



Feb 29, 2024

# Environmental Impact of Primary Care- Australian Perspective: A Scoping Review

DOI

[dx.doi.org/10.17504/protocols.io.14egn35epI5d/v1](https://dx.doi.org/10.17504/protocols.io.14egn35epI5d/v1)

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**Protocol Citation:** jessica.jaja 2024. Environmental Impact of Primary Care- Australian Perspective: A Scoping Review. **protocols.io** <https://dx.doi.org/10.17504/protocols.io.14egn35epI5d/v1>

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**Protocol status:** Working

We use this protocol and it's working



**Created:** February 28, 2024

**Last Modified:** February 29, 2024

**Protocol Integer ID:** 95927

**Keywords:** primary care, primary healthcare, environment, carbon footprint, impact of primary care, primary healthcare, effects of the primary healthcare sector, primary care, primary healthcare sector, scoping review climate change, climate crisis, environmental impact, global warming, significant detrimental impacts on human health, human health, greenhouse gas, healthcare sector, australian perspective, co2, increased patient demand, patient demand, mortality, environment, equivalent emission

## Abstract

Climate Change has significant detrimental impacts on human health, well-being, and mortality. As the first responder during a climate crisis, primary healthcare is implicated by increased patient demand and burden on the system. Paradoxically, primary healthcare, and the healthcare sector as a whole, are major greenhouse gas emitters and contributors to anthropocentric global warming. In Australia, few studies have been conducted on the effects of the primary healthcare sector on the environment. This study was conducted to understand the impact of primary care on the environment. Greenhouse gas, CO<sub>2</sub>, and CO<sub>2</sub>-equivalent emissions are investigated to elucidate the environmental impact.

## Troubleshooting

## Background/Purpose

- 1 Climate Change has significant detrimental impacts on human health, well-being, and mortality. As the first responder during a climate crisis, primary healthcare is implicated by increased patient demand and burden on the system. Paradoxically, primary healthcare, and the healthcare sector as a whole, are major greenhouse gas emitters and contributors to anthropocentric global warming. In Australia, few studies have been conducted on the effects of the primary healthcare sector on the environment. This study was conducted to understand the impact of primary care on the environment. Greenhouse gas, CO<sub>2</sub>, and CO<sub>2</sub>-equivalent emissions are investigated to elucidate the environmental impact.

## Methods

- 2 Selection Criteria: The PRISMA-2020 (Page, et.al., 2021) guideline will be followed, with peer-reviewed primary research and grey literature included in the process. Grey literature documents published by governments and advisory bodies will be included, whilst reviews, editorials, opinion pieces, commentaries, letters and book chapters are excluded. Articles written in a language other than English and articles published prior to 2010 will be excluded.
- 3 Search Strategy: Search strategy: A search of OVID, PubMed and Google Search databases is conducted using Boolean operators. Operators of (Primary healthcare) AND (environmental sustainability), ((Environmental sustainability) AND (primary healthcare)) AND (Australia), ((Waste management) AND (Primary healthcare)) , ((Carbon emissions) AND (general practice)) AND (Australia), ((Carbon footprint) AND (Primary healthcare)) AND (Australia) will be used. To determine the quality and bias of assessed studies, Hawker et.al.'s 2002 Quality Assessment Tool is going to be used.
- 4 Data Collection: Data screening as per PRISMA 2020 guidelines will be conducted, via Rayyan software and reading of abstracts by reviewers. Three reviewers will take part in the screening process with any disagreements over data extraction are resolved via discussions reaching a mutual consensus
- 5 Displaying Data: Data will be displayed using a PRISMA flow diagram as per PRISMA-2020 guidelines.
- 6 Analysis and synthesis: Rayyan software will be utilised to categorise and analyse data based on the inclusion/exclusion criteria and relevance determined by reviewers. Limitations in the methodology include the lack of automation in the screening stage, where identification of relevant studies will be solely completed by the reviewer, thus introducing possible sources of bias and possibly removing relevant studies as a result.



## Protocol references

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