National Climate and Health Strategy
Consultation

July 2023

Introduction

Thank you for the opportunity to provide comment to this consultation. As the leading advocate for surgical standards, professionalism in surgery and surgical education in Australia and New Zealand, the Royal Australasian College of Surgeons (RACS) is committed to taking informed and principled positions.

RACS the efforts of the Australian Government in developing the consultation paper and we thank you for the opportunity to participate in the process. The effects of climate change are already impacting on the health of individuals across the world. Counter-intuitively, the health sector itself represents a significant source of pollution and is a major contributor to national carbon emissions world-wide. In Australia it is estimated that health care in contributes to seven per cent of the entire country's carbon emissions, with around half of this contribution coming from hospitals alone.

Environmental sustainability is one of RACS' key advocacy priorities. Due to being one of the most resource-intensive areas of the hospital, strategies which target the operating theatre have the potential to have the highest impact within the health-care industry. RACS is committed to working with the Government and the Unit to ensure that the strategy initiatives which reduce the impact that surgical practice has on the environment, while also ensuring patient safety or quality of care is not compromised.

We have provided responses below to some of the key areas highlighted throughout the discussion paper. Please note that while we have answered the majority of questions, there are some that lie outside of our areas of expertise. However, many members of RACS are also members of Doctors of the Environment Australia (DEA) and have actively contributed to DEA's submission. Recognising this, we would like to endorse the submission made by DEA, particularly for those questions we have chosen not to answer.

Which of the various types of greenhouse gas emissions discussed above should be in scope of the Strategy's emission reduction efforts?
RACS agrees that targets should apply to Scope 1, Scope 2 and Scope 3 emissions. We understand the complexities with developing and enforcing Scope 3 targets, but given the significant proportion of these types of emissions it is crucial that accountability for them is enforced as part of the strategy. The leadership role played by the UK National Health Service (NHS) provides the most successful example incorporating Scope 3 targets into a net-zero emissions plan. The plan acknowledges that the NHS's supply chain is a major source of emissions and outlines a framework for evaluating the carbon footprint of their supply chain and working with suppliers to reduce emissions. We would like to see a similar approach taken in the Australian strategy.

What existing First Nations policies, initiatives, expertise, knowledge and practices should the Strategy align with or draw upon to address climate change and protect First Nations country, culture and wellbeing?
RACS supports a strong focus of First Nations voices and policies in this Strategy and co-design of the necessary governance structures. We do not seek to represent the views of First Nations people and encourage meaningful engagement with their communities.

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?
RACS supports a strong focus of First Nations voices and policies in this Strategy and co-design of the necessary governance structures. We do not seek to represent the views of First Nations people and encourage meaningful engagement with their communities.

Beyond the schemes already noted above, is your organisation involved in any existing or planned initiatives to measure and report on health system emissions and/or energy use in Australia?
RACS does not directly report our emissions as an organisation, however we would be willing to do so and we strongly support targets and transparency across the health sector.

in 2022 RACS became the first medical College in Australia to sign up to the newly developed Green College Guidelines development by the Australia Medical Association (AMA) and Doctors for the Environment Australia (DEA). As part of our commitment to the Green College Guidelines, RACS also committed to emissions reduction targets of 80 per cent by 2030 and net zero emissions by 2040. This approach is supported by other peak bodies and organisations within the health sector. As highlighted earlier, RACS was one of ten medical College that endorsed the comprehensive report commissioned by the Royal Australasian College of Physicians. The report recommended that Australia commit to net zero healthcare by 2040.

RACS appreciates that the strategy's goal of net zero by 2050 is consistent with the broader Government targets across all portfolios. However, given the widespread support for more ambitious reductions across the medical community, we believe that there is scope to achieve these targets much sooner, and that this ambition should be reflected in the framework.

What do you think of these proposed focus areas for emissions reduction? Should anything else be included?
RACS agrees with all the focus areas for emissions reduction. We recommend an additional category is added that encompasses education and awareness for health sector workers.

To date there has been little response at the university level to prepare medical graduates to practice environmentally sustainable healthcare. A recent study from the Medical Journal of Australia highlighted an example of the formation of a Working Group on Climate Change and Health. The Working Group have identified five broad areas of learning to guide the development of curriculum resources. These areas include understanding the evidence for climate change and its impact on health, the impact of climate change on the health system, the environmental impact of the health sector, and creating change through

practice, advocacy, and leadership. The working group also identified 'modest changes' to the Australian Medical Council (AMC) graduate outcomes statement to reflect a greater focus on environmental sustainability. The working group recommended that these changes be adopted by the AMC and become part of the Standards for Assessment and Accreditation of Primary Medical Programs.

RACS believes such an approach will allow Trainees to commence their surgical educational and training with an existing level of awareness of more sustainable practices. This approach has strong support from the RACS Training Association (RACSTA), as well as the RACS Younger Fellows Group. Both these bodies have identified greater awareness and education on more environmentally sustainable practices as one of their key priorities.

As a provider of surgical education and training, RACS acknowledges that medical Colleges also have an important role to play in this space. Further information is provided in response to question 17.

Which specific action areas should be considered relating to the built environment and facilities (including energy and water), over and above any existing policies or initiatives in this area?
RACS strongly supports sustainable, green and healthy hospital design and construction. A particularly important action will be the transition of hospitals and health care facilities to 100 percent renewable energy supply. This was highlighted by a 2020 study, which included the observation:

In 2019, only 14 percent of electricity generation in Queensland was from renewable sources, rising to 23.9 percent in Victoria; in contrast, 95.6 percent of electricity generation in Tasmania was from renewable (hydro) sources. Thus, a hospital in Tasmania that was identical in every other respect to a counterpart in Queensland would record Scope 2 emissions that were six times lower simply by the good fortune of its location.

The above observation demonstrates the significant reduction in emissions that can be achieved simply by a change in energy supply. A key role of the strategy will be to facilitate and support the transition to renewable energy across all Australian health facilities and hospitals. RACS recently responded to a consultation released by the Western Australian Government on the state's new climate and health framework. As part of our response, we commended the WA Government for committing to 100 per cent renewable energy by 2030, and we believe that all states and territories should work towards this target.

In addition to the source of energy used, hospitals and health facilities can reduce their carbon footprint by investing in energy-efficient equipment and practices, such as LED lighting and low-power electronics. The final framework must also place a responsibility of health services to ensure that their facilities are adequately maintained to minimise the impact on the environment – such as through leaking nitrous oxide supply pipes and energy inefficiency.

The consultation paper states:

The built environment consists of all the human-made aspects of people's surroundings, including hospitals, facilities, roads and other connecting transit systems.

While RACS acknowledges the importance of sensible design in the broader built environment, including roads and transit systems, our expertise lie primarily in the hospital and health facility setting. In this context, the College would like to emphasise the importance of ensuring the strategy has a strong focus on collaboration with both health professionals and non-health professionals. This includes architects, urban planners, and policy makers.

Which specific action areas should be considered relating to travel and transport, over and above any existing policies or initiatives in this area?
RACS views our expertise in this area as advocating for surgical policies that have the added benefit of lowering emissions from transport. In recent years RACS has advocated strongly telehealth services as a way of providing more equitable and accessible health services, particularly to patients living in rural and

remote areas. By utilising telehealth services where appropriate, surgeons and other medical professionals can remotely provide consultations, post-operative follow ups and even perform certain procedures. Notably, the environmental benefits of telehealth have the potential to be significant. By minimising patient travel and also the need for surgeons to commute between clinics, sensible and targeted telehealth policies will play a significant role in the strategy's stated aim of reducing travel associated healthcare emissions.

RACS has previously undertaken numerous advocacy activities relating to telehealth. These include:
Two separate surveys seeking the views of both surgeons and patients regarding their telehealth experiences. The survey, which was conducted during the early stages of the Covid-19 pandemic, found that 87.8 per cent of Fellows would consider using telehealth once social distancing restrictions are eased, and 93.9 per cent of patients said they were satisfied with the quality of their telehealth consultation.

Additionally the College conducted a rapid review of telehealth services in Australia, provided numerous submissions to the Federal Government, including our 2022 election statement, and our response to a consultation on revised telehealth guidelines. RACS requests that the recommendations provided in these previous advocacy activities are also taken into consideration as part of this consultation.

Furthermore, Patient and visitor travel to and from healthcare facilities needs to be included in the Strategy. Robust accounting of all emissions is necessary and modes and habits of patient and visitor travel, in particular, can influence the emissions from different models of care, such as telehealth. NHS England (8% of NHS emissions) and some Australian healthcare organisations have measured these emissions, so we do not accept that these emissions should not be measured, reported and reduced through policies included in this strategy.

Policies that promote active transport and corresponding infrastructure for access to healthcare, including affordable public transport options, must be prioritised and outlined in the Strategy. This would include facilitating collaboration between state and territory governments, local government and health services to improve active and public transport access, infrastructure and incentives for patients, staff and visitors at existing and new facilities.

Which specific action areas should be considered relating to supply chain, over and above any existing policies or initiatives in this area?
Data from the UK's National Health Service shows that goods and services procured are responsible for 65-70% of the carbon footprint of hospitals. As such our industry partners are an integral part of our efforts to reduce carbon the carbon footprint of healthcare delivery.

Transparency in the procurement process is essential to identify areas for improvement and implement sustainable practices effectively. RACS has previously reached out to industry partners, urging greater transparency. While we acknowledge the complex nature of global supply chains which makes oversight challenging, to date we have found the information provided to be largely inadequate, and we have continued to encourage greater investment in mechanisms that provide a clearer understanding of their supply chains. In parallel with industry investment, government regulations and policies play a critical role in driving sustainable practices and ensuring transparency. RACS recommends that the Strategy requires suppliers to engage in transparent reporting, which includes disclosing the carbon emissions and environmental footprint of their supply chains. These reporting requirements should be mandated and supported by standardised frameworks that define clear guidelines and metrics for environmental data to be consistently reported.

To further incentivise more sustainable practices, the strategy may also consider that Government provides financial incentives, and give preference in procurement processes to those who demonstrate a commitment to transparency and sustainability. By leading by example and prioritising responsible suppliers within their own procurement processes, governments can create a market demand for transparency and encourage industry partners to adopt sustainable practices.

Which specific action areas should be considered relating to waste, over and above any existing policies or initiatives in this area?

RACS' position paper on the environmental impact of surgical practice recommends implementing initiatives underpinned by the five Rs:

- Rethink
- Reduce
- Recycle
- Reuse
- Research

Each of these initiatives are Australian health context and are critical in reducing solid waste.

Rethink

The national strategy is a prime example of rethinking the way we approach healthcare, by recognising the important leadership role that government must play in reducing carbon emissions and promoting environmental sustainability.

RACS and other professional bodies also have an important role to play in this area. From a surgical perspective, many initiatives that aim to reduce the environmental impact of surgical practice will require small changes to how staff perform their roles and how surgical departments operate.

It is essential to emphasise to those within the health sector and the broader community that these changes are not just symbolic gestures but vital steps towards creating a more sustainable and healthy future. The social, logistical, and institutional barriers to implementing these initiatives may be significant, but they are not insurmountable. It will require a rethinking of how health care is provided at the departmental, institutional, and national levels.

RACS is encouraged that many other states and territories have also begun or will shortly commence developing similar frameworks. This shared goal and responsibility presents an opportunity for ongoing collaboration and promotion of key initiatives, but also a risk of duplication and fragmentation. While RACS appreciates the importance of each state and territory having their own framework, it is important that within each jurisdiction there is an acknowledgement of the shared national ambition and responsibilities, and the benefits of collaboration.

Reduce

The central concept of initiatives which aim to reduce health sector waste is to avoid using resources which are not needed to ensure patient or staff safety. This can include reducing electrical expenditure by powering down devices when idle, reformulating operating room kits to reduce overage, and embracing and supporting programs such as *Choosing Wisely* which is aimed at eliminating unnecessary and low value care. Many studies, such as a 2016 study into the use of steam sterilisers at a Melbourne hospital, highlight not only the environmental savings that can be made from reducing resources but also the significant financial savings.

Recycle

Proper waste segregation also plays a large role in reducing resource use. Compared with normal solid waste, biohazard or regulated medical waste requires high energy processing, and is estimated to cost up to eight times that of normal solid waste. The improper segregation of waste can increase the amount that undergoes high energy processing, with some studies suggesting that up to 92 per cent of a hospital's biohazard waste may be nonhazardous.

Surgical procedures produce large volumes of plastic waste in addition to cardboard and paper, much of which can be easily recycled. To improve this situation, RACS recommends that the

government works with the health sector to implement better recycling and segregation practices by investing in more efficient waste management systems, increasing staff education and awareness, and partnering with waste management companies.

Reuse

From a surgical perspective most waste in the operating theatre comes from single-use surgical supplies and instruments, most commonly textiles (e.g. personal protective equipment (PPE), drapes and operating table sheets), sterile and non-sterile packaging, and various consumables and perioperative equipment including surgical scissors, plastic suction bottles, packs etc. Single use, disposable products, may be preferred over re-usable alternatives for sterilisation, infection control, or cost purposes. However, single use items and their packaging contribute to a considerable proportion of operating room waste and have a significant carbon footprint over their life cycle, from manufacture through to disposal.

Compared by their up-front cost, reusable products are an expensive alternative to disposable products. However, when the whole life-cycle of these products are compared, including supply chain and waste disposal costs, reusable items are typically not only more environmentally friendly, but have a cost benefit over disposable items.

This is the case even after accounting for sterilisation and laundering. As Australia shifts to a cleaner energy mix, with 100 per cent renewable energy sources, the comparative sustainability of reusable items only increases.

Research

Ongoing, evidence-based research into the environmental impact of surgical practice and healthcare is needed, both to measure the effects that the provision of health care has on the environment, and to further develop technologies and practices to mitigate this impact. Research into the environmental impact of particular procedures, life cycle analyses and cost comparisons of materials, and the on-going development of devices which can maintain quality of care while minimising the environmental impact of the operating theatre are also needed.

As an example, the COVID-19 pandemic has exacerbated the use of single-use disposables in healthcare, as many hospitals and clinics have opted for disposable equipment and PPE to minimise the risk of infection. While the use of disposable items can be necessary in certain circumstances, it is important to note that in many cases, reusable items are just as effective in terms of sterilisation and infection control. A role of the unit could be to facilitate and/or advocate for education and training in this area, as well as further research.

Which specific action areas should be considered relating to prevention and optimising models of care, over and above any existing policies or initiatives in this area?

As highlighted in our response to question 13, RACS is a strong supporter of the Choosing Wisely program. According to the Choosing Wisely website the aim of the goal of this initiative is to:

Promote a national dialogue on unnecessary tests, treatments and procedures, and support people to choose health care that is:

- *supported by evidence*
- *not duplicative of other tests or procedures already received*
- *free from harm*
- *truly necessary*

These stated goals closely align with the goals put forward in the discussion paper. At the end of 2022 RACS was informed that NPSMedicineWise the organisation previously responsible for administering the Choosing Wisely program had had their funding ceased, and that responsibility for Choosing Wisely had transferred to the Australian Commission on Safety and Quality in

Health Care (ACSQHC). Prior to the change in administration RACS regularly received updates, resources and information, and regularly participated in Choosing Wisely representative panel meetings. While RACS does not have a formal position on a preferred provider, we note that since responsibility for Choosing Wisely has changed hands, there has been no communication or engagement with member organisations. While we appreciate that there will be a transition phase, we believe that the development of the strategy represents an important opportunity to recalibrate and to identify the obvious synergies that exist between Choosing Wisely and the national strategy.

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

In response to question 3 we highlighted the successful manner in which the NHS has incorporated Scope 1, 2 and 3 emissions into their net-zero emissions plans. While we believe the Australian Government should adopt the same ambition, we appreciate the complexities of both systems, their many differences, and that the strategies used in the UK are not all easily translatable to the Australian system. Most obviously this includes the fact that the federal government plays more of a funding role for the hospital system and does not directly control procurement and supply chains. Despite this, the government does have is influence and leverage as a major funding source to state and territory governments, and to private providers. The strategy should therefore include bold and ambitious plans to work with state and territory governments, private hospitals and private companies to ensure greater transparency and to reduce the carbon footprint of supply chains.

What 'quick wins' in relation to emissions reduction should be prioritised for delivery in the twelve months following publication of the Strategy?

Greater workplace education and awareness

In response to question eight, we highlighted the need for changes to the education systems to equip doctors with the necessary skills to practice environmentally sustainable health care.

RACS also believes there is an urgent need to provide greater awareness and training to the existing workforce. A 2021 multinational study conducted by the Lancet Commission found that an overwhelming majority of health professionals were concerned by the threat posed to human health posed by climate change. However, many felt unable or unsure of how to implement more environmental practices into their work environments. The study's conclusion states:

Despite the high rates of concern expressed by survey participants about the health threats of climate change, more than four in ten participants felt insufficient knowledge about the topic was an impediment to engaging with the public on the issue. This is consistent with the findings of other studies. Given the magnitude of the problem, and the large number of health professionals who feel their lack of knowledge poses a barrier to engagement, efforts to offer such education—in medical, nursing, and other health professional curricula and through continuing education—should be accelerated, and research should be done to investigate efficient and effective ways of providing such education, especially in light of the time constraints being identified as the greatest barrier to engagement.

At a local level, a 2022 survey distributed to RACS Fellows found that approximately 79 per cent of respondents either often or almost always made personal choices outside of their work to reduce their carbon footprint. This suggests that surgeons would also implement more sustainable practices at work if greater education and more evidence-based guidelines were provided.

RACS recommends that an action for the first 12-24 months of the national strategy be to encourage/compel dedicated environmental sustainability staff to be employed within health care organisations. We believe Anecdotally, surgeons have reported feedback to RACS, such as a lack of guidance or understanding of waste segregation practices within hospitals. By having a dedicated staff member available, hospitals could offer greater education to staff on waste segregation and treatment, as well as clearer labelling and coding to enable more efficient and accurate sorting of waste.

RACS acknowledges that the responsibility to provide greater education and awareness to health care workers is a shared responsibility, and the College has a role to play over the next 12-24 months also. In recent times we have developed dedicated environmental webpage on the RACS website, and we have previously undertaken a number of initiatives, including hosting webinars for our members to promote more sustainable practices. RACS is also part of an international Green Surgery Oversight Committee. Representatives include several college groups across England and Scotland, and representatives from the USA and Canada. The project aims to produce an evidence-based guide and then produce an implementation plan with the intention of disseminating to organisations and health workers. It is expected that the report will be produced within the next 3-6 months.

In addition to the international collaboration, RACS has also commissioned our own research division to complete a research project which will review the evidence base to ensure that the College's position paper remains contemporary, and where appropriate include practical tips for members on how they can incorporate more sustainable practices in their work. Once available the College will post these resources on our website, and we would be happy to share these links with the Department of Health and the proposed National Sustainable Health Unit.

What health impacts, risks and vulnerabilities should be prioritised for adaptation action through the Strategy? What process or methodology should be adopted to prioritise impacts, risks and vulnerabilities for adaptation action?

In 2020 the Royal Commission into natural disasters issued a warning that Australia must be prepared for the grave consequences of climate change. It outlined that these include more frequent and intense natural disasters such as devastating fire conditions, heavy precipitation resulting in floods, and fewer but more violent cyclones.

Further testimony from the CSIRO to the Royal Commission highlighted that even in the best case scenario (of net negative emissions) it will take a significant amount of time for the climate to revert to preindustrial or recent baseline levels. Their testimony emphasised the importance of Australia adapting to future climate change, regardless of the trajectory of emissions.

RACS provided a response to this Royal Commission, highlighting the leading role that surgeons play leading roles in treating the health impacts of disasters such as the black summer bushfires, as well as major floods which have subsequently occurred across Australia. In the immediate aftermath of such disasters, specialty trained Trauma surgeons (orthopaedic, paediatric and general) are key in the treatment of major injuries caused by disaster related trauma. Our trainees are often the first point of contact between patient and surgical service for initial triage, assessment and management.

Additionally, frontline health workers are subject to extraordinary physical, psychological and professional demands during emergency responses to natural disasters and other mass casualty events. A case study of the 2019–20 bushfires across Australia, found that rural and remote health practitioners in areas affected by bushfire reported experiencing the same traumas and challenges as their patients. Many were unable to take a break to look after their own wellbeing. Furthermore, natural disasters can severely damage healthcare facilities, disrupt supply chains, and overwhelm healthcare systems.

The World Health Organization defines a climate resilient health system as one that is capable to anticipate, respond to, cope with, recover from and adapt to climate-related shocks and stress, to bring sustained improvements in population health, despite uncertainty. This includes designing hospitals and clinics to withstand disasters, establishing backup power systems, and ensuring the availability of essential medical supplies and equipment. By appropriately preparing and protecting the healthcare system, communities can better respond to and recover from natural disasters.

Should the Australian government develop a National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan?

RACS supports the proposal to develop a National Climate Risk Assessment and a National Adaptation Plan. It is critical that the methodology is underpinned by:

- High quality data collections, analysis and projections

- Wide ranging stakeholder engagement, including clinicians, community organisations, vulnerable populations, etc.
- Ensuring that the scope and the objectives of the above projects clearly align with the scope and the objectives outlined in the National Health and Climate Strategy

As highlighted above in 2020 RACS provided a response to the Royal Commission into natural disaster arrangements. The final report from the Commission Chair was released in October 2020. RACS believes that the recommendations of this report, including those yet to be implemented, provide a strong basis to draw upon.

From an international perspective, the World Health Organization has previously provided guidance to countries on how they can conduct vulnerability and adaptation assessments.