EPSO

Climate Sustainability and Healthcare (CSH)

Peter Carter March 2021

Seeding Discussion



(*I am*)".... in no doubt that regulation (and its cousins) have a major role to play in reducing carbon emissions and preparing the healthcare workforce, systems, infrastructure, and associated apparatus to meet the challenges climate change poses now and increasingly in the future. The detail of how this might be done could well be developed through EPSO".

Climate Change

Greenhouse gases, such as Carbon Dioxide, trap more heat in the Earth's atmosphere than would be the case without human activity, leading to changes in our climate.

Carbon dioxide concentrations have increased by 40% since pre-industrial times, primarily from fossil fuel emissions and secondarily from net land use change emissions.

Carbon dioxide levels are higher than at any time over the last 800,000 years, and are still increasing. Globally, temperatures are 1.1°C above pre-industrial levels and 2015-2019 is the warmest 5-year period observed.

In Australia, 2019 was the warmest and driest year on record and as I write this 10 million of Australia's 26 million people are being battered by the highest concentrated rainfall and floods for 100 years. Just a year ago Australia experienced the worst bushfires in its recorded history.

US Global Change Research Program

"Human health has always been influenced by climate and weather. Changes in climate and climate variability, particularly changes in weather extremes, affect the environment that provides us with clean air, food, water, shelter, and security. Climate change, together with other natural and humanmade health stressors, threatens human health and well-being in numerous ways. Some of these health impacts are already being experienced in the United States" (Boswell et al., 2019).

"Given that the impacts of climate change are projected to increase over the next century, certain existing health threats will intensify and new health threats may emerge. Connecting our understanding of how climate is changing with an understanding of how those changes may affect human health can inform decisions about mitigating (reducing) the amount of future climate change, suggest priorities for protecting public health, and help identify research needs".

NSW LHD Statement of Commitment on CSH.

"Climate change is a health issue:

The Northern NSW Local Health District is committed to understanding the impact of climate change on the health of our population and working with our health professionals and support staff to prepare to meet the challenges that climate change presents.

We are also committed to reducing the environmental impact of our organisation, primarily through reducing our carbon emissions. This includes moving from traditional forms of energy production to renewable energy, where possible, and making more efficient and sustainable use of resources."

Climate Change and Regulation

While I do not regard myself as an expert in healthcare regulation, standard setting or accreditation I have over the years managed to gain an insight into these areas of quality assurance and quality improvement both internationally, through ISQua, where I was CEO and Board member for a total of seven years and to which I still belong as Member

and ISQua Expert, and nationally through my sixteen years as CEO, first of the College of Psychiatrists and then of the College of Surgeons (both operating in Australia and New Zealand).

This combined with my work on Climate Sustainability and Healthcare over recent years leaves me in no doubt that regulation (and its cousins) have a major role to play in reducing carbon emissions and preparing the healthcare workforce, systems, infrastructure, and associated apparatus to meet the challenges climate change poses now and increasingly in the future. The detail of how this might be done could well be developed through EPSO.

Healthcare is itself a significant contributor to carbon emissions, representing 7% of the Australian national carbon footprint – equivalent to the state of South Australia. Given that carbon emissions are detrimental to health, our carbon emissions are at odds with our primary purpose in healthcare which is to promote, protect and maintain the health of the community.

In the past three to four years there has been a profound shift in the way that Australian regulators, organisations and public perceive climate risk. This shift creates imperatives for organisations to give increased attention to both the assessment and disclosure of climate risk and to seek to mitigate it. Risks to be assessed include both mitigating the impacts of climate change and managing the reputational risk of a perception of inadequate action to reduce carbon emissions and failure to operate in a more sustainable fashion.

Transition to a lower-carbon economy may create cost risks, however more sustainable healthcare is aligned with better value care as it entails models of care that optimise the use made of limited resources.

World Health Organisation

The World Health Organisation declared in 2015 that climate change is the greatest threat to global health in the 21st century.

Climate change is impacting human lives and health in a variety of ways. It threatens the essential ingredients of good health - clean air, safe drinking water, nutritious food supply, and safe shelter - and has the potential to undermine decades of progress in global health (WHO, 2015).

International Society for Quality in Health Care (ISQua)

ISQua Statement on Sustainability in Health Care:

- ISQua recognizes the serious consequences of climate change and pollution for the health of individuals and populations across the planet;
- ISQua recognizes that the healthcare sector has a responsibility to minimise its impact on climate change and pollution;
- ISQua recognizes the urgency and importance of climate change as part of its mission to inspire and empower people to advocate for and facilitate health and improvements in the quality and safety of healthcare worldwide;

- ISQua believes that inspiring and empowering people to advocate for and facilitate health and improvements includes the promotion of climate sustainability and implementation of climate friendly interventions; and
- ISQua will support the promotion of climate sustainability in the healthcare sector.

UK National Health Service

The United Kingdom National Health Service (NHS) states that climate change poses a major threat to our health as well as our planet (Pencheon, 2015). 'The environment is changing, that change is accelerating, and this has direct and immediate consequences for our patients, the public and the NHS' (Roberts, 2009).

US Global Change Research Program

Climate drivers to health outcomes:

CLIMATE DRIVERS

- Increased temperatures
- Precipitation extremes
- Extreme weather events
- Sea level rise

ENVIRONMENTAL & INSTITUTIONAL CONTEXT

- Land-use change
- Ecosystem change
- Infrastructure condition
- Geography
- Agricultural production
 & livestock use

EXPOSURE PATHWAYS

- Extreme heat
- Poor air quality
- Pool an quanty
- Reduced food & water quality
- Changes in infectious
 agents
- Population displacement

HEALTH OUTCOMES

- Heat-related illness
- Cardiopulmonary illness
- Food-, water-, & vector-borne disease
- Mental health consequences
 & stress

SOCIAL & BEHAVIORAL CONTEXT

- Age & gender
- Race & ethnicity
- Poverty
- Housing & infrastructure
- Education
- Discrimination
- Access to care & community health infrastructure
- Preexisting health conditions

NOTES AND REFERENCES

Northern New South Wales Local Health District, NSW Australia (NNSWLHD).

The NNSW LHD is responsible to the NSW Ministry of Health to deliver health services across northern NSW through eight hospitals, four Multi Purpose Centres, one detoxification unit, twenty Community Health Centres and two Health One services.

The LHD offers numerous healthcare programs to a population of approximately 400,000 through 6,000 staff across a wide geographical area. It has a recurrent budget of AUD 1 billion and currently has AUD900 million in capital works underway.

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