The Thoracic Society of Australia and New Zealand response to the National Health and Climate Strategy Consultation

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Introduction

The Thoracic Society of Australia and New Zealand (TSANZ) is a health promotion charity whose mission is to lead, support and enable all health workers and researchers who aim to prevent, cure, and relieve disability caused by lung disease. TSANZ is the only Peak Body in Australia that represents all health professionals working in all fields of respiratory health.

The TSANZ has a membership base of over 1800 individual members from a wide range of health and research disciplines. The TSANZ is a leading provider of evidence-based guidelines for the treatment of respiratory disease in Australia and New Zealand and undertakes a large amount of professional education and training. The TSANZ is also responsible for significant research administration and coordinates an accredited respiratory laboratory program.

As the leaders in lung health, we promote the:

- highest quality and standards of patient care
- development and application of knowledge about respiratory health and disease
- highest quality air standards including a tobacco smoke free society and effective regulation of novel nicotine delivery systems
- collaboration between all national organisations whose objects are to improve the wellbeing of individuals with lung disease and to promote better lung health for the community
- professional and collegiate needs of the Membership

The TSANZ thank the Department of Health and Aged Care for the opportunity to respond to the consultation on the National Health and Climate Strategy. Much more work is required in this space, and the TSANZ will continue to advocate through evidence-based practice and policy to produce better respiratory health outcomes for all Australians.

Consultation Topic

The Department of Health and Aged Care is seeking stakeholder feedback on the National Health and Climate Strategy via the below survey.

Thoracic Society Feedback

The TSANZ are generally supportive of the National Health and Climate Strategy and commend the Department of Health and Aged Care for the development of this document.

We have provided answers to the survey questions below.

Objectives

It is proposed the Strategy includes the following objectives in support of this vision:

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

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

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

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

While our proposed Objective 1 is focused on measuring health system greenhouse gas emissions, we recognise there are many other measurement challenges related to climate change and health – such as measuring environmental exposures and vulnerability indicators related to the resilience of health services to climate change. These are listed under Objective 3 on adaptation.

1. Do these objectives support the vision of the Strategy?

The Thoracic Society are generally supportive of the objectives of the Strategy. The TSANZ has responded in detail on each objective below.

1. Measurement:
   Further definition of greenhouse gas emissions is required, in particular the ones most relevant to the medical sector. Measurement strategies will change based on what exactly is being measured – including location and timing of measurement. Some greenhouse gases are generated immediately, others as part of reactions of non-greenhouse gas emissions from the healthcare sector released into the environment to react with UV light[1]. These are ultimately still greenhouse gas emissions caused by the healthcare sector. With regard to measurement, measurement of waste and development of strategies to minimise waste and create circular economies where waste can be reused and recycled will be critical to reducing the environmental impact of hospital care.

   Of particular note, should the focus only be on greenhouse gas emissions or all airborne pollutant emissions? The National Health and Climate Strategy is designed “to prepare for

health challenges presented by climate change", of which poor air quality is a highlighted concern. Airborne pollutants other than greenhouse gases also have significant impacts on health. Pollutants such as particulate matter (particularly ultrafine particles), sulphur dioxide, and airborne microplastics go on to form greenhouse gases[1]. Consider measuring the contribution of the healthcare sector towards increasing concentrations of these pollutants as well as general greenhouse gases. This would be more applicable under Objective 1 than Objective 3, which appears to be more about managing the health effects caused by poor air quality.

2. Mitigation:
   The TSANZ note that some medications contribute to greenhouse gas emissions. A TSANZ Working Group has found that some inhalers use greenhouse gases as propellant and alternatives should be made available as soon as possible.

   By prioritizing mitigation efforts, the Strategy aligns with the broader goal of combating climate change and its adverse effects and, consequently, the impact on lung health. This objective demonstrates a commitment to sustainable practices within the health sector, which is essential for achieving the vision.

3. Adaption:
   The TSANZ note that this objective is very vague in its current wording and does not detail how resilience will be strengthened. It is difficult to say that this objective supports the vision of the Strategy when it is not properly defined. Adaptation is critical but clearly there is a long way to go to fully adapt hospital and living spaces to be resilient to airborne infectious diseases. Monitoring of indoor air quality and careful recording on hospital acquired airborne infections will be vital to assessment of our performance in being able to adapt.

4. Health in all policies:
   The TSANZ agrees that this is a very important area and needs to be included. By addressing the social and cultural determinants of health and well-being, the Strategy recognizes the multifaceted nature of climate change's impact on human health as well as lung health. This objective underscores the importance of collaboration across policy areas to achieve the vision effectively. This should be the highest priority objective.

Principles

It is proposed our pursuit of the above objectives are informed by the following principles.

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

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

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

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

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

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

2. Do these principles inform the objectives of the Strategy?

The TSANZ agree with the principles of the Strategy.

Global warming, the destruction of our natural environments and pollution/waste affect our lived environment. The most susceptible area is the air we breathe. The historical lessons of industrial revolution cities demonstrate the possibilities of widespread poor air quality. Population health interventions need to be ambitious and broad sweeping in order to avoid unequal applications. In order to mitigate the effects of climate change, our public health apparatus needs to be heavily focused on air quality, both indoor and outdoor.

3. What existing First Nations policies, initiatives, expertise, knowledge and practices should the Strategy align with or draw upon?

It is crucial to engage in respectful and reciprocal relationships with Indigenous communities, ensuring their active participation, leadership, and decision-making power throughout the development and implementation of the Strategy. This requires meaningful consultation, collaboration, and the establishment of mutually beneficial partnerships based on trust, respect, and shared objectives.

4. 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?

Please see above comment.

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

The TSANZ advocate for a report directly addressing:

- What are the biggest emissions contributors (all emissions, not just greenhouse gases) in the healthcare sector, properly broken down by source/service?
- Why are these items the biggest contributors?
- Then targeted strategies can be properly developed to address them sector by sector, balancing reduction of emissions against impacting health care quality.

Current research appears to be mostly focussing on carbon footprint, not emissions as a whole[2]. We need to measure the parameters we want to change. That means measuring waste, tracking waste, measuring indoor air quality and hospital acquired infections.

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

The participation of the private sector will most likely need to involve incentive/penalty based regulation. These businesses are profit oriented by nature and will take a path of least resistance and they need to be engaged at that level.

Specific actions include encouraging non greenhouse gas propellants to be used in inhalers, and recycled packaging for therapeutics. For sectors whose services are used by the healthcare system (transport, utilities), preferentially selecting carbon neutral companies over ones that are not.

7. Please rank the below six sources of emissions in highest priority for action, 1 is the highest priority, 6 is the lowest priority.

1. Waste
2. Medicines and gases
3. Prevention and optimising models of care
4. Travel and Transport
5. Supply Chain
6. Built environment and facilities (including energy and water)

The TSANZ's bottom three priorities for action, built environment and facilities (including energy and water), travel and transport, and supply chain, will have to be addressed largely outside of the healthcare sector. While large contributors in emissions, they are ultimately not wholly encompassed by healthcare, i.e. healthcare is generally only one sector that relies on these facilities and as such can only control the company whose services are being utilised. If this Strategy is designed to address the contributions of healthcare to climate change then the priorities are sources that the healthcare sector is most responsible for and can actively work to change.

8. Which specific actions should be considered to reduce greenhouse gas emissions from the health system?

Waste control[3]. As it stands, there is far too much waste produced by the healthcare sector. The burning of clinical waste, the high amounts of single use plastics, inhalers, and medicines, and waste products are likely to be amongst the greatest contributor to health sector greenhouse gas emissions.

Other actions which should be considered are the provision of training to staff, green transportation, and adoption of sustainable procurement practices, including purchasing energy-efficient medical equipment, eco-friendly supplies, and products with reduced carbon footprints. Reducing the impact

of hospital based care – waste generation, inefficient buildings (heating, indoor air quality), morbidity and mortality from hospital based infections.

9. What health impacts, risks and vulnerabilities should be prioritised for adaptation action through the Strategy?

Lung and heart comorbidities will be amongst those most highly impacted by poor air quality- air pollution is known to bypass the lung barrier to directly enter the bloodstream and as such has been linked to both cardiovascular disease and stroke[4, 5]. Cancer will be a serious issue from low air quality exposures and it will not be localised to just lung cancer- brain, bladder, blood and liver cancers have also been linked to pollution exposure[6]. Asthma will be another concern, both due to rising incidence of the disease[7, 8] and also because climate change is increasing the incidence and severity of both bushfires and thunderstorms. Both are linked to asthma exacerbations, making them a concern for the future health and wellbeing of a growing Australian population.

Children will be amongst the most highly impacted by the negative effects of climate change[9-12] and special consideration towards preventing young children and infants from being exposed to these negative effects should be considered. Exposure in childhood is more likely to develop into chronic conditions in adulthood, if these exposures can be prevented or reduced then it is likely to have a great effect on the future health of the Australian Population.

10. What immediate, high-priority actions are required in the next 12 to 24 months to enable the health system to respond to the impacts of climate change on health and wellbeing, and reduce the severity of these impacts?

Fund research into climate change, focussed on prevention of negative effects. This will help answer what can be done to reduce negative effects. Asthma will be a growing concern due to increased incidence and severity of bushfires, with exposure to smoke likely to cause a range of health problems.

Increase the number of trained doctors and nurses to help combat health effects caused by climate change. Develop training for current doctors and nurses so that they can be prepared for the future effects of climate change. The health system needs to be adequately funded in order to maintain flexibility. A system that is poorly funded, inefficient, and rigid cannot change to meet needs as they arise. The only thing that is certain about the next decades is that they are likely to be periods of incredible change and preparing our systems to respond and adapt is critical.

11. What actions are needed outside the health system to reduce or avoid the negative impacts of climate change on health and wellbeing?

Switching to renewable energy and reducing industrial waste will likely be the most critical actions. However, the renewable fuel source being used needs consideration. Some types, such as certain varieties of biodiesel, result in more toxic emissions than fossil fuels[13]. Others have the same or greater carbon footprint as fossil fuels due to land clearance to increase farming capabilities and grow the required amounts of the renewable fuel source (bio-ethanol, biodiesel made from crops, etc)[14, 15]. Policy and control around what types of renewable fuels can be used need to be created immediately to help take these points into consideration so that air quality is not lowered further and greenhouse gas emissions actually reduced.

The impact of living conditions on patient well being should also be taken into consideration. With rising incidence of extreme temperatures, access to conditions to help combat these extremes will be critical on patient well being and health.

Enablers

Enablers provide the foundation for action in the health system to tackle climate change. The World Health Organization has recently found that progress in delivering national health and climate change plans or strategies has been impeded by a number of challenges including insufficient financing, human resource constraints, and limited research, evidence, technologies and tools.[a] Feedback already received indicates the below enablers will be critical to effective implementation of the Strategy.

[a]World Health Organization (WHO), *WHO health and climate change global survey report*, WHO, 2021.

Enabler 1: Workforce, Leadership and Training

This enabler is focused on supporting and engaging the health and aged care 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, strengthening the resilience of health services and providing care to affected populations; and lead innovation in reducing health system emissions. This enabler is also focused 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 – including stresses related to the COVID-19 pandemic, recent climate-related emergencies such as bushfires and floods, and ongoing workforce shortages, including in areas particularly impacted by climate change.

On workforce, leadership and training, it has already been proposed to the Department that the Strategy consider actions in the following areas:

E1.1. Encourage medical colleges and other education and training institutions to ensure the impacts of climate change on health form part of the training curriculum for all health care professionals.

Enabler 2: Research

Investing in and supporting coordinated climate and health research will improve the evidence base for responses to: better understand current and emerging climate risks and systemic vulnerabilities; strengthen the resilience and sustainability of the health system; improve health and wellbeing by ameliorating the negative health effects of climate change; and reduce health system greenhouse gas emissions. Evidence should inform priority selection and ensure funds are allocated strategically to maximise outcomes.

On research, it has already been proposed to the Department that the Strategy consider actions in the following areas:

E2.1. A scan of current research activities pertaining to climate change and health.

Enabler 3: Communication and Engagement

Effectively communicating and engaging with a wide range of stakeholders and the general public will ensure actions to address the health and health system impacts of climate change are widely understood. There is a particular need for engagement with communities that will be hit hardest by climate change, such as First Nations and young generations.

On communication and engagement, it has already been proposed to the Department that the Strategy consider actions in the following areas:

E3.1. Increase public awareness of the health impacts of climate change to empower individuals and communities to take actions to reduce emissions and build climate resilience.

Enabler 4: Collaboration

Establishing governance structures – both cross-jurisdictional and beyond government – to facilitate regular collaboration with all stakeholders (and in particular First Nations) will build ownership and facilitate working partnerships where required to plan and deliver shared commitments to reduce emissions and strengthen climate resilience.

Enabler 5: Monitoring and Evaluation

The health system response to climate change should be measured and tracked through regular reporting on progress against key deliverables, to inform future decisions, drive action and hold all stakeholders accountable.

On monitoring and evaluation, it has already been proposed to the Department that the Strategy consider actions in the following areas:

E5.1. Establish agreed indicators to monitor the key deliverables for the Strategy.

E5.2. Provide annual reports on progress against the objectives of the Strategy.

12. In your view, are these the right enablers to inform the objectives of the Strategy? If not, please detail how they could be improved or amended.

Yes, these appear to be the right enablers.

13. For each of the above enablers please detail what is working well and how the Strategy could support delivery?

E1.1 Also provide training to current medical professionals, not just future.

E2.1 a scan of current research activities is critical however targeted funding initiatives would help further the goals of this section.

The Healthy Environments and Lives Network and Doctors for the Environment should also be contacted to help facilitate these actions.

Concluding remarks

The TSANZ thank the Department of Health and Aged Care for their hard work in this space. It is great to see this important document addressing some long overdue gaps for climate and health. The TSANZ hope to continue to work together with the Department of Health and Aged Care to improve respiratory health for all Australians.

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