

Healthcare Stakeholders' Perceptions Regarding Leveraging Opportunities In Renewably Powered Health Services To Reduce Scope 3 emissions



Team Members: : Dr Rebecca Patrick, Dr Mike Forrester, Dr Martin Hensher, Dr George Keel, Dr Peter Vuillermin and Urvi Thanekar

INTRODUCTION

Health systems are responsible for 7% of global greenhouse gas emissions (1). Whilst most health systems are developing strategies to target emissions from owned assets (Scope 1) and purchased energy sources (Scope 2) through transitioning towards renewable energy, there is a currently a gap in action and research pertaining to healthcare supply chain emissions (Scope 3), constituting ~70% of the emissions.

Health professionals have a crucial role in leading and managing health system sustainability transitions including realising the Scope 3 co-benefits of switching to renewable energy.

OBJECTIVES

To seek the insights of healthcare stakeholders towards Scope 3 reduction opportunities in renewably powered health services and influences on these opportunities.

What are the opportunities for health services to reduce Scope 3 related emissions enabled by the all-electric health service transitioning to renewably generated electricity?



METHOD

Semi-structured interviews with stakeholders from regional and metropolitan health services in Victoria, Australia including doctors, nurses, dieticians, procurement, waste coordinators, and sustainability managers. Data analysis used reflexive and iterative deductive thematic techniques. Complexity Theory was used to interpret system-level changes.

RESULTS

n = 17

Stakeholders identified key opportunities for reducing scope 3 emissions and provided practical examples of scope 3 co-benefits of renewable energy. They acknowledged the breadth of renewable energy benefits in terms of Scope 3 emissions and welcomed further information about the full range of Scope 3 co-benefit opportunities that could be leveraged through renewable energy.



THEME 1

Reprocessing of Reusable Medical Equipment

Sterilisation of reusable instruments through renewably powered health services can result reduced future costs to the health service and decreased environmental emissions. Examples of commonly used single use instruments/equipments that could be reusable include: Kingaard, Blueys, single suture packs, laryngeal masks etc.

"It will create more washing, but I think you know, adding a bit more washing doesn't affect things too much, because it's a bulk process. And also, if we then use renewable energy for our hot water, then again, the gains are huge."[Surgeon 2]

THEME 2

Cradle to Grave based Procurement Decisions

Life cycle analysis to account for emissions throughout the product's life as key procurement criterias to help sustainability managers choose environmentally appropriate products.

"We, as the health, industry, private and public, start to embed very prescriptive mandatory requirements in our procurement contracts where they .. commit to only using renewable energy for their transport, they commit to being responsible for the waste associated with their products, the end of life of their products." [Sustainability manger 2]

THEME 3

Sustainable Staff & Patient Transport

On-site electric charging through renewable energy and incentivising electric vehicle purchases speed up uptake of electric vehicles by staff and patients.

"if we were to get renewable energy powered hospitals the more charging stations, more people are going to use it. So, if you're incentivizing traveling with electric vehicles that's definitely going to help" [Nurse 2]

THEME 4

Leadership Influences

Leadership factors influencing implementation of Scope 3 opportunities included: staff awareness; infrastructural changes; and meso-level staff involvement. Developing capacity for reusable equipment procurement and incentivising transition towards renewable energy through government leadership were highlighted as future priority areas.

DISCUSSION

The value of managing Scope 3 emissions is often overlooked. The results highlight crucial opportunities to reduce Scope 3 emissions in renewably powered health services as recognised by healthcare stakeholders. The perspectives of healthcare stakeholders reflects the array of opportunities including reusable equipment, evidence-based procurement decisions, sustainable food and travel services .

Leadership and governance will play a crucial role in managing sustainability related changes in health organisations.

CONCLUSION

By harvesting action ideas from a motivated group of healthcare stakeholders, this study advances knowledge of the factors that influence Scope 3 reduction opportunities. We recommend two key priority action foci: sustainable healthcare training for health professionals as well as strong government leadership through resourcing climate change action within health services.

REFERENCES & ACKNOWLEDGEMENTS

1. WHO (2015). Climate Change and Human Health. <https://www.who.int/globalchange/global-campaign/cop21/en/>.

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