



**RACP**  
**Specialists. Together**  
EDUCATE ADVOCATE INNOVATE

## **RACP Environmentally Sustainable Healthcare 2016**

Please note this document was published more than 5-years ago. Please ensure you check information for currency, and/or refer to more up-to-date sources for relevant information and advice.



**RACP**  
Specialists. Together  
EDUCATE ADVOCATE INNOVATE

The Royal Australasian College of Physicians

# Environmentally Sustainable Healthcare Position Statement

November 2016

145 Macquarie Street, Sydney NSW 2000, Australia  
Telephone +61 2 9256 5420 | Facsimile +61 2 9251 7476 | [racp@racp.edu.au](mailto:racp@racp.edu.au)

# Acknowledgements

The RACP would like to acknowledge and thank those who led this work.

## The Climate Change and Health Working Party members:

Dr George Laking FRACP (Chair)  
Associate Professor Marion Carey FAFPHM  
Dr Kate Charlesworth FAFPHM  
Professor Charles Guest FAFPHM  
Associate Professor David Harley FAFPHM  
Dr Karen Kiang MD  
Dr Lloyd Nash FRACP  
Associate Professor Linda Selvey FAFPHM  
Dr Ashwin Swaminathan FRACP

## Supported by:

Louise Hardy, Manager, Policy and Advocacy  
Helen Stasa, Policy Officer, Policy and Advocacy  
Corey Watts, Senior Advocacy Officer, Policy and Advocacy

# Contents

Executive summary .....	3
Introduction.....	3
Environmentally sustainable healthcare – more than energy efficiency and recycling .....	4
The economics of environmentally sustainable healthcare .....	4
International approaches to environmentally sustainable healthcare .....	4
Environmentally sustainable healthcare in Australia and New Zealand .....	5
Summary and recommendations .....	5
The role of the RACP .....	5
Recommendations.....	6
References .....	8

## Executive summary

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. 'Green' initiatives such as improving energy efficiency and promoting recycling are important, but healthcare organisations need to act more broadly to reduce carbon and resource use by developing integrated models of care, strengthening primary care, and optimising use of new technologies.

In this Position Statement, the Royal Australasian College of Physicians (RACP) reaffirms its commitment to raising awareness about and advocating for environmentally sustainable healthcare, and calls upon Australian and New Zealand Governments to implement a comprehensive strategy for measuring the carbon footprint of the Australian and New Zealand health sectors, and to establish Healthcare Sustainability Units to lead this vital work.

## Introduction

At the 2015 Paris Climate Conference (COP21), the Australian and New Zealand Governments committed to limit the increase in global average temperature to well below 2°C (and ideally below 1.5°C) above pre-industrial levels.<sup>1 2</sup> To meet this commitment, the health and other major sectors of the Australian and New Zealand economies will be required to measure, monitor and reduce their carbon footprints.

The RACP recognises the overwhelming evidence that climate change will have adverse impacts on human health, and these effects are projected to worsen if action is not taken.<sup>3</sup> Given that the core business of healthcare is to protect and promote human health, there is an imperative for the health sector to reduce its own carbon emissions. The carbon footprint of the health sector has been measured in other countries such as the United Kingdom and the United States.<sup>4 5</sup> The carbon footprints of the Australian and New Zealand health sectors have not been measured, but healthcare expenditure in the two countries is nearly 10 per cent of GDP<sup>6 7</sup> and therefore emissions must be substantial.

This Position Statement asserts that health professionals have a responsibility to develop environmentally sustainable healthcare systems. We outline the defining features of such systems, and advance policy recommendations for how this may be achieved. Such systems offer a significant opportunity to improve quality of care and reduce costs.

Sustainable development employs the 'triple bottom line' framework. This recognises the three interdependent elements of economic development, social development and environmental protection.<sup>8</sup>

The implication of this framework for health and social care is a system that is not only financially sustainable, but also minimises impacts on society and the natural environment that could "jeopardise the ability of future generations to meet their health and social care needs".<sup>9</sup>

## Environmentally sustainable healthcare – more than energy efficiency and recycling

Environmentally sustainable healthcare is broader than energy efficiency, recycling and active transport.<sup>10</sup> Although these actions are important, on their own they will be insufficient to address the most carbon-intensive areas in health. In the UK, 18 per cent of the health and social care sector's 2015 carbon footprint came from building energy use, while 13 per cent was due to travel (patient, staff and visitor). In contrast, 57 per cent of carbon emissions were from procurement activities, such as manufacturing of pharmaceuticals and medical equipment.<sup>11</sup> Similarly, US research found that although hospitals were the largest contributor of carbon emissions in the health sector, the second largest contribution came from the pharmaceutical industry.<sup>4</sup>

Healthcare organisations will need to act more broadly to reduce carbon and resource use. This may be achieved by avoiding wasteful or unnecessary medical interventions (such as in the Choosing Wisely<sup>12</sup> and the RACP's associated EVOLVE<sup>13</sup> initiatives); developing innovative and more integrated models of care; optimising the use of new technologies; preventing avoidable activity; and strengthening primary care, self-management and patient empowerment.<sup>9 10 14 15</sup>

## The economics of environmentally sustainable healthcare

There is alignment between imperatives of environmental sustainability, quality of care and financial rigour. Research by The Commonwealth Fund investigating energy, waste, and operating room supply efficiencies in the USA found that the financial savings of these initiatives were \$5–10 billion over 10 years.<sup>16</sup> Similarly, a recent report from the UK's National Health Service (NHS) Sustainable Development Unit (SDU) estimated that, since 2007, the cumulative savings from the introduction of energy efficient measures is in the region of £1.85 billion, in addition to environmental and health benefits such as reduced air pollution.<sup>17</sup>

## International approaches to environmentally sustainable healthcare

Internationally, there are examples of innovative approaches to improving the environmental sustainability of healthcare. In the UK, the SDU ([www.sduhealth.org.uk](http://www.sduhealth.org.uk)) was established in 2008 with the task of reducing the carbon footprint of the NHS. Subsequently, its role has been expanded to include the public health and social care sectors. The SDU has enjoyed cross-party support and has exceeded the government's carbon reduction targets at the same time as fostering innovation in healthcare.<sup>14</sup>

Also in the UK, the Centre for Sustainable Healthcare (<http://sustainablehealthcare.org.uk/>) works to reduce healthcare's resource footprint by modelling the carbon footprint of clinical care and, with health professionals, to develop sustainable models of care.

In the United States, one example is the healthcare organisation, Kaiser Permanente, which has an environmental stewardship program including targets to become ‘carbon net positive’ and sending zero waste to landfill, both by the year 2025.<sup>18</sup> Globally, Health Care Without Harm (HCWH) (<https://noharm.org/>) is a coalition of professionals, organisations and systems working towards a healthcare sector that promotes the health of people and the environment. One of HCWH’s programs, Global Green and Healthy Hospitals (<https://noharm-global.org/issues/global/global-green-and-healthy-hospitals>) is a network of more than 680 hospitals, health systems and health organisations from six continents which are committed to reducing their ecological footprint and promoting environmental health.

## Environmentally sustainable healthcare in Australia and New Zealand

Australian and New Zealand approaches to sustainable healthcare remain underdeveloped, particularly in comparison to countries such as the UK and the US.<sup>19</sup> Although some Australian states (such as New South Wales and Victoria)<sup>20,21</sup> and New Zealand District Health Boards (such as Waitemata)<sup>22</sup> have released sustainability plans, the approach has been described as “reductionist and piecemeal”.<sup>19</sup>

Considering the size of the health sector and its significance to the economies of both nations, there is a need for a consistent approach to carbon reduction and environmental sustainability. Without central support and coordination, significant financial and carbon savings risk being forgone.

## Summary and recommendations

The imperative for healthcare to be delivered in ways that are environmentally sustainable presents significant opportunities for the health sector. The judicious use of resources is likely to offer significant carbon and financial savings. Relevant actions include preventing avoidable activities, reducing low value activities, implementing innovative and integrated models of care, optimising water and energy infrastructure, and optimising use of new technologies.

### The role of the RACP

The Australian and New Zealand approach to low carbon healthcare is at a preliminary stage. To advance this, the RACP is committed to raising awareness of the importance of action to reduce the health sector’s carbon footprint.

The RACP is advocating for action on climate change. In 2015, we led the *Doctors for Climate Action* campaign.<sup>23</sup> As part of the campaign, a consensus statement endorsed by over 60 international medical colleges was presented to key decision makers at the COP21 meeting in Paris. In 2015, the Board made the decision to divest from firms with a direct stake in the fossil fuel industry.<sup>24</sup>

As evidence from overseas has shown, comprehensive strategies are needed to implement environmentally sustainable healthcare initiatives. The RACP considers that such actions require the direct attention of the Australian and New Zealand Governments.

## **The RACP recommends that the Australian and New Zealand Governments:**

### **1. Establish appropriate metrics and measure the total carbon footprints of the Australian and New Zealand health sectors**

Measurement of the carbon footprint of the Australian and New Zealand health sectors is needed to identify the contribution of different parts of the healthcare system (e.g. transportation, building usage, procurement). This will help focus carbon emission reductions. After establishing a baseline carbon footprint, future measurements would monitor progress and evaluate different reduction strategies. This work could be done at national, state or regional levels.

### **2. Establish Healthcare Sustainability Units in Australia and New Zealand**

The RACP recommends the Australian and New Zealand Governments establish Healthcare Sustainability Units, at national, state, or regional levels. The units would draw on local best practice as well as leading international models, such as the SDU in the UK. The first tasks of the units would be to:

- a) consult with stakeholders
- b) measure the carbon footprint of health services in their jurisdiction
- c) work with health stakeholders to develop an environmental sustainability strategy
- d) support health services in their jurisdiction to implement the strategy.

### **3. Consult with health departments, peak health bodies, health researchers and professionals to develop a framework under which the HSUs would operate**

In determining the framework under which the HSUs would operate, key stakeholders must be consulted at all stages. This is important to ensure that:

- a) appropriate governance arrangements are in place
- b) clear, achievable outcomes are identified
- c) timelines are developed to promote the attainment of these outcomes
- d) sufficient funding and resources are available, and
- e) reporting and evaluation mechanisms are in place.

### **4. Draw on the expertise of RACP members in the development of HSUs**

The Fellows and Trainees of the RACP welcome the opportunity to provide expert advice on the structure and remit of HSUs. Many of our Members have extensive knowledge and experience in environmentally sustainable healthcare.



## **About this Position Statement**

*This Statement was developed by The Royal Australasian College of Physicians (RACP) 2015 Climate Change and Health Working Party (CCHWP). It forms part of a set with the updated Climate Change Position Statement and The Health Benefits of Mitigating Climate Change Position Statement.*

## References

1. United Nations Framework Convention on Climate Change 2015. Adoption of the Paris Agreement Conference of the Parties 12/12/2015. Paris, UNFCCC.  
<https://unfccc.int/resource/docs/2015/cop21/eng/l09r01.pdf>
2. United Nations 2015. Framework Convention on Climate Change: Paris Agreement.
3. Watts N, Adger WN, Agnolucci P et al. Health and climate change: policy responses to protect public health. *The Lancet* 2015;386(10006):1861–1914.
4. Chung JW, Meltzer DO. Estimate of the carbon footprint of the US health care sector. *JAMA* 2009;302(18):1967–1972.
5. Sustainable Development Unit 2016. Measuring sustainability.  
<http://www.sduhealth.org.uk/delivery/measure.aspx>.
6. AIHW 2016. 25 years of health expenditure in Australia: 1989–90 to 2013–14. Health and welfare expenditure series no. 56. Cat. no. HWE 66. Canberra: AIHW.
7. World Health Organization 2016. Countries: New Zealand.  
<http://www.who.int/countries/nzl/en/>.
8. Sustainable Development Unit 2016. What is sustainable health?  
<http://www.sduhealth.org.uk/policy-strategy/what-is-sustainable-health.aspx>.
9. Naylor C, Appleby J 2012. Sustainable health and social care: connecting environmental and financial performance. London: The King's Fund.
10. Tomson C. Reducing the carbon footprint of hospital-based care. *Future Hospital Journal* 2015;2(1):57–62.
11. Sustainable Development Unit 2016. Carbon footprint update for NHS in England 2015. Cambridge: SDU.
12. ABIM Foundation 2016. Choosing Wisely. <http://www.choosingwisely.org/>.
13. Royal Australasian College of Physicians 2016. About EVOLVE. <http://evolve.edu.au/about>.
14. Sustainable development in the health and care system: Health Check 2016. United Kingdom: Sustainable Development Unit, NHS England and Public Health England.
15. Sustainable health systems, visions, strategies, critical uncertainties and scenarios: a report from the World Economic Forum. Healthcare Industry 2013. Geneva: World Economic Forum.

16. Kaplan S, Sadler B, Little K et al. Can sustainable hospitals help bend the health care cost curve? Issue Brief November 2012. The Commonwealth Fund.
17. Sustainable Development Unit 2016. Securing healthy returns: realising the financial value of sustainable development. Cambridge, UK: The Sustainable Unit.
18. Kaiser Permanente pledges bold 2025 environmental performance to benefit people and planet. Press release, 17 May 2016. <https://share.kaiserpermanente.org/article/kaiser-permanente-pledges-bold-2025-environmental-performance-to-benefit-people-and-planet/>.
19. Jamieson M, Wicks A, Boulding T. Becoming environmentally sustainable in healthcare: an overview. *Australian Health Review* 2015;39(4):417–424.
20. NSW Ministry of Health 2012. Environmental Sustainability Strategy: 2012–2015.
21. Victorian Department of Health & Human Services 2016. Sustainability in healthcare. <https://www2.health.vic.gov.au/hospitals-and-health-services/planning-infrastructure/sustainability>.
22. Waitemata District Health Board 2016. Sustainability. <http://www.waitematadhb.govt.nz/About-Us/Sustainability>.
23. Royal Australasian College of Physicians 2016. Climate change and health. <https://www.racp.edu.au/advocacy/policy-and-advocacy-priorities/climate-change-and-health>.
24. Royal Australasian College of Physicians 2015. RACP divesting from fossil fuels. Media release. <https://www.racp.edu.au/docs/default-source/default-document-library/mr-racp-divesting-from-fossil-fuels.pdf?sfvrsn=0>.