboriginal and Torres Strait Islander Health Healthy Environments and Lives (HEAL) Network & Centre for Research Excellence in Strengthening Systems for Indigenous Healthcare Equity (CRE-STRIDE) [Internet]. 2021 [cited 2023 Jul 21]. Available from: https://www.lowitja.org.au/content/Image/Lowitja_ClimateChangeHealth_1021_D10.pdf

[30] Lowitja Institute. Indigenous Data Governance and Sovereignty (Research Pathways: Information Sheet Series). 2021 [cited 2023 Jul 25]; Available from: https://www.lowitja.org.au/icms_docs/328550_data-governance-and-sovereignty.pdf

[31] Curtis E, Jones R, Tipene-Leach D, Walker C, Loring B, Paine SJ, et al. Why cultural safety rather than cultural competency is required to achieve health equity: A literature review and recommended definition. International Journal for Equity in Health [Internet]. 2019 Nov 14 [cited 2023 Jul 25];18(1):1–17. Available from: https://equityhealthj.biomedcentral.com/articles/10.1186/s12939-019-1082-3

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?

Recommendations

a. Consider the measurement and reporting of health system emissions and energy use at state, territory, and local levels.

As noted above, 'Measurement' should be considered as an enabler not an objective.

State and Territory mitigation policies

We note that varying but significant levels of mitigation action are being taken at state, territory, and local levels to mitigate health sector carbon emissions. The NSW Net Zero Unit[32] and progress at the Hunter New England Local Health District[33] are good examples of this. Further, as shown by the numerous Australian members of the Global Green and Healthy Hospitals network[34], environmental sustainability is a concern for hospitals and other health sector organisations across Australia.

We draw your attention to the Climate Change and Australia's Healthcare Systems – A Review of Literature, Policy and Practice (RACP Research Report), which identifies health system responses to climate change along with state specific mitigation and adaptation policies and programs. We also note the Australian Commission on Safety and Quality in Healthcare report "A Review of Sustainable Healthcare[35]" which outlines policies directly and indirectly supporting sustainable healthcare. For example the Victorian Health Service are required to monitor their emissions if they want to fulfil environmental sustainability requirements. Additionally https://consultation.health.wa.gov.au/corporate-services/department-of-health-climate-action-plan/results/departmentofhealthclimateactionplanseptember2022version1.1.pdf[36] to support a system wide response to climate change. The report further outlines specific activities being undertaken across health organisations. The Government of Western Australia South Metropolitan Health Service's Environmental Sustainability Strategy[37] may also be a useful resource.

Environmental sustainability initiatives

While many health organisations have implemented environmental sustainability initiatives, there are many challenges. A review of initiatives in NSW[38] found that implementation was key, highlighting the need for leadership, data, resources, engagement, partnership, and integrated care.

[32] Climate risk and net zero [Internet]. www.health.nsw.gov.au. 2022 [cited 2023 Jul 25]. Available from: https://www.health.nsw.gov.au/netzero/Pages/default.aspx
[33] Hunter New England Health. Sustainable Healthcare [Internet]. HNE Health. 2022 [cited 2023 Jul 25]. Available from: https://www.hnehealth.nsw.gov.au/about-us/sustainable_healthcare
[34] Global Green and Healthy Hospitals [Internet]. greenhospitals.org. 2022 [cited 2023 Jul 25]. Available from: https://greenhospitals.org/about
[35] Wyns A, Alliance H, Bragge P. A Review of Sustainable Healthcare Policy, Practice, and Research with a Focus on Safety and Quality [Internet]. 2022 [cited 2023 Jul 25]. Available from: https://www.safetyandquality.gov.au/sites/default/files/2022-10/a_review_of_sustainable_healthcare_-_june_2022.pdf
[36] Department of Health, WA. Climate Action Plan 2022-2024 [Internet]. 2022 [cited 2023 Jul 25]. Available from: https://consultation.health.wa.gov.au/corporate-services/department-of-health-climate-action-plan/results/departmentofhealthclimateactionplanseptember2022version1.1.pdf
[37] Western Australia South Metropolitan Health Service. Environmental Sustainability Strategy 2023-2026. 2023 May [cited 2023 Jul 25]; Available from: https://smhs.health.wa.gov.au/~/media/HSPs/SMHS/Corporate/Files/Sustainability/SMHS-Environmental-Sustainability-Strategy.pdf
[38] Charlesworth K, Stewart G, Sainsbury P. Addressing the carbon footprint of health organisations: eight lessons for implementation. Public Health Research & Practice [Internet]. 2018 [cited 2023 Jul 25];28(4). Available from: https://apo.org.au/sites/default/files/resource-files/2018-12/apo-nid208936.pdf

While the RACP is not involved in initiatives to measure and report on health system emissions as a college, many RACP members have been or are involved in such initiatives. We note that the RACP has recently finalised its Environmental Sustainability Policy[39] and we plan to continue our work in measuring and reporting on our energy use. We have also been using the Doctors for the Environment Australia's GreenCollege Guidelines[40] to strengthen our work in this area.

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

Recommendations

a. Draw on international experience and resources and apply these to an Australian context.
b. Establish monitoring and evaluation frameworks that support continuous improvement of mitigation measures.

We recognise the importance of measuring emissions and ensuring that emissions are systematically measured.

International tools can offer guidance on measurement

There are some tools to help health organisations/facilities better record and monitor progress and success of their sustainability projects, and thus support emissions reductions. Outcomes can then be reported and tracked. In the UK, the National Health Service (NHS) implemented the Sustainability Model[41], a diagnostic tool, to identify the strengths and weaknesses of a project. Further, the NHS has provided guidance on emissions factors per unit of healthcare activity[42] and a calculator for assessing the environmental sustainability of healthcare pathways. A suite of guidance and emissions factors specific to the Australian context, along with training, would be invaluable to assist clinicians and healthcare planners to determine the carbon emissions impact of changes to care pathways. It is important that all health professionals have access to tools and basic carbon footprint training so they can assess the care they deliver and how they could reduce climate impacts, while maintaining standards of care.

The NHS has a number of other useful resources including the Delivery a 'Net Zero' National Health Service report[43]. Connecting with Greener NHS to share resources, approaches, and best practice is an important opportunity for international collaboration.

Another tool is the Sustainability in Quality Improvement (SusQI)[44] to guide organisations. This is a recognised method for embedding sustainability into quality improvement, social and environmental challenges in healthcare and assesses quality and value through the lens of a 'triple bottom line'. The Centre for Sustainable Health[45] has developed resources supporting this approach.

[39] The Royal Australasian College of Physicians. Environmental Sustainability Policy [Internet]. www.racp.edu.au. The Royal Australasian College of Physicians; 2023 [cited 2023 Jul 25]. Available from: https://www.racp.edu.au/about/board-and-governance/governance-documents/environmental-sustainability-policy
[40] Doctors for the Environment Australia. Green College Guidelines [Internet]. 2022 [cited 2023 Jul 25]. Available from: https://dea.org.au/wp-content/uploads/2022/10/GreenCollege-guidelines_online.pdf
[41] NHS England and NHS Improvement. Sustainability Model Online library of Quality, Service Improvement and Redesign tools NHS England and NHS Improvement [Internet]. 2021 [cited 2023 Jul 25]. Available from: https://www.england.nhs.uk/wp-content/uploads/2021/03/qsir-sustainability-model.pdf
[42] Sustainable Care Coalition. Sustainable Care Pathways Guidance [Internet]. [cited 2023 Jul 25]. Available from: https://shcoalition.org/sustainable-care-pathways-guidance/
[43] NHS England. Delivering a "Net Zero" National Health Service [Internet]. 2022 [cited 2023 Jul 25]. Available from: https://www.england.nhs.uk/greenernhs/wp-content/uploads/sites/51/2022/07/B1728-delivering-a-net-zero-nhs-july-2022.pdf
[44] Centre for Sustainable Healthcare. What is SusQI? [Internet]. [cited 2023 Jul 25]. Available from: https://www.susqi.org/the-susqi-education-project
[45] Centre for Sustainable Healthcare [Internet]. Centre for Sustainable Healthcare. [cited 2023 Jul 25]. Available from: https://sustainablehealthcare.org.uk/

Research and data collection should be considered

We note the need to invest in research and data collection from systematic monitoring and evaluation of environmental sustainability activities to support continual improvement and to show whether the healthcare sector is reducing emissions at or above the rates committed to in Australia's NDC[46].

The role of the Australian Centre for Disease Control should be considered, particularly in relation to national leadership and data collection in this area. The role of the Australian Institute of Health and Welfare in collecting and reporting relevant data should also be considered.

In addition to measuring emissions, it is also useful to demonstrate the value in doing so. The global temperature-related mortality impact of earlier decarbonization for the Australian health sector and economy: A modelling study[47] suggests that "earlier decarbonisation has a significant impact on temperature-related mortality." Such studies and frameworks may be helpful for justifying significant near-term investments to rapidly decarbonise the health sector.

[46] Australian Government. Australia's Nationally Determined Contribution [Internet]. 2022 [cited 2023 Jul 21]. Available from: https://unfccc.int/sites/default/files/NDC/2022-06/Australias%20NDC%20June%202022%20Update%20%283%29.pdf

[47] Sharma S, Bressler RD, Bhopal A, Norheim OF. The global temperature-related mortality impact of earlier decarbonization for the Australian health sector and economy: A modelling study. Fu S, editor. PLOS ONE. 2022 Aug 3;17(8):e0271550.

Proposed Objective 2: Mitigation

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

Recommendations

a. Leverage connections between focus areas for emissions reduction to maximise impact.
b. Approach mitigation through an environmental sustainability lens.
c. Add energy as a separate focus area.
d. Leverage a Health in All Policies approach to contribute to mitigation, including a focus on transitioning to renewables.
e. Add food as a focus area for emissions reduction.
f. Assess costs of mitigation initiatives to identify the best opportunities.

Emissions reduction efforts must be comprehensive and interconnected

While the focus areas in the Consultation Paper are broad and will capture many emissions sources, it is important that each area is canvassed thoroughly to ensure that the Strategy provides a comprehensive plan for health sector emissions reduction. Further, it is important to take a holistic approach to mitigation. While it may be useful to identify different focus areas for mitigation, it is important to understand how these areas interact to ensure initiatives can maximise emissions reductions in all relevant areas.

Patient care must not be compromised

The RACP's approach to policy and advocacy[48] aims to prioritise patient and carer experience. Quality of care and patient health outcomes must not be compromised on the path to achieving a net zero healthcare system. Initiatives to reduce emissions must maintain or improve patient health outcomes. Where patient care will be impacted, for example, moving away from pressurised metered dose inhalers, relevant consumer groups must be consulted alongside clinicians and other stakeholders to develop transition plans that consider patient needs and concerns. Initiatives to reduce emissions that involve patients must proactively ensure that patients are not stigmatised and must not impose additional costs.

It is important that the need to reduce emissions does not interfere with essential healthcare service delivery, result in poorer health outcomes, or reduce healthcare access. This report[49] discusses false economies in the public sector in the pursuit of efficiency. It notes that effectiveness and equity of an action must be assessed when meeting targets. These principles can also be applied to reducing health sector emissions. While all areas of healthcare systems should be planning to equitably decarbonise, there may be areas where emissions increase due to increased demand. It is important to consider the health sector holistically when this occurs as investment in prevention, primary care, high-value testing, and increased immunisation coverage can improve health outcomes and reduce mortality while also helping reduce emissions in higher carbon parts of the health sector.

Innovation focused on best practice in environmental sustainability and better patient outcomes is needed.

[48] The Royal Australasian College of Physicians. Creating Equitable and Healthier Communities - College Policy and Advocacy Council Plan 2022-2026 [Internet]. 2022 [cited 2023 Jul 25]. Available from: https://www.racp.edu.au/docs/default-source/policy-and-adv/creating-equitable-and-healthier-communities-college-policy-and-advocacy-council-plan-2022-2026.pdf?sfvrsn=141cca1a_6
[49] Stone C. False economies: unpacking public service efficiency [Internet]. Centre for Policy Development; 2014 [cited 2023 Jul 25]. Available from: https://apo.org.au/sites/default/files/resource-files/2014-06/apo-nid40210.pdf

Environmental sustainability is a foundation for ongoing emissions reduction

We commend the Consultation Paper's focus on mitigation. As outlined above, we consider that this objective should be broadened to encompass environmental sustainability. The RACP's Environmentally Sustainable Healthcare Position Statement[50] states that "An environmentally sustainable healthcare system is one that has no cumulative harmful impacts on the natural environment or society, while providing high-quality healthcare and being financially viable." A broadened focus on environmental sustainability provides a strong foundation for emissions reduction efforts, ensures that initiatives that aim to reduce emissions are otherwise environmentally sustainable, and can bring about health co-benefits. The resource stewardship approach outlined below in response to question 13 is a useful concept for approaching environmental sustainability.

Transitioning to renewables is key to reducing health system emissions

A Health in All Policies approach and adaptation action fit well with an environmental sustainability lens. We note that energy, mainly fossil fuel combustion contributes over half of the healthcare sector's emissions[51]. Accordingly, an economy-wide transition to renewables is needed for effective and widescale health sector emissions reduction and the health sector has a role to play in advocating for this as part of its own climate mitigation action. Further, fossil fuel combustion and extraction contribute significantly to other environmental impacts, including air pollution and water contamination, which have related health impacts. Reducing fossil fuel extraction can improve population health and through addressing the environmental determinants of health.

Given the significant contribution of fossil fuels to climate change and direct health impacts, we consider that energy should be a separate focus area, rather than bundled with 'built environment and facilities.'

Adaptation action and addressing determinants of health contribute to mitigation

Improving health equity and addressing the social determinants of health are climate-health mitigation and adaptation solutions. Addressing environmental and social determinants improves health[52], which reduces demands on the healthcare system[53], particularly at the high-emissions tertiary end. This can significantly impact emissions, given that alongside pharmaceuticals, hospitals contribute the largest share of the health sector's carbon emissions[54].

Commercial determinants of health are a powerful component of social determinants and addressing these can contribute to improving health. For example, reducing junk food advertising[55] has the potential to improve health outcomes as "widespread advertising, marketing, availability and access to foods and non-alcoholic beverages linked with unhealthy diets are strongly associated with increases in obesity rates – and childhood

[50] The Royal Australasian College of Physicians. Environmentally Sustainable Healthcare Position Statement [Internet]. Available from: https://www.racp.edu.au/docs/default-source/advocacy-library/environmentally-sustainable-healthcare-position-statement.pdf?sfvrsn=2834361a_4

[51] Health Care Without Harm. HEALTH CARE'S CLIMATE FOOTPRINT HOW THE HEALTH SECTOR CONTRIBUTES TO THE GLOBAL CLIMATE CRISIS AND OPPORTUNITIES FOR ACTION Health Care Without Harm Climate- [Internet]. 2019 [cited 2023 Jul 25]. Available from: https://noharm-global.org/sites/default/files/documents-files/5961/HealthCaresClimateFootprint_092319.pdf

[52] Health in All Policies Position Statement [Internet]. The Royal Australasian College of Physicians; 2016 [cited 2023 Jul 21]. Available from: https://www.racp.edu.au/docs/default-source/advocacy-library/health-in-all-policies-position-statement.pdf

[53] NHS England. Delivering a "Net Zero" National Health Service [Internet]. 2022 [cited 2023 Jul 25]. Available from: https://www.england.nhs.uk/greenernhs/wp-content/uploads/sites/51/2022/07/B1728-delivering-a-net-zero-nhs-july-2022.pdf

[54] Malik A, Lenzen M, McAlister S, McGain F. The carbon footprint of Australian health care. The Lancet Planetary Health [Internet]. 2018 Jan [cited 2023 Jul 24];2(1):e27–35. Available from: https://www.thelancet.com/journals/lanplh/article/PIIS2542-51961730180-8/fulltext

[55] The Royal Australasian College of Physicians. Switch off the Junk - Let's get kids' health back on track [Internet]. kidscatchup.org.au. 2023 [cited 2023 Jul 25]. Available from: https://kidscatchup.org.au/switch-off-the-junk/

obesity in particular[56].” Further, as outlined in the section below, a plant-based diet can contribute to reducing emissions.

Food presents a challenge and an opportunity

Emissions related to food are relevant to all the focus areas identified. The significant challenge and opportunity that addressing food-related emissions presents warrants food being a separate focus area. The RACP recognises[57] that plant-based diets can contribute to reducing emissions while also bringing about health benefits. The EAT-Lancet Commission on Food, Planet, Health has developed The Planetary Health Diet[58], which provides guidelines “to ranges of different food groups that together constitute an optimal diet for human health and environmental sustainability”. Diets such as this provide a guide for organisations seeking to support healthier and environmentally friendly food options. Hospitals can play a leading role in influencing both supply chains and patient dietary choices through purchasing and menu decisions that encourage plant-based healthy eating. Reducing food waste and packaging are also relevant for emissions reduction efforts. Addressing food waste should also be considered in this section, it can account for a significant portion of total waste in some healthcare facilities[59]. Reducing food waste should consider plate waste[60] and a reduction in single-use packaging items that are provided as part of hospital food service. This should include reducing reliance on bottled water where there are alternative safe drinking water options available.

Marginal abatement cost curves (MACCs) can identify cost-effective initiatives

Effective reduction of the healthcare sector’s footprint requires a better understanding of the sector’s emissions profile. As part of identifying opportunities to reduce the sector’s carbon footprint, costs should also be analysed, for example, through a marginal abatement cost curve which presents the costs or savings from different emissions reduction opportunities alongside the size of the emissions reduction that could be achieved. NHS England completed a MACC[61] in 2010 and MACCs are widely used in climate policy to identify the best emissions reduction opportunities.

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?

Recommendations

a. Include actions for improving the built environment on, around, and near health facilities.

[56] The Royal Australasian College of Physicians. Action to prevent obesity and reduce its impact across the life course Evidence Review [Internet]. Available from: https://www.racp.edu.au/docs/default-source/advocacy-library/racp-obesity-evidence-review.pd

[57] The Royal Australasian College of Physicians. The Health Benefits of Mitigating Climate Change Position Statement [Internet]. 2016 [cited 2023 Jul 25]. Available from: https://www.racp.edu.au/docs/default-source/advocacy-library/health-benefits-of-mitigating-climate-change-position-statement.pdf?sfvrsn=3d34361a_5

[58] The EAT-Lancet Commission. The Planetary Health Diet [Internet]. EAT. [cited 2023 Jul 25]. Available from: https://eatforum.org/eat-lancet-commission/the-planetary-health-diet-and-you/

[59] Cook N, Goodwin D, Porter J, Collins J. Food and food-related waste management strategies in hospital food services: A systematic review. Nutrition & Dietetics [Internet]. 2022 Sep 27 [cited 2023 Jul 25]; Available from: https://onlinelibrary.wiley.com/doi/full/10.1111/1747-0080.12768

[60] Williams P, Walton K. Plate waste in hospitals and strategies for change Plate waste in hospitals and strategies for change [Internet]. 2011 [cited 2023 Jul 25]. Available from: https://ro.uow.edu.au/cgi/viewcontent.cgi?referer=&httpsredir=1&article=1911&context=hbspapers

[61] NHS England Marginal Abatement Cost Curve [Internet]. 2010 Feb [cited 2023 Jul 25]. Available from: https://www.england.nhs.uk/greenernhs/wp-content/uploads/sites/51/2021/02/SDU-Marginal-Abatement-Cost-Curve-2010.pdf

Greener spaces can improve health and wellbeing

Built environments have an impact on health and resources such as the NSW Healthy Built Environment Checklist[62] are invaluable for understanding how the built environment influences health outcomes and the opportunities to promote health. The built environment on, around and near health facilities also play an important role in promoting health. For example, access to green spaces can provide physical and mental health benefits, including benefits from increased physical activity.[63] There is also growing evidence showing links between contact with nature and improved health[64]. The Strategy is an opportunity to increase access to green spaces on health sites, as is being done through the NHS Forest Alliance[65]. Further, several Mater private hospital facilities in Queensland have Healing Gardens[66] and last year the Mater piloted an edible garden. Initiatives like this have the potential to contribute to climate action and bring health benefits.

In addition to building design, construction, and operation areas outlined in the Consultation Paper, we suggest considering the optimisation of natural lighting[67] and ventilation[68], alternative energy sources[69], and green roofing[70].

We note that this focus area should include retrofitting existing buildings as well as putting in place standards for new buildings. This is important given the longevity of some of the health system's building stock. Retrofitting should consider building climate resilience alongside plans to reduce emissions. The repurposing of building spaces should also be considered.

Decisions on whether to retrofit or rebuild should consider the environmental sustainability, climate resilience, health, and healthcare service delivery-related costs and benefits of each option.

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

Recommendations

a. Employee, patient, and visitor travel should enable and encourage active transport to harness health co-benefits.

[62] NSW Ministry of Health. Healthy Built Environment Checklist A guide for considering health in development policies, plans and proposals. 2020 [cited 2023 Jul 25]; Available from: https://www.health.nsw.gov.au/urbanhealth/Publications/healthy-built-enviro-check.pdf

[63] The Royal Australasian College of Physicians. Action to prevent obesity and reduce its impact across the life course Evidence Review [Internet]. 2018 [cited 2023 Jul 25]. Available from: https://www.racp.edu.au/docs/default-source/advocacy-library/racp-obesity-evidence-review.pdf

[64]

[65] Centre for Sustainable Healthcare. NHS Forest [Internet]. nhsforest.org. [cited 2023 Jul 25]. Available from: https://nhsforest.org/

[66] Mater Private Hospital. Healing Garden [Internet]. www.mater.org.au. [cited 2023 Jul 25]. Available from: https://www.mater.org.au/health/facilities/healing-garden-mphs

[67] Muñoz-González C, Ruiz-Jaramillo J, Cuerdo-Vilches T, Joyanes-Díaz MD, Montiel Vega L, Cano-Martos V, et al. Natural Lighting in Historic Houses during Times of Pandemic. The Case of Housing in the Mediterranean Climate. International Journal of Environmental Research and Public Health [Internet]. 2021 Jan 1 [cited 2023 Jul 25];18(14):7264. Available from: https://www.mdpi.com/1660-4601/18/14/7264/htm

[68] Muhaidat J, Albatayneh A, Assaf MN, Juaidi A, Abdallah R, Manzano-Agugliaro F. The Significance of Occupants' Interaction with Their Environment on Reducing Cooling Loads and Dermatological Distresses in East Mediterranean Climates. International Journal of Environmental Research and Public Health [Internet]. 2021 Aug 23 [cited 2023 Jul 25];18(16):8870. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8395048/

[69] Zhang S, Ocłoń P, Klemeš JJ, Michorczyk P, Pielichowska K, Pielichowski K. Renewable energy systems for building heating, cooling and electricity production with thermal energy storage. Renewable and Sustainable Energy Reviews [Internet]. 2022 Sep 1 [cited 2023 Jul 25];165:112560. Available from: https://www.sciencedirect.com/science/article/pii/S1364032122004592

[70] ziaee S, Gholampour Z, Soleymani M, Doraj P, Eskandani OH, Kadaei S. Optimization of Energy in Sustainable Architecture and Green Roofs in Construction: A Review of Challenges and Advantages. Wei C, editor. Complexity [Internet]. 2022 Sep 17 [cited 2023 Jul 25];2022:1–15. Available from: https://www.researchgate.net/publication/363636106_Optimization_of_Energy_in_Sustainable_Architecture_and_Green_Roofs_in_Construction_A_Review_of_Challenges_and_Advantages

b. Technology and digital health reforms should be harnessed to reduce travel and transport emissions.

The Strategy should address Scope 3 emissions

The RACP considers that Scope 3 emissions should be addressed by the Strategy, which would mean the inclusion of employee commuting and supply chain transportation. The Hunter New England Health District encourages video-conferencing for everyday business where possible and will implement strategies to support cycling to work and carpooling[71].

Transport strategies for employees and patients are needed

Walking and cycling infrastructure as well as public transport hubs are needed to encourage active travel. While visitor and patient transport is difficult to account for, we would like to see these included in the Strategy. Encouraging walking and cycling to and from health precincts and facilities has co-benefits for physical and mental health as well as reducing carbon emissions.

Patient transport is important for its climate impacts but it also impacts access to healthcare[72], an added impetus for leadership in this area by the Australian Government. Further, Global Green and Healthy Hospitals recommends transport strategies for both staff and patients[73] and the NHS aims to reduce vehicle use by both staff and patients[74]. The Strategy may also wish to consider providing services closer to patients where this can decrease overall transport and travel across staff and patients.

Digital health can be harnessed to reduce unnecessary travel

Health reform measures such as those relating to digital health[75] could contribute in the reduction of both patient and staff travel, noting that some of these are outlined later in the Consultation Paper. Engagement with rural and remote health organisations and communities will be crucial in identifying solutions that are fit for purpose. We note that digital health may be challenging in some rural and remote locations and may not be appropriate for all situations. A health equity lens should be applied to ensure access to healthcare for all populations, including those where digital solutions are not viable.

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

Recommendations

a. Leverage International collaboration to influence global supply chains.

b. Develop a national framework for reliable and sustainable health sector supply chains.

A National Framework is needed for management of low carbon supply chains

A resource stewardship approach can assist in reducing the volume of resources needing to be procured. Reduced resource use leads to less pollution as well as reduced carbon emissions.

[71] Hunter New England Health. Transport [Internet]. HNE Health. 2022 [cited 2023 Jul 25]. Available from: https://www.hnehealth.nsw.gov.au/about-us/sustainable_healthcare/transport
[72] The Council of Social Service of New South Wales (NCOSS). Provided there's Transport: Transport as a barrier to accessing healthcare in NSW. 2012 Dec [cited 2023 Jul 25]; Available from: https://www.ncoss.org.au/wp-content/uploads/2015/08/121206health-transport-report.pdf
[73] Global Green and Healthy Hospitals. Transportation [Internet]. greenhospitals.org. [cited 2023 Jul 25]. Available from: https://greenhospitals.org/transportation
[74] NHS England. Delivering a "Net Zero" National Health Service [Internet]. 2022 [cited 2023 Jul 25]. Available from: https://www.england.nhs.uk/greenernhs/wp-content/uploads/sites/51/2022/07/B1728-delivering-a-net-zero-nhs-july-2022.pdf
[75] The Royal Australasian College of Physicians. Digital Health [Internet]. www.racp.edu.au. The Royal Australasian College of Physicians; [cited 2023 Jul 25]. Available from: https://www.racp.edu.au/fellows/resources/digital-health

Further, the Strategy should consider incentives for use of reusable and biodegradable products. The Australasian Society for Infectious Diseases (ASID) can play a role in provision of infection control expertise in the selection of appropriate products and practices.

We note the need for international collaboration is relevant to supply chains to achieve the economies of scale needed to drive changes in global supply chains (such as pharmaceuticals and medical equipment and supplies) and contributes to an international political context where climate change and health and decarbonising healthcare systems is prioritised.

We also suggest that a national framework for reliable and sustainable health sector supply chains is developed. Its purpose should be to establish standards, systems, and targets to guide the management of public health supply chains across all Australian jurisdictions.

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

Recommendations

a. Consider how the Pharmaceutical Benefits Scheme can contribute to reducing emissions from medication.

Patient care and health outcomes must be central to all medication reviews

We commend the inclusion of a focus to work with key stakeholders in primary care to help reduce the use of pressurised metered dose inhalers (PMDIs). However, other avenues should be considered as well, for example, ensuring that patients can access more sustainable alternatives at the same or lower price than their current inhalers. Further, as outlined above patient care and health outcomes must not be compromised in moving away from PMDIs and nor should patients be stigmatised. Consumer groups, the RACP, the RACGP and other relevant groups must be consulted on any plans in this space.

More broadly, there is an opportunity for the Pharmaceutical Benefits Advisory Committee to consider the climate impacts of medication as part of their decision-making on which medications to fund within the Pharmaceutical Benefits Scheme.

Further, the Strategy should consider synergies with antimicrobial stewardship and preventive health. Non-pharmaceutical treatment options should also be considered. However, these should only be relied upon where medically appropriate and less likely to cause environmental harm.

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

Recommendations

a. Reducing the use of resources should be central to reducing waste-related emissions.
b. Consider incorporating principles of resource stewardship into the Strategy.

Prevent waste through health reform measures and low value care

We commend the Consultation Paper's recognition that re-use and recycling are key to reducing emissions related to waste. However, reducing the need for re-use and recycling is preferable. Leveraging prevention, eliminating low value care, and other health reform

measures are relevant as reduced demand and reducing low-value care contribute to reducing emissions.

Grampians Health Ballarat's focus on prevention and population health[76] recognises the need to tackle climate change and health. It has developed a Health Resource Stewardship@BHS Framework[77], which recognises that precious and finite health resources must be maximised to provide health services as efficiently as possible. The Framework uses a stewardship lens to identify 16 sources of waste, including unwarranted clinical variation, duplication, over-diagnosis and over-treatment, delays, safety shortcuts, and programs that worsen inequality.

The Strategy should consider applying principles of resource stewardship. The RACP's Evolve[78] initiative, which aims to reduce low value care, and antimicrobial stewardship[79], which aims to ensure optimal antimicrobial prescribing and use, are examples of resource stewardship. Choosing Wisely is another example and we hope to continue to engage with this program as it develops under the new leadership of the Australian Commission on Safety and Quality in Healthcare.

Food and water waste policies need to be considered

While food should be a separate focus area, food waste[80] should also be considered in this section, including consideration of composting options through green space initiatives. Reducing water use[81] should also be considered.

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?

Recommendations

a. Ensure that environmental sustainability and climate resilience are key considerations for all health reform activities.
b. 'Prevention and optimising models of care' should be the first focus area in this section.
c. Increase funding for preventive health in line with the Government's commitment to earmark 5 percent of all health expenditure for prevention by 2030.
d. Increase funding for primary healthcare.

The Strategy must take a broader health systems reform approach

The Strategy's health reform approach should centre prevention, optimising models of care, and reducing low value care and resource use.

We are pleased to see a focus on prevention and optimising models of care in the Consultation Paper. However, we recommend broadening this focus to include other health reform measures that can assist in climate health mitigation and adaptation. Ensuring that environmental sustainability and climate resilience are key considerations

[76] Prevention and Population Health [Internet]. www.bhs.org.au. [cited 2023 Jul 25]. Available from: https://www.bhs.org.au/services-and-clinics/grampians-public-health-unit/prevention-and-population-health/
[77] Ballarat Health Services. Ballarat Health Services Health Resource Stewardship Framework [Internet]. 2019 [cited 2023 Jul 25]. Available from: https://www.bhs.org.au/media/usgj3ww5/health-resource-stewardship-framework-september-2019.pdf
[78] The Royal Australasian College of Physicians. Evolve [Internet]. evolve.edu.au. [cited 2023 Jul 25]. Available from: https://evolve.edu.au/
[79] Australian Commission on Safety and Quality in Healthcare. Antimicrobial Stewardship [Internet]. www.safetyandquality.gov.au. [cited 2023 Jul 25]. Available from: https://www.safetyandquality.gov.au/our-work/antimicrobial-stewardship
[80] Cook N, Goodwin D, Porter J, Collins J. Food and food-related waste management strategies in hospital food services: A systematic review. Nutrition & Dietetics [Internet]. 2022 Sep 27 [cited 2023 Jul 25]; Available from: https://onlinelibrary.wiley.com/doi/full/10.1111/1747-0080.12768
[81] Department of Health, Victoria. Reducing water use at healthcare facilities [Internet]. Vic.gov.au. 2015 [cited 2023 Jul 25]. Available from: https://www.health.vic.gov.au/planning-infrastructure/reducing-water-use-at-healthcare-facilities

for all health reform activities will assist in identifying health reform measures that can support the aims of this Strategy.

We support an increased focus on reducing low-value care within the Strategy, and on evidence-based clinical decision-making that delivers better patient outcomes by minimizing harmful and unnecessary care while reducing climate impact. In Australia, it is estimated that 30% of healthcare is 'low value, with 10% being harmful to the patient[82]. Low value practices include over testing, overdiagnosis, and overtreatment. Beyond the preventable harm to patients, this contributes to an avoidable increase in the health system's carbon footprint. We refer you to our flagship initiative, Evolve[83], which aims to improve patient outcomes through a reduction in practices that are low in value while it also improves resource stewardship in Australia and Aotearoa New Zealand. We commend the Strategy's aim to support such initiatives and note that this support will require funding to ensure it can be embedded in clinical practice, reach patients and encourage ongoing innovation and evidence-based practice.

The drivers of low-value care are entrenched in, assumptions of patient expectations, perceptions of peer behaviour, physician practice, cognitive biases, slow knowledge translation, physician fatigue, lack of healthcare resourcing, and healthcare legal risks and financial considerations. The drivers reflect challenges to eliminate low-value care practices that impact the delivery of high-quality patient care. Addressing entrenched physician practice and healthcare drivers to achieve low value care may provide valuable lessons for broader emissions reduction activities.

Prevention and early intervention must be central to the Strategy

Prevention and early intervention should be the first focus area listed under this section. Primary prevention activities are often cost effective and help avoid overuse of scarce healthcare resources[84]. However, in spite of the Government's commitment to more adequately address prevention under the National Preventive Health Strategy, the current budgetary provisions for prevention are limited and the longer-term planning for prevention funding is lacking.

The Consultation Paper recognises that addressing the social determinants of health and creating environments that promote health are integral to primordial and primary prevention. These are not currently reflected in the suggested actions and should be included as additional actions. The wider determinants of health such as cultural, environmental, and economic, should also be included. While there is a separate section on Health in All Policies, it would be useful to note connections and dependencies between these sections where relevant, including in this section. Prevention, including through addressing the wider determinants of health[85] can reduce health system demand[86]. This helps reduce the health sector's carbon emissions.

Integrated care models can reduce the healthcare system's carbon footprint

Innovative, well-designed, and properly implemented models of care will be critical to making a dent in the carbon footprint of the Australian healthcare sector. Patients with

[82] Braithwaite J, Glasziou P, Westbrook J. The three numbers you need to know about healthcare: the 60-30-10 Challenge. BMC Med [Internet]. 2020 May 4 [cited 2023 Jul 27]; Available from https://doi.org/10.1186/s12916-020-01563-4
[83] The Royal Australasian College of Physicians. Evolve [Internet]. evolve.edu.au. [cited 2023 Jul 25]. Available from: https://evolve.edu.au/
[84] The Australian Prevention Partnership Centre. The value of prevention - Evidence Brief [Internet]. 2021 [cited 2023 Jul 25]. Available from: https://preventioncentre.org.au/wp-content/uploads/2021/10/The-Value-of-Prevention-Evidence-Brief-March-2021.pdf
[85] Health in All Policies Position Statement [Internet]. The Royal Australasian College of Physicians; 2016 [cited 2023 Jul 21]. Available from: https://www.racp.edu.au/docs/default-source/advocacy-library/health-in-all-policies-position-statement.pdf
[86] NHS England. Delivering a "Net Zero" National Health Service [Internet]. 2022 [cited 2023 Jul 25]. Available from: https://www.england.nhs.uk/greenernhs/wp-content/uploads/sites/51/2022/07/B1728-delivering-a-net-zero-nhs-july-2022.pdf

multimorbidity have higher healthcare resource utilisation, including more hospitalisations, outpatient visits, and subspecialist referrals. Primary and secondary prevention – the latter involving a key role for specialists such as members of the RACP – leads to a reduction in deterioration and exacerbation of disease, resulting in better outcomes for the patient, the system and climate stewardship alike.

The RACP's integrated Model of Complex Care (MOCC)[87] is an excellent example of the way care integration might lead to the reduction in healthcare's carbon footprint. Increasing the integration and coordination of health services is vitally important to the improved management of chronic conditions in the community, ensuring that more people stay out of the expensive and resource-intensive hospital system. The role of multi-disciplinary models of care that encourages collaboration with healthcare professionals should be considered.

Integrated care models such as the MOCC make effective use of such technologically enabled services as telehealth visits, hospital in the home and virtual teams and monitoring. When used as clinically advisable, these services provide the patient with quality care out of hospital or outpatient clinic, while decreasing the need for carbon-intensive travel or hospital-based services. We note the importance of enablers such as human resourcing and funding that will be required to successfully shift models of care from acute care to prevention and primary care.

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

Recommendations

a. Recruit multi-disciplinary teams including representatives with experience in private healthcare.
b. Establish and fund communities of practice that engage with health professionals across the health system, including private providers.
c. Develop and roll out guidelines and training to support locally led climate risk and vulnerability assessments, adaptation, and resilience planning. These must be guided by appointed First Nations leadership and engage climate change, health, education, and other relevant professionals.
d. Engage medical colleges, Primary Health Networks (PHNs), universities, and allied health and nursing bodies

Involvement of private providers offers opportunities

Involving private providers in the Strategy's emissions reduction efforts is important. Private providers have a role to play in the health system building climate resilience. They must meet minimum standards for environmental sustainability and climate resilience. This must include international healthcare providers operating in Australia.

Approaches to this could include recruiting multi-disciplinary teams to implement the Strategy, including representatives with experience in private healthcare and funding the establishment of communities of practice which include the aim of engaging with private providers.

The RACP's 2023-2024 pre-budget submission[88] calls for funding for the development of an online system to consolidate the evidence base for climate health action and the

[87] The Royal Australasian College of Physicians. Integrated Model of chronic care management: Cardiometabolic Syndrome and related conditions [Internet]. 2019 Oct [cited 2023 Jul 25]. Available from: https://www.racp.edu.au/docs/default-source/advocacy-library/c-final-mccm-document.pdf?sfvrsn=f873e21a_14
[88] The Royal Australasian College of Physicians. Pathways to Wellbeing: Enhancing the health and wellbeing of all Australians [Internet]. 2023 Jan [cited 2023 Jul 25]. Available from: https://www.racp.edu.au/docs/default-source/advocacy-library/racp-2023-24-pre-budget-submission-to-aust-treasury.pdf?sfvrsn=7c43d11a_6

development and rollout of guidelines and training to support locally led climate risk and vulnerability assessments, adaptation, and resilience planning.

As we have recommended that this database is open access, private providers would benefit from the system alongside public and community organisations. Private providers should be encouraged to build on the database to support other similar private providers in climate resilience and environmental sustainability efforts and to build on public and community sector contributions. Training and guidelines could also assist in involving private providers. While the above recommendations were made regarding climate health resilience, they also apply to climate mitigation. We note that resources, training, and guidelines would need to be tailored for private providers where relevant and that private providers should be encouraged to lead this process.

Infrastructure that supports the private sector taking the lead on innovations in this space and leveraging the movement of workforce between public and private sectors could encourage cross-fertilisation of ideas and approaches.

The relevance of a fully integrated My Health Record System that includes transition from primary care to tertiary, including the private sector, should be considered in relation to furthering the goals of the Strategy.

We also suggest engaging with medical colleges, PHNs, universities, and allied health and nursing bodies because an environmentally sustainable and climate resilient healthcare system requires collaboration from health professionals across the sector.

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? [Built environment and facilities, Travel and transport, Supply chain, Medicines and gases, Waste, and Prevention and optimising models of care]

Recommendations

a. Consider how climate health adaptation action can also contribute to climate mitigation.

b. Ensure urgent action on prevention and low-value care in the Strategy.

Cross-government and interagency collaboration is needed to reduce emissions

We consider that it is crucial for the Strategy to prioritise emissions reduction both in areas where it has control and those that it does not directly have control over. One approach to striking a balance would be urgently addressing the areas within its control while putting in place a longer-term process to engage with relevant stakeholders to reduce emissions outside the health system's control. Cross-government and interagency collaboration is needed to do this effectively. Similarly, in relation to the six focus areas identified in the Strategy, all of these must be addressed, but some may be more feasible to implement immediately while others may require further research and planning.

The Strategy should consider how an environmental sustainability lens can be applied to actions that are required to make the health sector more climate resilient. As Australia is already facing the impacts of extreme weather events, climate health adaptation action is

urgent and may provide an opportunity to implement climate mitigation and environmental sustainability measures at the same time.

Address the environmental, cultural and social determinants of health

Prevention, reducing low-value care and optimising models of care must be a focus within the Strategy. Initiatives to reduce low value care, including Evolve[89] are already underway and providing such existing programs with further funding can have a broad impact across the sector.

Addressing the environmental, cultural, economic and social determinants of health through Health in All Policies actions will be crucial to effective prevention efforts. Some prevention actions will be within the health sector's remit, while others will require a whole of government, multi-sector approach. These may require more planning and collaboration; however, they can bring about significant health and climate benefits that contribute significantly to the health sector's mitigation efforts. The Commonwealth Government has a pivotal role to play in mobilising sectors outside of health to collaborate with the health sector to address the environmental, cultural and social determinants of health. We also note that there is already significant amount of work underway in the prevention space that would benefit from further funding and support. As outlined above, transitioning to renewables is key to reducing health system emissions and it is important that the Strategy recognises the need for an economy-wide shift away from fossil fuels to reduce health system emissions and protect health.

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

Recommendations

a. Urgently fund and expand programs across all health systems that minimise low value care and encourage innovation such as the RACP's Evolve[90] program.
b. Invest now in enablers that ensure successful implementation of the Strategy, including establishing governance, leadership and funding mechanisms.

Preparing the system for the future is a win now and then

As outlined above, there is already a significant level of activity underway to reduce the health system's carbon emissions at local, state, and territory level. At a national level, we consider quick wins to be those actions that can be quickly implemented to set the health system up for deep, meaningful emissions reductions across the sector, alongside actions that directly reduce emissions. This should include establishing and funding our recommendations relating to enablers outlined in our response to question 25 below. This includes governance and leadership, funding mechanisms, human resourcing, technology and tools, and strengthening the health workforce. These actions result in wins when the enablers are established and when they facilitate climate health action in the future.

Further, as outlined above, there are also many activities underway in preventive health and reducing low value care, which could be expanded to increase capacity and reach. This includes funding initiatives that aim to reduce low value care, such as the RACP's Evolve program. The Strategy should also consider a large-scale randomised control trial on programs such as Evolve to evaluate their impact on climate mitigation and resource stewardship.

[89] The Royal Australasian College of Physicians. Evolve [Internet]. evolve.edu.au. [cited 2023 Jul 25]. Available from: https://evolve.edu.au/
[90] The Royal Australasian College of Physicians. Evolve [Internet]. evolve.edu.au. [cited 2023 Jul 25]. Available from: https://evolve.edu.au/

We note that the GreenCollege Guidelines[91] developed by Doctors for the Environment Australia outlines a comprehensive list of actions for medical colleges. Many of these would be applicable to health administration, general practice and specialist consulting rooms as well as other parts of the health sector. Some of these actions may be suitable as quick wins.

We note that given the significant climate mitigation across the health sector, it is likely that many quick wins will have already been realised.

[91] Doctors for the Environment Australia. Green College Guidelines [Internet]. 2022 [cited 2023 Jul 25]. Available from: https://dea.org.au/wp-content/uploads/2022/10/GreenCollege-guidelines_online.pdf

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?

Recommendations

a. Prioritise adaptation action based on vulnerability assessments and adaptation planning.
b. Address systems and structures that cause socioeconomic inequitiess.
c. Prioritisation should consider risks posed to community, culture, and connection to Country for Aboriginal and Torres Strait Islander people and communities.
d. Prioritisation should consider risks driven by poor social determinants of health and risks for priority populations including older people and disabled people and their carers.

Adaptation action must address harmful policies and practices

We are pleased to see that the Consultation Paper recognises that a climate resilient health system will need to be capable of withstanding impacts and flow on healthcare demand from a range of different climate health impacts.

We also commend the recognition of the uneven impacts of climate change and health on some communities. As outlined in our response to question 2 above, the vulnerabilities faced by these communities arise from systemic and structural socioeconomic causes such as harmful policies and practices. Accordingly, solutions must be focused on addressing these causes.

We acknowledge that there are benefits to prioritising some adaptation actions for immediate action but note that in the medium to long term adaptation action must be undertaken across Australian healthcare systems and the community more broadly, for all the impacts of climate change and health.

Priority populations must be considered in adaptation planning

Health impacts, risks, and vulnerabilities can only be prioritised for adaptation action after an assessment of these impacts, risks, and vulnerabilities has been undertaken. This should be reflected in the Strategy. Prioritisation must consider physical and transition risks. It should also account for risks posed to community, culture, and connection to Country by engaging with Aboriginal and Torres Strait Islander people and communities to establish what these risks are. Further, risks driven by poor social and wider determinants of health must be considered as part of any prioritisation process. The Australian and New Zealand Society for Geriatric Medicine's Statement on Climate Change and the Health of Older People[92] outlines that "older adults are particularly vulnerable to changing environmental conditions due to medical comorbidities, altered homeostasis and physical limitations." This includes susceptibility to infectious disease outbreaks in residential aged care facilities. Accordingly, aged care facilities should be considered as part of prioritising health impacts, risks, and vulnerabilities for adaptation action, with reference to lessons that can be learnt from Covid-19.

We consider that the effects of climate change on the disability community should also be considered when prioritising health impacts, risks, and vulnerabilities for adaptation action. As acknowledged in this article on the rights of people with disabilities and climate-resilient development pathways, there is a dearth of academic literature on climate change and

[92] The Australian and New Zealand Society for Geriatric Medicine. ANZSGM Statement on Climate Change and the Health of Older People About the Australian and New Zealand Society for Geriatric Medicine (ANZSGM) [Internet]. [cited 2023 Jul 25]. Available from: https://anzsgm.org/wp-content/uploads/2021/04/ANZSGM-Position-Statement_Climate-Change_2021.30.03-1.pdf

disability. Health system emergency planning must support disabled persons affected by climate change, both as part of the individual's general management plan, and as part of regional health services response in an emergency. We are concerned about the health impacts of floods, bushfires, and extreme heat events.

When disabled people are evacuated in emergencies, they may not have their normal care team (who are likely to be dealing with their own emergencies), experience displacement, neglect and constrained access to services[93]. Additionally, people with mobility issues may struggle to relocate in an emergency, access their usual rehabilitative services or equipment or receive accessible information[94] to help their own disaster planning.. Health and emergency planning must consider impacts of climate change on disabled people and how to them and their carers. This is an urgent consideration given the increasing frequency and intensity of extreme weather events. Groups that should be considered in addition to older adults and people with a disability include:

- Children
- People with chronic medical conditions (particularly cardiovascular disease, diabetes, chronic respiratory disease, and renal disease)
- Socioeconomically disadvantaged communities
- Culturally and linguistically diverse (CALD) communities
- Outdoor workers
- Rural and remote communities, and
- Communities living in flood plains.

Many of these groups face already existing access barriers to healthcare.

We note that the Health Canada and WHO Climate Change and Health Vulnerability and Adaptation Assessment[95] guidance is a useful resource.

We outline further considerations and resources for assessing climate health risks in our response to question 19 and 20.

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?

Recommendations

a. Develop a National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan that supports local vulnerability assessment and adaptation planning.
b. Rename the plan to 'National Health Vulnerability Assessment and Adaptation Plan'.

[93] Royal Commission into Violence, Abuse, Neglect, and Exploitation of People with Disability. Overview of responses to the Emergency planning and response Issues paper. 2021 Feb [cited 2023 Jul 25]; Available from: https://disability.royalcommission.gov.au/system/files/2022-03/Overview%20of%20responses%20to%20the%20Emergency%20planning%20and%20response%20Issues%20paper.pdf
[94] Engelman A, Craig L, Iles A. Global Disability Justice In Climate Disasters: Mobilizing People With Disabilities As Change Agents. Health Affairs [Internet]. 2022 Oct 1 [cited 2023 Jul 25];41(10):1496–504. Available from: https://www.healthaffairs.org/doi/full/10.1377/hlthaff.2022.00474
[95] World Health Organization. Climate change and health vulnerability and adaptation assessment [Internet]. 2021 [cited 2023 Jul 25]. Available from: https://apps.who.int/iris/rest/bitstreams/1376931/retrieve

c. Establish processes and structures that centre community engagement, equity, and inclusion.
d. Facilitate connections with experts and communities across states and territories.
e. Establish funding structures to resource vulnerability and adaptation assessment and planning.
f. Establish a National Climate Change and Health Resilience Research Fund to identify resilience strategies suited to our health system.

Australia needs a national health vulnerability assessment and adaptation plan

The RACP strongly supports the development of a National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan. A national plan is important to ensure health vulnerability and adaptation assessment and planning occurs across Australia and no healthcare settings, communities or people are left out. A national plan can facilitate the identification of gaps, sharing of information, and highlight best practice.

It is crucial that the national plan takes a place-based approach that centres engagement with local communities and health professionals. Equity and inclusion considerations are a key part of this to ensure that those communities who may not otherwise be able to engage in vulnerability assessments and adaptation planning are supported. A focus on systemic change rather than behaviour change is critical to effective action on climate change and health.

We consider that one plan should cover both vulnerability and adaptation assessments and planning. We suggest renaming it to 'National Health Vulnerability Assessment and Adaptation Plan' (National Adaptation Plan).

Plan must be holistic and dynamic and integrate principles and enablers

The National Adaptation Plan must support holistic, dynamic and system-wide approach to vulnerability and risk assessment that considers environmental, social, and cultural determinants of health. We commend the Consultation Paper's acknowledgement that "historical events and patterns are no longer sufficient to forecast the future." While Australia has already experienced many devastating climate impacts and further impacts are predicted, the increasing frequency and intensity of climate impacts and their compounding nature mean the climate change presents risks to health and healthcare systems that may not be captured by generic approaches, checklists, and relying largely on past experiences. Instead, we need a holistic focus that draws on relevant frameworks but is not bound by them.

We note that the Strategy must integrate with broader adaptation planning outside health, not just align to it. Further we note that risk assessment planning modelling is fundamental and that risk assessments must be undertaken regularly and done at an appropriate geographical scale.

The health sector has an opportunity to demonstrate leadership in place-based climate adaptation responses that can protect health.

It is important that the Strategy's principles are central in both vulnerability assessments and adaptation planning and implementation, particularly First Nations leadership and tackling health inequities.

Environmental determinants of health that must be considered include climate impacts on access to clean air and water, healthy food, and safe shelter. These determinants are essential to good health.

The National Strategy for Just Adaptation[96] touches on many of the Principles in the Strategy. It aims to provide a blueprint for decision makers at all levels of government and community to embed a justice framework in their climate change work.

We consider the Enablers are critical to successful climate health adaptation. In particular:

- Education and training an important aspect of implementation - there is a gap in Australian specific adaptation and resilience resources.
- Expertise across multiple sectors will be needed to guide the Strategy's success.
- Establishment of a research and innovation fund is essential.

Deep community engagement and understanding of regional variations is crucial

Deep community engagement is key to building climate resilience. Australia has significant remote and regional vulnerabilities and appropriate support is crucial in the communities. Climate mapping that accounts for regional variability is important – this needs to be communicated to health professionals and communities on the ground.

Technology that geographically accurately predicts climate change events exists however does not communicate with local communities very well. This needs to be improved to support community disaster response plans.

The RACP strongly supports the role of primary care and community providers in health sector preparedness[97] and recognises the specific role of ACCHS as primary care providers for local Aboriginal communities. ACCHS are best placed to know and respond to the needs and priorities of their communities. The ACCHS sector and their peak bodies should likewise be included and integrated into all phases of extreme weather event response.

Healthcare systems must ensure that quality of care and protecting health remain paramount as they build climate resilience and become environmentally sustainable. Health professionals can play a role in communicating this to patients and providing reassurance that these changes are not going to impact the care they receive.

An accessible database is a key tool for drawing on work already undertaken

National coordination can facilitate collaboration and reduce duplication across states and territories by highlighting effective models and best practice with areas who do not have this information. However, the approach cannot be one size fits all – communities need information and resourcing to develop and implement measures that work best for them.

The RACP's pre-budget asks[98] include calls for the development of online system to consolidate the evidence base for climate health action and the development and rollout of guidelines and training to support locally led climate risk and vulnerability assessments, adaptation, and resilience planning. We consider that these actions need to be undertaken in relation to both climate mitigation and adaptation.

National approach should provide coordination, information, and funding

As outlined above, we consider that successful climate health assessment and adaptation initiatives must be place-based with national coordination and support.

[96] Future Earth Australia. Reimagining Climate Change Adaptation | Future Earth Australia [Internet]. www.futureearth.org.au. [cited 2023 Jul 25]. Available from: https://www.futureearth.org.au/initiatives/securing-australias-future
[97] The Royal Australasian College of Physicians. Submission to the Royal Commission into National Natural Disaster Arrangements - Issues Paper - Health Arrangements in Natural Disasters [Internet]. 2020 [cited 2023 Jul 25]. Available from: https://www.racp.edu.au/docs/default-source/advocacy-library/racp-submission-to-the-royal-commission-into-national-natural-disaster-arrangements---issues-paper---health-arrangements-in-natural-disasters.pdf?sfvrsn=f2b7f11a_6
[98] The Royal Australasian College of Physicians. Pathways to Wellbeing: Enhancing the health and wellbeing of all Australians [Internet]. 2023 Jan [cited 2023 Jul 25]. Available from: https://www.racp.edu.au/docs/default-source/advocacy-library/racp-2023-24-pre-budget-submission-to-aust-treasury.pdf?sfvrsn=7c43d11a_6

National coordination and support should:

- Track vulnerability assessments and adaptation planning across states and territories to ensure a comprehensive approach;
- Develop and maintain a central, open access database of relevant resources;
- Roll out a national toolkit of climate data, including vulnerability mapping, and shareable ideas for adaptation for use by health professionals and communities;
- Facilitate conversations with local communities to determine what needs to be done and how support at a national level could assist
- Connect experts and communities across states and territories;
- Establish funding structures to resource vulnerability and adaptation assessment and planning in partnership with states and territories; and
- Establish a National Climate Change and Health Resilience Research Fund to identify resilience strategies suited to our health system.

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?

Recommendations

a. Support health professionals and communities through access to a national toolbox of information, advice, and tools.

A National Toolbox is needed to guide health professionals and communities

As outlined above, there is value in national coordination that supports community-led action. Vulnerability assessment and adaptation planning for health needs to allow space for dynamic thinking, community led approaches, and flexibility. However, nationally consistent baseline standards and benchmarks grounded in best practice could serve as a starting point for state, territory, and local governments and organisations. National minimum standards would also be useful for evaluation and reporting purposes. It would be useful to have a toolbox of resources and guidance developed at the national level that health professionals and communities can refer to.

The toolkit should include:

- Future climate conditions including temperature and precipitation similar to this Future Climate Projections information from the United States government[99]. Access to up-to-date disaster risk modelling is also essential.
- Approaches to risk and vulnerability assessments without being prescriptive.
- Best practice approaches to climate resilience in the health sector.
- Information for providers and patients that covers a range of topics including heat, bushfires, and flooding such as this climate resilience toolkit[100].
- Information on cultural safety and strength-based approaches.
- Information on building capacity and resilience within the workforce.
- Information on how to apply for funding for climate resilience initiatives.
- Information on workshops and training available to support climate resilience work.

[99] National Oceanic and Atmospheric Administration. Future Climate Projections - Graphs & Maps | NOAA Climate.gov [Internet]. www.climate.gov. [cited 2023 Jul 25]. Available from: https://www.climate.gov/maps-data/dataset/future-climate-projections-graphs-maps

[100] Americares. Climate Resilient Health Clinics [Internet]. Americares. [cited 2023 Jul 25]. Available from: https://www.americares.org/what-we-do/community-health/climate-resilient-health-clinics/#toolkit

- Contact information for experts and organisations that can assist with different aspects of building climate resilience.

We note that The Royal Commission into National Natural Disaster Arrangements Report[101] provides useful recommendations and the Strategy should draw from and build on these. Further, the disaster risk reduction approaches outlined in the Sendai Framework for Disaster Risk Reduction[102] are relevant to health and should be integrated into climate resilience-building efforts.

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

Recommendations

a. Prioritise heat and bushfire smoke health hazard strategies and planning for urgent action.
b. Establish a nationally coordinated surge health and medical workforce for deployment in response to extreme weather events.
c. Build a national stockpile of medication, personal protective equipment, and other emergency response resources.

Heat and bushfire smoke health hazard strategies are urgently needed

As outlined in our response to question 18, health system adaptation actions can only be prioritised once impacts, risks, and vulnerabilities have been assessed.

However, we note that it is established that extreme heat events have, since 1900, killed more people in Australia than the sum all other natural hazards[103] and Australia continued to experience warmer than average weather in 2022 with extreme heat events in parts of the country[104]. Accordingly, heat and health strategy and planning should be considered an urgent national priority.

Heat disproportionately effects the elderly and disadvantaged[105], as well as populations in suburbs of lower socio-economic background and regional and remote communities[106], particularly where cooling systems are unavailable or unaffordable[107] and where residential dwellings are crowded. Accordingly, a health equity lens is crucial to support priority populations.

Following the devastation of the 2019 to 2020 bushfires communities faced poor air quality and some hospitals were without power[108]. There was an increase in patients presenting

[101] The Royal Commission into National Natural Disaster Arrangements. The Royal Commission into National Natural Disaster Arrangements Report [Internet]. Royal Commission into National Natural Disaster Arrangements. [cited 2023 Jul 25]. Available from: https://naturaldisaster.royalcommission.gov.au/publications/royal-commission-national-natural-disaster-arrangements-report
[102] United Nations Office for Disaster Risk Reduction. Sendai Framework for Disaster Risk Reduction 2015-2030 [Internet]. Undrr.org. 2015 [cited 2023 Jul 25]. Available from: https://www.undrr.org/publication/sendai-framework-disaster-risk-reduction-2015-2030
[103] Coates L, Haynes K, O'Brien J, McAneney J, de Oliveira FD. Exploring 167 years of vulnerability: An examination of extreme heat events in Australia 1844–2010. Environmental Science & Policy [Internet]. 2014 Oct [cited 2023 Jul 25];42:33–44. Available from: https://www.sciencedirect.com/science/article/pii/S1462901114000999
[104] Bureau of Meteorology. Annual Statement 2022 [Internet]. Bom.gov.au. 2023 [cited 2023 Jul 25]. Available from: http://www.bom.gov.au/climate/current/annual/aus/#:~:text=Wetter%20and%20warmer%20than%20average%20for%20Australia%20overall&text=The%20mean%20annual%20minimum%20temperature
[105] AECOM Australia Pty Ltd. Economic Assessment of the Urban Heat Island Effect [Internet]. 2012 [cited 2023 Jul 25]. Available from: https://www.melbourne.vic.gov.au/SiteCollectionDocuments/eco-assessment-of-urban-heat-island-effect.pdf
[106] Bragge P, Armstrong F, Bowen K, Burgess M, Cooke S, Lennox A, et al. Climate Change and Australia's Healthcare Systems A Review of Literature, Policy and Practice [Internet]. 2021 Oct [cited 2023 Jul 25]. Available from: https://www.racp.edu.au/docs/default-source/advocacy-library/climate-change-and-australias-healthcare-systems-a-review-of-literature-policy-and-practice.pdf
[107] AECOM Australia Pty Ltd. Economic Assessment of the Urban Heat Island Effect [Internet]. 2012 [cited 2023 Jul 25]. Available from: https://www.melbourne.vic.gov.au/SiteCollectionDocuments/eco-assessment-of-urban-heat-island-effect.pdf
[108] Bragge P, Armstrong F, Bowen K, Burgess M, Cooke S, Lennox A, et al. Climate Change and Australia's Healthcare Systems A Review of Literature, Policy and Practice [Internet]. 2021 Oct [cited 2023 Jul 25]. Available from:

with respiratory and cardiovascular issues[109]. The RACP's submission to the Royal Commission into National Natural Disaster Arrangements - Issues Paper - Health Arrangements in Natural Disasters[110] highlights the "need for better integrated disaster planning with public and private hospitals, primary care and specialists". It also calls for easily accessible air quality information and public education on the impact of smoke haze, with clear consistent advice. We also note the need to consider community clean air shelters. Stockpiles of medical supplies and equipment should also be considered.

Surge health and medical workforce in extreme weather events

Further, we consider that the establishment of a nationally coordinated surge health and medical workforce for deployment in response to extreme weather events is urgently needed. A nationwide program should be established to encourage a wide cross-section of health and medical workers to join, provide initial and ongoing training, funded travel to impacted regions, and remuneration and access to mental health support for deployed workers. Medical and nursing students should be considered when establishing the surge workforce.

In addition, we suggest a national stockpile of medication, personal protective equipment, and other resources to support emergency response.

The Strategy should consider how its objectives fit with the activities of the Australian Centre for Disease Control (ACDC). A collaborative, cross-sectoral One Health approach to surveillance to better inform preparedness and response activities to climate sensitive conditions such as vector borne disease, other zoonoses and illnesses that are seen following major flood events could contribute to achieving climate resilience in the health sector and more broadly.

https://www.racp.edu.au/docs/default-source/advocacy-library/climate-change-and-australias-healthcare-systems-a-review-of-literature-policy-and-practice.pdf

[109] Borchers Arriagada N, Palmer AJ, Bowman DM, Morgan GG, Jalaludin BB, Johnston FH. Unprecedented Smoke-related Health Burden Associated with the 2019–20 Bushfires in Eastern Australia. Medical Journal of Australia [Internet]. 2020 Mar 12 [cited 2023 Jul 25];213(6). Available from: https://www.mja.com.au/journal/2020/213/6/unprecedented-smoke-related-health-burden-associated-2019-20-bushfires-eastern

[110] The Royal Australasian College of Physicians. Submission to the Royal Commission into National Natural Disaster Arrangements - Issues Paper - Health Arrangements in Natural Disasters [Internet]. 2020 [cited 2023 Jul 25]. Available from: https://www.racp.edu.au/docs/default-source/advocacy-library/racp-submission-to-the-royal-commission-into-national-natural-disaster-arrangements---issues-paper---health-arrangements-in-natural-disasters.pdf?sfvrsn=f2b7f11a_6

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?

Recommendations

a) Prioritise an urgent transition away from fossil fuels to clean, renewable energy across all economic sectors as a key focus area within the Strategy.
b) Prioritise policies that support reforestation and biodiversity conservation.

We are very pleased to see the inclusion of Health in All Policies as an objective. Such an approach is crucial given the predicted widescale environmental, economic, and social consequences of climate change and the related health impacts that will stem from these. While we have outlined key areas below for urgent action, we consider that the threat climate change poses to health will require a comprehensive application of a Health in All Policies approach responds both to direct climate health impacts and addresses social determinants of health, particularly as many of the policy levers that can do this are outside the traditional remit of the health system.

An urgent transition to renewables mitigates climate change and protects health

The key Health in All Policies action in the Strategy must be to ensure cross-government action to facilitate an urgent transition to clean, renewable energy across all economic sectors. As we have noted above, fossil fuel combustion contributes over half of the healthcare sector's carbon emissions[111] and contributes significantly to climate change across the economy. Further, fossil fuel combustion and extraction cause other environmental impacts, including air pollution and water contamination, which have related health impacts.

Policies that can support this include the following recommendations from the RACP's Health Benefits of Mitigating Climate Change Position Statement[112]:

- Requiring all fossil fuel extraction projects within their jurisdiction to undertake a full independent Health Impact Assessment before proceeding, including the effects on climate change.
- Increasing public transport infrastructure, particularly to inadequately serviced areas.
- Increasing active transport use and safety, for example by funding the construction of bicycle and pedestrian paths.
- Ensuring that public and active transport are incorporated into the planning phase of new developments, by using environmentally and health-sensitive urban planning.

Food, housing, biodiversity and reforestation must also be addressed

Other areas that need to be addressed under this objective are improving the energy efficiency of homes and buildings and decreasing emissions from agriculture and food. The RACP has called on Australian and Governments[113] to facilitate low carbon systems

[111] Health Care Without Harm. HEALTH CARE'S CLIMATE FOOTPRINT HOW THE HEALTH SECTOR CONTRIBUTES TO THE GLOBAL CLIMATE CRISIS AND OPPORTUNITIES FOR ACTION Health Care Without Harm Climate- [Internet]. 2019 [cited 2023 Jul 25]. Available from: https://noharm-global.org/sites/default/files/documents-files/5961/HealthCaresClimateFootprint_092319.pdf
[112] The Royal Australasian College of Physicians. The Health Benefits of Mitigating Climate Change Position Statement [Internet]. 2016 [cited 2023 Jul 25]. Available from: https://www.racp.edu.au/docs/default-source/advocacy-library/health-benefits-of-mitigating-climate-change-position-statement.pdf?sfvrsn=3d34361a_5
[113] The Royal Australasian College of Physicians. The Health Benefits of Mitigating Climate Change Position Statement [Internet]. 2016 [cited 2023 Jul 25]. Available from: https://www.racp.edu.au/docs/default-source/advocacy-library/health-benefits-of-mitigating-climate-change-position-statement.pdf?sfvrsn=3d34361a_5

of food production and to facilitate construction of buildings to high health and environmental standards.

We consider that occupational health should be a key focus area, given that most people in Australia spend a considerable amount of time at work. Workplaces will need to adapt to protect workers from the health impacts of climate change and can also provide a hub for sharing information.

Another key area that needs to be covered in this section is biodiversity loss, which the RACP recognises is both closely connected to climate change and has significant implications for health[114]. The WHO has outlined the many ways biodiversity and health are interconnected[115], including through air and water quality, food security and nutrition, microbial diversity and noncommunicable diseases, development of medicines, traditional medicine, and disaster risk reduction. These concerns are echoed in *Why losing Australia's biodiversity matters for human health: insights from the latest State of the Environment assessment*[116], which warns of the impacts of biodiversity loss on food, medicines, water, infectious diseases, and psychological health and wellbeing. The Strategy is an opportunity to consider how approaches to climate resilience and climate mitigation can also strengthen biodiversity and in turn bring about health-co benefits.

Trees are also very interconnected with human health as this report from WWF-Australia and Doctors for the Environment Australia[117] outlines. The report discusses that trees are a connection to Country; trees contribute to cleaner air and water; and they can reduce infectious diseases and improve mental health. They also protect against heat and sun exposure, promote physical activity, and mitigate climate change. A shift from deforestation to reforestation would help mitigate climate change and have health benefits.

The Australian Government's recent Wellbeing Budget and its recent Measuring What Matters initiative (to which the RACP made two submissions here[118] and here[119]) are a step in the right direction. A National Health and Climate Strategy underpinned by a Health in All Policies approach will add to and complement this work.

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?

Recommendations:

a. Roll out guidance and resources to all Commonwealth, state, and territory government departments to enable the consideration of climate change and health in all government policy and infrastructure expenditure.

[114] The Royal Australasian College of Physicians. Submission to the Environment Protection and Biodiversity Conservation Act 1999 Independent Review [Internet]. 2020 [cited 2023 Jul 25]. Available from: https://www.racp.edu.au/docs/default-source/advocacy-library/submission-to-the-environment-protection-and-biodiversity-conservation-(epbc)-act-review.pdf?sfvrsn=e379f31a_6

[115] World Health Organization. Connecting Global Priorities: Biodiversity and Human Health [Internet]. www.who.int. 2015 [cited 2023 Jul 25]. Available from: https://www.who.int/publications/i/item/connecting-global-priorities-biodiversity-and-human-health

[116] Barraclough KA, Carey M, Winkel KD, Humphries E, Shay BA, Foong YC. Why losing Australia's biodiversity matters for human health: insights from the latest State of the Environment assessment. Medical Journal of Australia [Internet]. 2023 Apr 17 [cited 2023 Jul 25];Online first. Available from: https://www.mja.com.au/journal/2023/218/8/why-losing-australias-biodiversity-matters-human-health-insights-latest-state

[117] WWF and Doctors for the Environment Australia. Trees: The Forgotten Heroes for our Health [Internet]. 2023 [cited 2023 Jul 25]. Available from: https://dea.org.au/wp-content/uploads/2023/03/WWF_DEA_Trees-Health-Report_FINAL_030323.pdf

[118] The Royal Australasian College of Physicians. Submission to Measuring What Matters [Internet]. 2023 [cited 2023 Jul 25]. Available from: https://www.racp.edu.au/docs/default-source/advocacy-library/racp-submission-to-australian-government-measuring-what-matters.pdf?sfvrsn=47fd01a_4

[119] The Royal Australasian College of Physicians. RACP Submission to Measuring What Matters [Internet]. 2023 May [cited 2023 Jul 25]. Available from: https://www.racp.edu.au/docs/default-source/advocacy-library/racp-submission-to-measuring-what-matters.pdf?sfvrsn=76e8d21a_4

b. Recruit multi-disciplinary teams to implement the Strategy, with the creation of a cross-agency implementation committee or similar to oversee the work;
c. Fund Aboriginal and Torres Strait Islander organisations to resource the sharing of knowledge and provision of leadership to climate health adaptation and mitigation initiatives across Australia;
d. Fund collaborative initiatives such as the HEAL (Healthy Environments and Lives) Network[120], which is research-focussed, in other areas such as policy, medical education and training, and health and science communication; and
e. Fund the establishment of multi-disciplinary communities of practice that can support climate health adaptation and mitigation.
f. Join the WHO Alliance for Transformative Action on Climate and Health (ATACH).

Collaboration must be far-reaching and build long-term alliances

We agree that collaboration is key to effective development and implementation of the Strategy and should:

- Provide an opportunity for public consultation on the draft Strategy, including stakeholders outside of health;
- Centre Aboriginal and Torres Strait Islander knowledge and leadership in relation to health of people and Country;
- Involve the whole health sector, rather than just hospitals and use the connections of those organisations to build further multidisciplinary connections;
- Be supported by a whole of government approach;
- Connect national, state, territory, and local governments, organisations, and communities;
- Prioritise voices of those in youth and child health, disability, LGBTQIA+, and patient rights communities and organisations; and
- Have state and territory premiers and chief ministers publicly sign off on the National Strategy to ensure continued commitment and collaboration in implementing the Strategy.

The Strategy is an opportunity to operationalise a Health in All Policies approach that also considers the impact of climate on health. We have suggested that Health in All Policies be added as an enabler to assist in implementing this approach throughout the Strategy.

Further, while there are quick wins within the Strategy, many of the Strategy's goals will require longer-term planning and action. It is important that collaboration seeks to build strong and lasting relationships.

International collaboration is an important opportunity

International collaboration is also important. The Alliance for Transformative Action on Climate and Health (ATACH) aims "to build climate resilient and sustainable health systems, using the collective power of WHO Member States and other stakeholders to drive this agenda forward at pace and scale; and promote the integration of climate change and health nexus into respective national, regional, and global plans". We call on the Australian Government to join this initiative to learn from the international climate change and health community and to provide input and advice as Australia implements its own initiatives, particularly relating to climate health adaptation.

[120] HEAL (Healthy Environments And Lives) National Research Network. HEAL Network [Internet]. healnetwork.org.au. [cited 2023 Jul 25]. Available from: https://healnetwork.org.au/

Enablers

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

Recommendations

a. Add enablers on 'Governance and leadership', 'Funding', 'Human resourcing', 'Measurement', 'Technology, tools and instruments', and 'Health in All Policies' as the first six enablers.

b. Remove 'leadership' from the 'Workforce, leadership and training' enabler.

c. Develop and fully fund a cross-sector implementation plan with key deliverables.

d. Secure commitments from all Australian governments to contribute to the funding and implementation of the Strategy.

e. Secure baseline funding commitments from relevant federal, state, and territory government departments.

f. Commit to recruiting staff to provide dedicated human resourcing for implementing the Strategy.

g. Develop a rigorous and accessible online system to consolidate the evidence base for climate health action, centring Aboriginal and Torres Strait Islander knowledges and including diverse types of information.

h. Explore technology, tools, and instruments that can facilitate implementation.

i. Establish a Climate Friendly Health System Innovation Fund to provide grants to local health services for emissions reduction and sustainability initiatives

j. Better integrate enablers throughout Strategy.

We support the inclusion of the enablers listed. However, we note that governance, funding, human resource capacity, technology are crucial enablers that have not been included.

The WHO Health and Climate Change Survey Report 2021[121] lists barriers to implementation (page 11) of national health and climate plans or strategies globally. These barriers include:

- Insufficient finance/budget;
- Insufficient human resource capacity;
- Insufficient research and evidence;
- Insufficient technologies, tools, and methods;
- Insufficient prioritisation or competing priorities; and
- Insufficient multi-sectoral collaboration.

Australia has an opportunity to develop and implement enablers that can mitigate the impacts of the barriers experienced in other parts of the world. We consider that funding, human resourcing capacity, consolidation, and expansion of relevant research as

[121] World Health Organization. 2021 WHO Health and Climate Change Survey Report [Internet]. www.who.int. 2021 [cited 2023 Jul 25]. Available from: https://www.who.int/publications/i/item/9789240038509

particularly important areas. These are reflected in our pre-budget submission[122] from earlier this year.

Implementation of the Strategy will require strong leadership and governance

As the Consultation Paper recognises, the Strategy will require collaboration and partnerships across all levels of government. We recommend adding an enabler on 'Governance and Leadership' to capture the crucial role of all Australian governments in effectively implementing the Strategy. Governments will need to demonstrate leadership and vision to engage key stakeholders and translate the Strategy into action.

A transparent governance and accountability structure that all Australian governments commit to is needed for ensuring the Strategy is implemented with the urgency and rigour that is required to mitigate climate change and protect health. We also recommend the development of a cross-sector implementation plan led by the Australian Government in partnership with states and territories. The plan should include SMART goals under each objective with responsibility for each goal assigned.

A strong governance framework can ensure long-term goals are committed to and worked towards and facilitate resource allocation and joint decision-making. Such a framework can also assist in setting aligned targets, building a legislative environment that supports implementation, and contributing to more cohesive and consistent messaging across Australia governments. Governance and leadership are especially important because many of the levers for meaningfully achieving healthy people and a healthy environment lie outside the health sector.

Governance structures should also consider how be best engage with organisations across the healthcare sector, including primary care, private providers, and research organisations.

International experience tells us that funding is crucial for implementation

Strong leadership and governance can also assist in securing funding for implementing the Strategy, however, this should be a separate enabler given its importance and its distinct role to governance in ensuring implementation of the Strategy. As outlined above, lack of finance was a key barrier to the implementation of plans similar to the Strategy internationally. Funding mechanisms, rewards, and incentives should be considered to encourage timely and comprehensive implementation of the Strategy across Australia.

Climate modelling and economic modelling which show the costs of future climate impacts are useful in demonstrating the economic arguments in favour of funding the Strategy.

Human resourcing is required to ensure the Strategy is actioned

While we agree that implementing the Strategy will require collaboration and partnerships and the engagement of the health workforce, significant human resourcing dedicated to Strategy implementation will also be required. This will include:

- coordination of Strategy implementation activity;
- facilitating engagement with communities;
- providing training and rolling out guidelines;
- developing and maintaining an online database of evidence for climate health action;

[122] The Royal Australasian College of Physicians. Pathways to Wellbeing: Enhancing the health and wellbeing of all Australians [Internet]. 2023 Jan [cited 2023 Jul 25]. Available from: https://www.racp.edu.au/docs/default-source/advocacy-library/racp-2023-24-pre-budget-submission-to-aust-treasury.pdf?sfvrsn=7c43d11a_6

- developing resources;
- providing secretariat support to committees and groups providing input into implementation;
- establishing, training, and maintaining a surge workforce;
- administrating funds established to support the Strategy;
- establishing monitoring and evaluation frameworks, facilitating progress tracking, and developing reports; and
- reviewing and updating the Strategy.

Many RACP members are already doing significant work in the climate change and health work across clinical practice, research, education, medical administration, and advocacy. They have demonstrated incredible generosity and commitment and have been pivotal in getting Australia to the point where it is developing a National Strategy on Health and Climate. However, the RACP is conscious of health workforce pressures and burnout, particularly in rural, remote, and regional areas[123] and feedback from members on climate change and health work in Australia being undertaken without adequate funding and resourcing and the toll this takes on members. Accordingly, we consider that human resourcing must be an enabler for the Strategy.

Measurement of emissions and underlying risk are essential for climate action

As noted above, we consider that the 'Measurement' objective should be expressed as an enabler.

Measuring greenhouse gas emissions will be an important part of implementing and monitoring the priorities of the Strategy. Best practice approaches to measure the effectiveness of mitigation efforts are varied and evolving. However, we recognise that measuring emissions to establish a baseline is important for evaluation progress in reducing emissions. We recommend having specific emissions reduction targets to health services that are consistent with net zero health sector emissions by 2040.

Measurement is an essential aspect of building and maintaining climate resilience. For example, it is important to measure changes in underlying risk, for example, changes to hazards, exposure, or vulnerability.

Technology, tools and instruments are essential investments for implementation

Technology, tools and instruments can facilitate information sharing, measurement, innovation and compliance.

The RACP pre-budget submission[124] calls for the funding of the development of a rigorous and accessible online system to consolidate the evidence base for climate health action, centring Aboriginal and Torres Strait Islander knowledges and including diverse types of information. Such a database can support both climate resilience and environmental sustainability activities. We have noted that the lack of accessible data, research, and policy has been a theme at climate change and health and healthcare environmental sustainability events over the last few years. The Strategy should prioritise addressing this issue. Our Healthy Climate Future[125] campaign calls for the establishment of a Climate

[123] The Royal Australasian College of Physicians. Pathways to Wellbeing: Enhancing the health and wellbeing of all Australians [Internet]. 2023 Jan [cited 2023 Jul 25]. Available from: https://www.racp.edu.au/docs/default-source/advocacy-library/racp-2023-24-pre-budget-submission-to-aust-treasury.pdf?sfvrsn=7c43d11a_6
[124] The Royal Australasian College of Physicians. Pathways to Wellbeing: Enhancing the health and wellbeing of all Australians [Internet]. 2023 Jan [cited 2023 Jul 25]. Available from: https://www.racp.edu.au/docs/default-source/advocacy-library/racp-2023-24-pre-budget-submission-to-aust-treasury.pdf?sfvrsn=7c43d11a_6
[125] The Royal Australasian College of Physicians. Home [Internet]. healthyclimatefuture.com.au. 2022 [cited 2023 Jul 25]. Available from: https://healthyclimatefuture.org.au/

Friendly Health System Innovation Fund to provide grants to local health services for emissions reduction and sustainability initiatives.

Tools for measurement will be required both as part of the Strategy, for example tools for measuring emissions must be developed to support monitoring and evaluation. Measurement will also be required outside the monitoring and evaluation framework. For example, it is important to measure changes in underlying risk, for example, changes to hazards, exposures and vulnerability, emissions measurement as part of ongoing vulnerability assessments, planning, and updates. Legislative, regulatory, and contractual instruments are important for encouraging compliance and should also be considered. We noted above that cost-effectiveness analyses should not form part of the principles. However, we think they are an important tool for the Strategy, along with similar tools.

Health in All Policies must be invested in to meet the Strategy's objectives

We commend the Consultation Paper on recognising the importance of the Health in All Policies approach and recommend that it be referred to as an enabler that is critical to the success of the Strategy. To be effective as an enabler, it is important that a suite of tools[126], guidelines, training, and support systems are developed and provided across government and private sectors to embed a Health in All Policies approach across government departments.

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

Recommendations

a. Prioritise building a strong and supported workforce that has capacity to engage in climate health training and activities through addressing shortages and burnout and providing mental health support.
b. Add diverse sources of knowledge, including Aboriginal and Torres Strait Islander knowledge to the 'Research' enabler.
c. Invest in a national Climate Change and Health Resilience Research Fund to identify resilience strategies suited to our health system.
d. Combine the 'Communication and engagement' and 'Collaboration' enablers
e. Move the 'Monitoring and evaluation' enabler to a cross-sector implementation Strategy.
f. Develop indicators that show progress on health outcomes, health system resilience, and capacity building.
g. Ensure evaluation reports highlight pathways and pitfalls.

Effective training requires a strong and supported workforce

We support an enabler on 'Workforce and training' but as noted above, we consider that leadership should sit within the 'Governance and leadership' enabler we have suggested above.

We agree that this enabler should focus on "ensuring the health system and workforce is supported to sustainably retain and attract staff into the future, acknowledging the existing and expected future pressures faced by the health workforce" as outlined in the Consultation Paper. A strong and supported workforce that meets the changing demand of the healthcare system is necessary for effectively implementing the Strategy. We also support training the health workforce to "further develop the skills and capacity to raise public awareness and understanding of the health impacts of climate change; take action to address these impacts,

[126] Health in All Policies Position Statement [Internet]. The Royal Australasian College of Physicians; 2016 [cited 2023 Jul 21]. Available from: https://www.racp.edu.au/docs/default-source/advocacy-library/health-in-all-policies-position-statement.pdf

strengthening the resilience of health services and providing care to affected populations; and lead innovation in reducing health system emissions". However, we are conscious that any efforts to build capacity in this area must acknowledge and respond to the needs of a workforce that is already facing shortages and burn out[127].

The RACP recognises the mental ill-health consequences of climate change[128]. The Royal Australian and New Zealand College of Psychiatrists (RANZCP) also recognises this and has a position statement on Addressing the mental health impacts of natural disasters and climate change-related weather events[129]. RANZCP's position statement acknowledges that "psychiatrists, other health workers, carers and whānau may themselves struggle with lack of access to information and resources prior to, in anticipation of and following natural disaster and climate change-related extreme weather. This can limit the capacity of this group to deliver support, impacting on the sustainability of these vital roles and leading to burnout."

This Strategy is a key step in building a more climate resilient health system and workforce. However, it is essential that hospitals, health services, and health workers are appropriately supported and resourced to meet the existing demands they face and the additional pressures that climate change will bring, including the need to train and build the workforce's capacity to respond to climate change.

Climate change presents complex challenges for rural and remote areas

Rural and remote populations have distinct challenges in accessing healthcare and poorer health outcomes than populations in metropolitan areas[130] and have already been experiencing the health impacts of climate change[131]. Now climate change is exacerbating existing workforce shortages in rural and remote areas[132]. The RACP research report[133] case study on mental health workshops for rural and remote health workers in bushfire affected areas found that rural and remote health practitioners faced trauma, high levels of stress, and exhaustion in areas impacted by the 2019-20 bushfires. It found that "the health system is deeply under-prepared. To build health system capacity and resilience to climate change will require significant, sustained strategic leadership, governance, guidance, training, and resources." The report outlined the value to healthcare professionals of having access to mental health workshops developed by CRANAplus. Importantly, it also recognises that "rural and remote health practitioners can be engaged and empowered to help their communities understand and build resilience to climate health impacts." With appropriate support and resourcing, the rural and remote health

[127] The Royal Australasian College of Physicians. Media release: Physicians and paediatricians call for national health reform to address workforce shortages that leave patients waiting and doctors burnt out [Internet]. www.racp.edu.au. The Royal Australasian College of Physicians; 2022 [cited 2023 Jul 25]. Available from: https://www.racp.edu.au/news-and-events/media-releases/physicians-and-paediatricians-call-for-national-health-reform-to-address-workforce-shortages-that-leave-patients-waiting-and-doctors-burnt-out

[128] The Royal Australasian College of Physicians. Climate Change and Health Position Statement [Internet]. 2016 [cited 2023 Jul 25]. Available from: https://www.racp.edu.au/docs/default-source/advocacy-library/climate-change-and-health-position-statement.pdf?sfvrsn=5235361a_5

[129] The Royal Australian and New Zealand College of Psychiatrists. Addressing the mental health impacts of natural disasters and climate change-related weather events [Internet]. RANZCP. 2020 [cited 2023 Jul 26]. Available from: https://www.ranzcp.org/clinical-guidelines-publications/clinical-guidelines-publications-library/addressing-the-mental-health-impacts-of-natural-disasters-and-climate-change-related-weather-events

[130] The Royal Australasian College of Physicians. Royal Australasian College of Physicians Regional, Rural and Remote Physician Strategy [Internet]. 2023 Jun [cited 2023 Jul 26]. Available from: https://www.racp.edu.au/docs/default-source/about/college-council/regional-rural-and-remote-physician-strategy.pdf?sfvrsn=1bffd01a_8

[131] Bragge P, Armstrong F, Bowen K, Burgess M, Cooke S, Lennox A, et al. Climate Change and Australia's Healthcare Systems A Review of Literature, Policy and Practice [Internet]. 2021 Oct [cited 2023 Jul 25]. Available from: https://www.racp.edu.au/docs/default-source/advocacy-library/climate-change-and-australias-healthcare-systems-a-review-of-literature-policy-and-practice.pdf

[132] Pendrey C, Quilty S, Lucas R. Surveying the changing climate of Northern Territory medical workforce retention. Australian Journal of Rural Health [Internet]. 2022 Mar [cited 2023 Jul 26]; Available from: https://pubmed.ncbi.nlm.nih.gov/35229933/

[133] Bragge P, Armstrong F, Bowen K, Burgess M, Cooke S, Lennox A, et al. Climate Change and Australia's Healthcare Systems A Review of Literature, Policy and Practice [Internet]. 2021 Oct [cited 2023 Jul 25]. Available from: https://www.racp.edu.au/docs/default-source/advocacy-library/climate-change-and-australias-healthcare-systems-a-review-of-literature-policy-and-practice.pdf

workforce can help build the health system and community climate resilience that is required to protect health.

A surge workforce can support communities experiencing extreme weather events

The RACP's Healthy Climate Future[134] campaign calls for the "establishment of a surge health and medical workforce for deployment in response to extreme weather events" following the findings of the RACP research report[135]. As outlined in the RACP's pre-budget submission[136], the establishment of such a program for climate change and health should include a broad cross-section of healthcare workers, provide initial and ongoing training, fund travel to impacted regions, include adequate remuneration, and ensure access to mental health support for deployed workers.

The Covid-19 surge healthcare workforce provides important lessons. This scoping literature review on the Australia respiratory workforce during Covid-19[137] makes several recommendations including the need for "closer liaison between respiratory physicians and healthcare/government leadership in developing pandemic response planning both prior to and during outbreaks" which is relevant to climate change and health in that the health workforce must be involved in planning for extreme weather events and other climate impacts. Further, the Covid-19 Frontline Health Workers Study[138] suggests approaches that could support workforce wellbeing during the pandemic[139]. These approaches include ensuring a safe working environment, clear communication from organisational leadership, and investing in wellbeing and mental health support.

Investing in training the health workforce builds climate resilience

We consider that it is powerful to invest in equipping the motivated, influential workforce of healthcare professionals. Further, health workforce education and training is integral to effectively implementing the Strategy. Equipping health and medical professionals with information, tools, and resources to support them to anticipate, prepare for and respond to climate risks is a key ask in the RACP's Healthy Climate Future[140] campaign. The health workforce is a key part of building a more resilient and environmentally friendly healthcare system as outlined in the RACP research report. The report found that "training of healthcare workers to improve environmental performance of hospitals which reduces chemical use, waste disposal and surgical costs was a beneficial intervention".

Workforce and workplaces understand that climate change is impacting health

In 2022, the RACP ran a survey of health professionals as part of our Healthy Climate Future[141] campaign. The survey had 423 respondents who were health professionals and 89% were members of the RACP. The survey found that found that 83% of respondents supported the healthcare system becoming more climate-friendly and climate-ready and

[134] Healthy Climate Future Campaign [Internet]. The Royal Australasian College of Physicians; 2023 [cited 2023 Jul 21]. Available from: https://healthyclimatefuture.org.au/
[135] Bragge P, Armstrong F, Bowen K, Burgess M, Cooke S, Lennox A, et al. Climate Change and Australia's Healthcare Systems A Review of Literature, Policy and Practice [Internet]. 2021 Oct [cited 2023 Jul 25]. Available from: https://www.racp.edu.au/docs/default-source/advocacy-library/climate-change-and-australias-healthcare-systems-a-review-of-literature-policy-and-practice.pdf
[136] The Royal Australasian College of Physicians. Pathways to Wellbeing: Enhancing the health and wellbeing of all Australians [Internet]. 2023 Jan [cited 2023 Jul 25]. Available from: https://www.racp.edu.au/docs/default-source/advocacy-library/racp-2023-24-pre-budget-submission-to-aust-treasury.pdf?sfvrsn=7c43d11a_6
[137] Stone E, Irving LB, Tonga KO, Thompson B. Sustaining the Australian respiratory workforce through the COVID -19 pandemic: a scoping literature review. Internal Medicine Journal [Internet]. 2022 Apr 5 [cited 2023 Jul 26]; Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9111702/
[138] Future Proofing the Frontline. COVID-19 Frontline Health Works Study [Internet]. Covid Research. [cited 2023 Jul 26]. Available from: https://covid-19-frontline.com.au/
[139] Smallwood N, Bismark M, Willis K. Burn-out in the health workforce during the COVID-19 pandemic: opportunities for workplace and leadership approaches to improve well-being. BMJ Leader [Internet]. 2023 Mar 10 [cited 2023 Jul 26];leader-2022-000687. Available from: https://bmjleader.bmj.com/content/leader/early/2023/03/09/leader-2022-000687.full.pdf
[140] Healthy Climate Future Campaign [Internet]. The Royal Australasian College of Physicians; 2023 [cited 2023 Jul 21]. Available from: https://healthyclimatefuture.org.au/
[141] Healthy Climate Future Campaign [Internet]. The Royal Australasian College of Physicians; 2023 [cited 2023 Jul 21]. Available from: https://healthyclimatefuture.org.au/

65% described the impacts of climate change on the health workforce as negative or very negative.

The RACP continues to develop climate change and health educational resources

We acknowledge the action 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 healthcare professionals."

The RACP has already developed podcasts and a curated collection of resources to educate physicians and trainee physicians on climate health impacts and healthcare sustainability. We are also currently developing an eLearning course that will equip health professionals with skill sets in:

- Understanding how to improve environmental performance of hospitals to reduce chemical use, waste disposal and surgical costs.
- Communication strategies for discussing climate health and its impacts with their patients.
- Conducting risk assessments for their services and communities.
- Integrating environmental, social, and financial sustainability into quality improvement.
- Preparing adaptation policies and programs.
- Tools and strategies for creating behavioural change within organisations and communities.
- Understanding that Aboriginal and Torres Strait Islander knowledge and self-determination is essential to work in this area and that policies and activities must be culturally safe and strengths-based.

The RACP can share resources that are developed to support the implementation of the Strategy, for example Sustainability in Quality Improvement (SusQI) and similar tools developed to support implementation of the Strategy within its Curated Collection and eLearning Resource as relevant.

Education on climate change and health needs to occur across all levels of healthcare education and accordingly, the broader education and university sector must be engaged alongside medical colleges in training students and allied health workers. Further, this education and training needs to be appropriately funded and resourced.

While states and territories will have their own specific educational requirements, there is a role for a nationally coordinated education and training strategy and programs. We encourage the development of a clear scaffold of expected standards for healthcare education providers, with differentiated levels for medical schools, prevocational training, and specialty medical colleges. This would help to ensure vertical integration across curricula.

The RACP raised the need for inclusion of climate change in its submission to the Australian Medical Council's (AMC) Review of Accreditation Standards for Primary Medical Standards. Changes to standards are an important driver for change and should be considered.

Research must consider diverse forms of evidence

We support the inclusion of research as an enabler. The RACP research report found significant evidence gaps on health system climate risk assessments. Further, the report identified a need for a more comprehensive assessment of health system vulnerability to climate change including economic evaluation of risks, costs of inaction, and savings from

climate mitigation and adaptation measures. Currently there is insufficient funding for research to conduct such assessments.

Future research should strike a balance between discovery research to establish 'what works' and encourage innovation in responding to climate change, and implementation research to evaluate effectiveness of strategies promoting meaningful individual and organisational-level change. Research should help enable clinicians in making changes. Participatory action research in impacted communities should be considered.

Greater evidence is required in both climate mitigation (reducing emissions in the health sector) and adaptation (planning for increased frequency and intensity of extreme weather events and their impacts on health and the health system).

It is critical that action and research occur concurrently – we cannot afford to wait for a robust evidence base to emerge.

Aboriginal and Torres Strait Islander knowledge is essential to effective climate action to protect health and healthcare systems and should be a central part of the evidence that is built to support the Strategy.

It is important that this enabler recognises that evidence can be in different forms, including lived experience of patients, pilots, experiments, demonstration sites, data from organisations undertaking their own climate adaptation and environmental sustainability activity, and grey literature. We must include these forms of evidence in research that informs the Strategy.

Further, while there are still many gaps, a significant amount of research does already exist on climate change and health and healthcare system sustainability. There is a need for this to be made accessible to stakeholders in an integrated manner that supports implementation as outlined under the 'Technology, tools, and instruments' enabler above. This will require sufficient funding and training, in addition to the funding provided to research projects themselves.

The Healthy Climate Future[142] campaign calls on the Australian Government to "invest in a national Climate Change and Health Resilience Research Fund to identify resilience strategies suited to our health system." We also recommend a climate change and health round for the Medical Research Future Fund in the interim.

Communication, engagement, and collaboration are important enablers

We commend the Consultation Paper on recognising the need to engage with communities who will be hardest hit by climate change. In our response to question 19 we recommend the establishment of processes and structures that centre community engagement. Those with lived experience of climate health impacts have a lot to contribute to understanding what community needs are and what works and what does not work on the ground in response to those needs.

To deliver sustainable healthcare, it is critical that engagement occurs with a broad range of stakeholders, and that partnerships are formed with sectors outside of health including energy, transport, planning and local government[143]. Utilising common language such as that found in the Australian Glossary on Health and Climate Change[144] can help bridge the gap with any knowledge silos and improve collaboration. To support the facilitation,

[142] Healthy Climate Future Campaign [Internet]. The Royal Australasian College of Physicians; 2023 [cited 2023 Jul 21]. Available from: https://healthyclimatefuture.org.au/

[143] Deeble Institute for Health Policy Research. Transforming the health system for sustainability: environmental leadership through a value-based health care strategy [Internet]. 2021 [cited 2023 Jul 26]. Available from: https://ahha.asn.au/system/files/docs/publications/deeble_issues_brief_no_41._transforming_the_health_system_for_sustainability_2.pdf

[144] Zhang Y, Barratt A, Rychetnik L, Breth-Petersen M. An Australian Glossary on Health and Climate Change [Internet]. [cited 2023 Jul 26]. Available from: https://www.sydney.edu.au/content/dam/corporate/documents/faculty-of-medicine-and-health/research/centres-institutes-groups/sustainability,-climate-and-health-collaboration/australian-glossary-on-health-and-climate-change.pdf

shared actions and capacity of these partnerships, a framework can be implemented that clearly articulates each partner's role and responsibility[145]. Having roles clearly outlined assists with communication and delivery of outcomes and improved collaboration across sectors.

Noting that we have suggested several additional enablers, we consider that the 'Communication and engagement' and 'Collaboration' enablers could be combined.

Monitoring and evaluation are a crucial part of implementation

It is important for the Strategy to have a monitoring and evaluation framework. However, we consider that this should form part of an implementation plan rather than an enabler.

We support having agreed indicators for monitoring, evaluation, and annual reporting. It is important that these indicators link to what the Strategy is trying to achieve - this must include health outcomes, health system resilience, and capacity building. The Measuring What Matters framework may be useful in looking broadly at health and wellbeing and its relationship with this Strategy should be considered.

Strategy evaluation should highlight pathways and pitfalls of environmental sustainability, climate resilience, and health in all policies activities undertaken to further the aims of the Strategy.

The Strategy should consider how to draw on the ACDC's approaches to environmental monitoring for health.

Monitoring and evaluation can inform future versions of the Strategy. Any future versions should be fully funded along with the current version.

We would be happy to provide input into implementation planning for the Strategy.

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.

[145] Climate and Health Alliance. FRAMEWORK FOR A NATIONAL STRATEGY ON CLIMATE, HEALTH AND WELL-BEING FOR AUSTRALIA ACkNOWLEDGEMENTS [Internet]. 2017 [cited 2023 Jul 26]. Available from: https://d3n8a8pro7vhmx.cloudfront.net/caha/pages/40/attachments/original/1498008324/CAHA_Framework_for_a_National_Strategy_on_Climate_Health_and_Well-being_v05_SCREEN_%28Full_Report%29.pdf?1498008324