

# Proposal for a National Sustainable Healthcare Unit

## 2021

### EXECUTIVE SUMMARY

The Australian healthcare system faces significant challenges. It is one of the largest sectors of the Australian economy (10% of GDP) with predicted expenditure increases.<sup>1</sup> The burden of chronic diseases is rapidly increasing, our population is aging, and climate change is predicted to increasingly threaten our health and wellbeing.<sup>2</sup> In this context, the future of high-quality health care relies on its delivery in ways that are both financially and environmentally sustainable.<sup>3,4</sup>

**The Australian healthcare sector, due to its significant greenhouse gas emissions is responsible for approximately 7% of Australia's national carbon footprint.<sup>5</sup>**

Presently there is no coordinated approach in Australia across jurisdictions to address and decrease carbon emissions from the healthcare sector and realise the full extent of financial, quality and environmental co-benefits of such actions.

Establishing a national Sustainable Healthcare Unit (nSHU) is required to work in conjunction with state-based units and activities to ensure (i) standardised and consistent measurement of healthcare sector emissions, (ii) the effective mapping and implementation of evidence-based approaches to emission reduction and sustainability best practices and (iii) achievement of nation-wide healthcare sector economic, quality and environmental outcomes.

In addition to working with the public hospital sector through state-based units, a national Sustainable Healthcare Unit would partner with sectors beyond the remit of state governments such as general practice, and not-for-profit and private healthcare organisations (including industry).

This would facilitate the optimisation of available resources and finances by reducing inefficiencies across the board within the healthcare sector and assist the whole Australian healthcare system (primary, secondary and tertiary) to deliver high-quality health care in environmentally and financially sustainable ways whilst concurrently addressing waste and wasteful practices.

A national Sustainable Healthcare Unit would work with stakeholders to lead research, policy development, system changes and education of healthcare staff, and would fulfil a central co-ordinating role for maximum effectiveness and successful implementation of initiatives at state, regional, health organisation / network, hospital and practice levels.

Leadership from Australia's healthcare sector would be expected to have the added benefits, due to its size and influence, of driving wider societal economic, social and environmental (triple bottom line) outcomes.<sup>6</sup>

The Australian Medical Association (AMA), the Royal Australasian College of Physicians, the Climate and Health Alliance (CAHA), Doctors for the Environment Australia (DEA) and the Climate Health WA Inquiry have all separately proposed a national unit with numerous other stakeholders in support.<sup>7-11</sup>

### RECOMMENDATIONS

1. The Australian Government communicates its commitment and support for the healthcare sector's ambition to deliver improved environmentally and financially sustainable high-quality health care.
2. The Australian Government commits to institution of a national Sustainable Healthcare Unit.
3. Healthcare clinical leaders be involved in determining the focus, structure and governance model for the national Sustainable Healthcare Unit.

## CONTEXT

Climate change threatens the fundamental determinants of health and is already contributing to life-threatening illnesses and deaths.<sup>12, 13</sup> The Australian healthcare sector is part of the problem – responsible for approximately 7% of Australia’s national carbon footprint.<sup>5</sup>

Presently there is no coordinated approach in Australia across jurisdictions to address and decrease carbon emissions from the healthcare sector and realise the full extent of financial, quality and environmental co-benefits of such actions.

The Australian Medical Association (AMA), Doctors for the Environment Australia (DEA) and others have called on the Australian healthcare sector to reduce its carbon emissions to net zero by 2040, with an interim emission target of 80% by 2030.<sup>7, 14</sup> These targets are consistent with Australia’s international commitments under the Paris Agreement to keep global warming under 1.5 degrees celcius.<sup>15</sup>

Every part of society needs to play a role to reduce carbon emissions and minimise wastage of resources. The healthcare sector, guided by the principle to ‘first do no harm’, has an added duty to lead and take action to protect health.

## OPPORTUNITIES AND CHALLENGES

The Australian healthcare system faces significant challenges. It is one of the largest sectors of the Australian economy (10% of GDP)<sup>1</sup> with predicted expenditure increases. The burden of chronic diseases is rapidly increasing, our population is aging and although medical technology continues to advance, climate change is predicted to increasingly threaten our health and wellbeing. In this context, the future of high-quality health care relies on its delivery in ways that are both financially and environmentally sustainable.

Of health care’s 7% contribution to Australian carbon emissions, hospitals are responsible for 44%, pharmaceuticals 19%, capital expenditure 8%, community and public health 6% and general practice 4%.<sup>5</sup> Beyond carbon emissions, health care is a significant contributor to waste products and natural resource consumption, threatening our present and future health.<sup>16</sup>

Leadership from Australia’s healthcare sector would be expected to have the added benefit, due to its size and influence, of driving wider societal economic, social and environmental (triple bottom line) outcomes.<sup>6</sup>

Although the future of quality health care is reliant upon both financial and environmental sustainability, at present there is no consistent or standardised measurement of Australian healthcare sector emissions across jurisdictions to benchmark emission reductions or guide and coordinate effective, efficient carbon reduction strategies. The standardisation of such measurements would also assist organisations in reporting to the Climate Risk Module<sup>17</sup> that the Australian Commission on Safety and Quality in Health Care (ACSQHC) is presently developing.

Opportunities for Australian health care to be fit for purpose to meet current and future needs and drive multi-sectorial triple bottom line outcomes are presently impaired by the:

- Fragmented response across the sector - in the absence of clear roadmaps,<sup>18</sup> prioritisation and aligned leadership and analysis
- limited carbon footprint metrics and research to inform decision-making and prioritisation
- lack of over-arching units (or programs) to enable health organisations, professionals, and related stakeholders to collaborate to align and maximise outcomes, strategic direction and related capabilities.

A national Sustainable Healthcare Unit (nSHU) is required to work in conjunction with state-based units and activities, to ensure standardised and consistent measurement of healthcare sector emissions across jurisdictions, effective mapping and implementation of evidence-based approaches to emission reduction and sustainability best practices whilst achieving nation-wide health sector economic, quality and environmental outcomes.

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The climate emergency...  
is also a health emergency.  
Unabated it will disrupt care,  
and affect patients and the  
public at every stage of our  
lives. With poor environmental  
health contributing to major  
diseases, including cardiac  
problems, asthma and  
cancer, our efforts must be  
accelerated. We therefore  
make no apologies for  
pushing for progress in this  
area while still continuing to  
confront coronavirus.”

—Sir Simon Stevens (NHS Chief Executive).  
Extract from Forward of NHS. Delivering a  
‘Net Zero National Health Service’.<sup>27</sup>

A national Sustainable Healthcare Unit would work with general practice and not-for-profit and private healthcare organisations (including industry), which lie beyond the remit of state governments.

## SUPPORTING ROAD MAPS FOR CHANGE IN AUSTRALIA

There are already advances at a state level, and by healthcare organisations and industry, to address carbon footprints, reduce waste and minimise overall environmental impact.

At a state level, Victoria's Health and Human Services Building Authority (VHHSBA) has an Environmental Sustainability Strategy and Progress Report<sup>19</sup> and all Victorian public hospitals will be supplied by 100% renewable electric by 2025.<sup>20</sup> Western Australia's recent Climate Health Inquiry recommended the establishment of a Sustainable Development Unit within the WA Department of Health<sup>21</sup> and Queensland Health is creating an Office of Hospital Sustainability.<sup>22</sup> Presently, individual healthcare organisations in Australia are also taking steps to address their environmental impact, such as Uniting Care Queensland<sup>23</sup> and Hunter New England Local Healthcare District.<sup>24</sup> Many are assisted by the Global Green and Healthy Hospital (GGHH) network,<sup>25</sup> coordinated by the Climate and Health Alliance in Australia.

At an industry level AstraZeneca (a significant healthcare industry stakeholder) has committed to becoming carbon neutral across its entire value chain by 2030.<sup>26</sup> England's National Health Service (NHS), with over 80 000 suppliers, is using its purchasing power by announcing that before the end of the decade they will no longer purchase from suppliers that do not meet or exceed their net zero commitment.<sup>27</sup> Supply chains / manufacturers across all sectors of health care are an important part of the solution as goods and services that are not owned or directly controlled by an organisation are a significant part of health care's carbon footprint (approximately 60% of emissions).<sup>28</sup>

*Action by states, healthcare organisations and industry in isolation, however, is not enough to address the healthcare sector's sizeable emissions and environmental footprint.*

The Health Care Without Harm (HCWH) Global Road Map<sup>29</sup> for healthcare decarbonisation calls for governments to develop national and sub-national road maps and action plans for health care decarbonisation. Australia has no such road map at any government level to lead and coordinate metrics, innovation, sustainability, quality improvement initiatives and collaboration.<sup>30</sup>

“  
Ultimately, the most sustainable healthcare system is one that minimizes unnecessary or ineffective use of resources (financial and natural) by delivering the right care, in the right place, at the right time – and by preventing care needs from arising at all where possible.  
”

—Highlighted by Naylor and Appleby<sup>38</sup>

### Sustainable Healthcare Units are fundamental to developing effective road maps for change.

Further, Sustainable Healthcare Units would assist to co-ordinate and systemically integrate three described guiding principles<sup>3</sup> for environmentally sustainable health care:

1. **Reduced demand for health care:** through public health improvements and disease prevention, e.g. decreasing rates of diabetes and obesity, and avoiding escalation of care.
2. **Matched healthcare supply with demand:** avoiding over- and under-investigating / treating (by Choosing Wisely).<sup>31</sup>
3. **Reduced greenhouse gas emissions from healthcare services:** through decarbonisation of health care delivery, facilities, operations, goods and supply chains (as described in the HCWH Road Map) and transforming health care to be part of the circular economy.<sup>32</sup>

More detailed strategies that could enable the minimisation of waste and inefficiencies whilst maximising potential financial and quality benefits are outlined in DEA's 2019 proposal.<sup>4</sup>

Responsibility for the delivery of Australia's health care is shared by governments (federal and state) and private entities (See Annex 1). Neither the state nor federal healthcare sectors can maximise carbon reductions or wider sustainability advances in isolation - nor can individual health districts, organisations or stakeholders. Coordination and alignment of goals are needed therefore to achieve reductions in the sector's carbon footprint and environmental impact across both public and privately funded entities.<sup>33</sup> With the right metrics and road maps, initiatives and successes can be optimised.

## ROLE OF A NATIONAL SUSTAINABLE HEALTHCARE UNIT

A national Sustainable Healthcare Unit working with state-based units would enable the healthcare sector to deliver quality health care in environmentally and financially sustainable ways. England's National Health Service (NHS) provides an international example of a national sustainable health unit that has successfully achieved a 26% reduction in greenhouse gas emissions between 1990 and 2019 – despite the population of England rising by 17%.<sup>27</sup> Between 2009 and 2017, the financial savings associated with the NHS environmental sustainability initiatives (mainly energy, waste and water improvements) rose to £90 million saved annually (See Annex 2).

An Australian national Sustainable Healthcare Unit would enhance and disseminate actions already occurring whilst undertaking systematic benchmarking and planning to realise the necessary emission reductions and environmental and financially sustainable pathways for health care. It would enable coordination across jurisdictions (states, regions, hospitals, clinics) and between stakeholders (healthcare professionals, organisations/ facilities, industry and suppliers etc), allowing health care to capture the full benefits of sustainability initiatives.

### OVER-ARCHING FUNCTION OF A NATIONAL SUSTAINABLE HEALTHCARE UNIT

- Co-ordinating targeted measurement of the healthcare sector's carbon footprint and environmental impact.
- Trend analysis, benchmarking and assessment of carbon reduction strategies within clinical pathways (including sustainable models of care), organisational processes, technology advancements (such as telemedicine) and purchasing/manufacturing (such as pharmaceuticals and equipment).
- Leading and co-ordinating research, policy development, system changes and staff engagement/education to maximise effectiveness and successful implementation of initiatives at state, regional, health network/organisation, hospital and practice levels.
- Co-ordinating activities amongst state-based units and other health organisations/networks (including primary health networks) and stakeholders.

### PRIORITIES FOR A NATIONAL SUSTAINABLE HEALTHCARE UNIT

1. Facilitation of coordination and collaboration with, and amongst, state-based units, healthcare organisations and industry.
2. A national consultation with healthcare sector bodies canvassing current and planned initiatives in relation to environmentally sustainable health care.
3. Establish guidelines for, and implement the targeted measurement of the carbon footprint and environmental impact of Australian healthcare services.
4. Develop and implement strategies for the Australian healthcare sector, including preventive, primary / community care and hospital care, that will improve the environmental sustainability of the healthcare sector and decrease its carbon footprint.
5. Research (including international best practice) and development of innovations (technological, clinical, organisational and so on) that will improve the environmental (and financial) sustainability of health care.
6. Social and psychological research to understand the behaviour, attitudes and cultures that will be needed within the healthcare sector to improve sustainability.
7. Policy research to clarify how the overall design of healthcare systems influences the uptake of sustainable behaviour and innovations.
8. Development of strategies and/or policies that minimise the need for escalation of care and the associated increases in resources and costs within the healthcare sector.
9. Coordinate analysis of risks to healthcare services from environmental impacts including extreme weather events (such as hospital damage from floods and fires).

### STRUCTURE FOR A NATIONAL SUSTAINABLE HEALTHCARE UNIT

A national Sustainable Healthcare Unit could be modelled on the initial Sustainable Development Unit (SDU) in the United Kingdom, which had a small (less than 10 full-time staff) multi-skilled team, including a director, operational director, communications manager, organisational development lead, project officer, technical/metrics lead and administrator.

The unit could be hosted by an existing health organisation (or within the Department of Health) to share use of offices, human resources, finance and IT systems.

Estimates of indicative costs:

- Establishment costs (development of governance structure etc.) - \$150-250,000.
- Implementation costs (assuming 5 staff and related infrastructure) - \$1-2 million per annum.



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## RECOMMENDATIONS

It is recommended that:

1. The Australian Government communicates its commitment and support for the healthcare sector's ambition to deliver improved environmentally and financially sustainable high-quality health care.
2. The Australian Government commits to institution of a national Sustainable Healthcare Unit.
3. Healthcare clinical leaders be involved in determining the focus, structure and governance model for a national Sustainable Healthcare Unit.

## ANNEX 1. AUSTRALIA'S NATIONAL AND STATE HEALTH SYSTEM JURISDICTIONS

Responsibility for the delivery of Australia's health care is shared by governments (federal and state), and private entities. Coordination and alignment of goals are needed therefore to achieve reductions in the sector's carbon footprint and environmental impact across both public and privately funded entities.<sup>33</sup>

Federal government funding<sup>34</sup> (41% of total health expenditure) includes (not exhaustive):

- Pharmaceutical Benefit Scheme (PBS)
- Medicare Benefits Schedule (MBS) – includes primary care (general practice), telemedicine, wider medical and diagnostic service rebates (unless public hospital inpatient)
- preventive health programs (shared with states)
- proportion (41%) of public hospital services<sup>35</sup>
- private health insurance rebates
- private inpatient and outpatient services in public hospitals (proportion of)
- purchase of vaccines for the national immunisation program.

State government funding (27% of total health expenditure) includes:

- Proportion (51%) of public hospital services, including staff wages.<sup>35</sup>
- community and mental health services
- patient transport and subsidy schemes<sup>36</sup>
- delivering of preventive services such as breast cancer screening and immunisation programs.

*Hence neither the state nor federal healthcare sectors can maximise carbon reductions or wider sustainability advances in isolation - nor can individual health districts, organisations or stakeholders. With the right metrics and road maps, initiatives and successes can be optimised.*

## ANNEX 2. ENGLAND'S NHS AS AN INTERNATIONAL EXEMPLAR

England's National Health Service (NHS) established a Sustainable Development Unit (now the Greener NHS programme)<sup>37</sup> in 2008 and was the first body worldwide to regularly measure health care's carbon footprint. Government support enabled the SDU to set practical, evidence-based road maps to guide the coordination and measurement of healthcare decarbonisation. This resulted in the NHS achieving a 26% reduction in GHG emissions between 1990 and 2019 despite the population of England rising by 17%.<sup>27</sup>

Importantly the Greener NHS program is collaborative in its aims to 'work with staff, hospitals and partners... to build on the great work done by trusts across the country, sharing ideas on how to reduce the impact on public health and the environment, save money and reach net carbon zero'.<sup>37</sup> Between 2009 and 2017, the financial savings associated with the NHS environmental sustainability initiatives (mainly energy, waste and water improvements) rose to £90 million saved annually.<sup>27</sup>

Regular updates and analysis of the NHS's carbon footprint, environmental impact and financial outcomes have been published since 2008, enabling maximisation of targeted strategic direction and outcomes. In Australia as there are limited published estimates of health care's carbon footprint, the data is not available to suggest a trend, or guide informed decision making to reap such environmental and financial benefits.

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# About Doctors for the Environment Australia

Doctors for the Environment Australia (DEA) is an independent, self-funded, non-governmental organisation of medical doctors and students in all Australian states and territories. We are supported by a distinguished Scientific Advisory Committee.

We work to address the public health impacts from damage to our natural environment such as climate change, which will increasingly undermine our health and our healthcare services if we fail to act.

A key focus of DEA's work is raising awareness of the healthcare sector's responsibility to reduce its sizeable carbon footprint and to ensuring adequate measures are instigated.

DEA's Scientific Advisory Committee:

Prof Stephen Boyden AM, Prof Emeritus Chris Burrell AO, Prof Colin Butler, Prof Peter Doherty AC, Prof Michael Kidd AM, Prof David de Kretser AC, Prof Stephen Leeder AO, Prof Ian Lowe AO, Prof Robyn McDermott, Prof Lidia Morawska, Prof Peter Newman AO, Prof Emeritus Sir Gustav Nossal AC, Prof Hugh Possingham, Prof Lawrie Powell AC, Prof Fiona Stanley AC, Dr Rosemary Stanton OAM and Dr Norman Swan.

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**We acknowledge the Traditional Custodians of the many Lands we call Australia,  
and pay respects to Elders Past and Present, as well as emerging  
Aboriginal and Torres Strait Islander leaders.**