The Climate and Health Alliance has responded to the Productivity Commission Draft Report on Climate Change Adaptation out of concern that the issue of health protection through effective adaptation is being overlooked in Australia’s adaptation responses and in the Commission’s report.

In 2009, the international medical journal *The Lancet* identified climate change as the biggest threat to global health of the 21st century.

The risks posed by the increasing frequency and severity of extreme weather events such as heatwaves, fires, floods and storms and the injuries, deaths and trauma – physical, emotional, financial - to health, require careful planning to help minimise harm. Rising temperatures lead to increased harmful air pollution and aeroallergens as well as increased risk of food borne disease; the changing climate affects food and water security; there are increased risks from vector borne diseases; and psychological impacts from a changing environment, ranging from solastalgia from a loss of the familiar natural environment to anxiety about the societal failure to respond, to bereavement, injury, displacement associated with extreme events. Health services are placed under increasing pressure during extreme events; supply chains of pharmaceutical and medical supplied impacted; and health professionals and emergency professionals themselves impacted personally, limiting their ability to respond.

A temperature spike of eight degrees above normal led to 56,000 deaths in the Russian summer of 2010. In 2009, Victoria experienced temperatures between 12-15 degrees above the average. That single heatwave saw a 62% increase in mortality, from both direct heat related illnesses and associated exacerbations of chronic medical conditions. The Victorian Department of Human Services reported that during this five day event, ambulances had a 46% increase in demand; emergency departments experienced an eight-fold increase in heat related presentations; a 2.8 fold increase in cardiac arrests; and a threefold increase in patients dead on arrival.
Monitoring these risks and preparing for them e.g. to track the health consequences of climate change and assess the adaptive processes in place should be an integral responsibility of government. Clear accountability for this responsibility is vital, as is the reporting of such monitoring so it is clear what adaptation strategies are in place and how effective they are.¹

The fact there is no submission from any health service agencies to this Inquiry reflects the lack of understanding within health departments and the health sector more broadly about the risks posed to health from climate change and the importance of protecting health through effective adaptive responses. We acknowledge and commend the submissions from the National Centre for Epidemiology and Population Health and the Australian Psychological Society which provide important perspectives on health but we regret the lack of broader engagement from other professions and health departments and health service providers. There are in fact excellent examples of some health services demonstrating leadership in helping communities adapt to climate change, such as the Southern Grampians and Glenelg Primary Care Partnership and Women’s Health in the North here in Victoria, but too often these initiatives depend on the passion and commitment of individuals and much more work is needed to institutionalize a responsiveness to climate change across the whole health sector.

This responsiveness however requires an understanding of the issue.

Climate change poses serious risk to health and to health services and yet the understanding of those risks among the professionals groups required to respond is very limited. The lack of engagement with this Inquiry and with the issue itself suggests that health professionals and the healthcare sector have largely failed to grasp the risks posed to Australian communities from a failure to develop effective adaptation strategies or for the need for urgent mitigation.

One of the key strategies for protecting health from climate change must be to enhance awareness of climate change and health among health and medical practitioners. This requires leadership from the instruments of government i.e. the public service in developing policies and programs to address this.

And yet, despite, climate change being the biggest threat to public health we face this century, there is no-one in the federal department of health clearly responsible for developing policy to protect health from climate change. There is no-one in the federal department of climate change who has a clear mandate for policy development that acknowledges and reflects the risks to health. While there has been an energetic public discussion about the need a national policy response to climate change for several years, there has been little acknowledgement by any government of the imperative to protect health through climate policy. The Climate Commission has produced a report on climate change and health, but its messages are yet to reach the majority of health professionals.

Communities can only effectively adapt to climate change if they understand the risks. One of the most cited reports on climate change adaptation in Australia is Community Engagement and Climate Change: Benefits, Challenges and Strategies produced by the McCaughey Centre in the School of Population Health at the University of Melbourne. This report states the development of effective adaptation and responses to climate change require: “assisting citizens and communities develop

informed understandings of climate change”, and that key success factors in using community engagement require “government policy frameworks to support and promote community engagement”. While these may appear in a limited way among some local governments, deliberate and sustained community engagement on climate change has been missing in federal government initiatives until the recent establishment of the Climate Commission and sporadic at state government levels.

While there have been some limited evaluations of climate literacy among health professionals internationally, little is known about the level of understanding about climate change among Australian health professionals. International evaluations reveal public health bureaucrats² and public health nurses³ are ill prepared to respond to climate change and have not yet made climate change adaptation a priority. One study of public health department directors in the US suggests climate change adaptation and prevention are not currently major activities at most health departments, and that all will require assistance in making a transition to doing so. The 2012 evaluation of public health nurses’ knowledge and attitudes regarding climate change suggests they lack a thorough understanding of the evidence regarding human induced climate change and its implications.

Improving climate literacy among health professionals is a key adaptive strategy that has so far been overlooked in Australian policy responses. This requires engagement of the existing as well as the future workforce. Continuing professional development programs about climate change and health are needed for the current healthcare workforce, and education of the future health workforce must be made a priority.⁴ Curricula for all health disciplines on the health impacts of climate change are needed – all healthcare professionals should be trained from undergraduate through to postgraduate level on how to respond to the risks of climate change to health at the population, community and individual levels. A better understanding among health professionals will also contribute to better community understanding, given the important role of health professionals as communicators, educators, and civil society leaders.

A paper in Australian Health Review by Weaver et al identifies six strategies for preparing the health system for climate change: health promotion; health protection; disaster preparedness; workforce development; strategic and service planning; and healthcare financing.⁵ All these elements require specific focus and additional resourcing in the Australian health sector.

Healthcare infrastructure itself faces risk from climate change.⁶ More information is needed about future demand for health services, likely physical impacts on facilities and their ability to cope with

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³ Polivka, B. et al. Public Health Nurses’ Knowledge and Attitudes Regarding Climate Change, Environmental Health Perspectives, 120:3, 2012.
⁴ Weaver, H. et al. Climate change and Australia’s healthcare system, Australian Health Review, 2010.
⁵ Weaver, H. et al. Climate change and Australia’s healthcare system, Australian Health Review, 2010.
these, strategies to improve coping capacity, associated costs, as well as integrated disaster plans to ensure health services can continue to function during extreme weather events.\footnote{Carthey, J. Et al. (2009) "Adapting Australian health facilities to cope with climate-related extreme weather events", \textit{Journal of Facilities Management}, 7:1, pp.36 – 51.}

There are many opportunities for the health care sector to respond to climate change in ways that reduce energy use, reduce waste, save money and improve health. The health sector needs to be supported to begin to implement adaptive strategies that will improve its resilience to climate change impacts, improve its capacity to deliver services and to provide an example of leadership in beginning to demonstrate the economic and health benefits of low carbon operations.

Health care providers should be supported to reduce the environmental footprint of the sector in ways that will protect them from future shocks in terms of energy prices, water shortages and resource shortages. Adaptation measures that create a sustainable and resilient healthcare sector will provide ongoing benefits for the community.

\textbf{The Climate and Health Alliance recommends:}

1. The development of a National Plan for Health in Responding to Climate Change (Adaptation and Mitigation).
2. A national community engagement campaign to build understanding about the risks from climate change.
3. The development and implementation of programs to increase awareness among health professionals about the health risks from climate change to assist in developing more effective adaptive responses.
4. A substantial increase in the funding available for climate and health research in Australia, including regional health impact assessments, and a specific emphasis on evaluating the health benefits of effective adaptation and mitigation.
5. Increased investment in research on climate change communication to support translation of evidence into policy action.
6. Improvements in disease surveillance, health risk monitoring, early warning systems, emergency response and disaster preparedness.
7. Improving community resilience through greater investment in health promotion and disease prevention.
8. Evaluation of projected health care demand from climate change; physical impacts on health care infrastructure from climate change; and projected associated costs.
9. Increasing health sector resilience through initiatives to ‘green’ the health sector.

The Climate and Health Alliance's earlier submission to the Productivity Commission Inquiry into Barriers to Effective Climate Change Adaptation can be found here: \url{http://caha.org.au/wp-content/uploads/2012/03/CAHA-Submission-PC-CC-Adaptation-Inquiry-June-2012.pdf}