Critical review report

Critical Review Report: Virtual health vs. In-Hospital Osteoarthritis Treatment in Australian Urban and Rural Settings

12th November 2024

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Context

This critical review report presents the results of the critical review process of the study identified below. This study under review consists of a life cycle assessment conducted on treatment options for knee osteoarthritis.

Report under review	
Title	Virtual health vs. In-Hospital Osteoarthritis Treatment in Australian Urban and Rural Settings
Date	Final version provided 12 th November 2024
Status	V1.7
Author(s)	Yumi Kobayashi Sazal Kundu
Prepared by	Edge Impact
Prepared for	Medibank
Critical review report	
Title	Critical Review Report: Virtual health vs. In-Hospital Osteoarthritis Treatment in Australian Urban and Rural Settings
Date	12 th November 2024
Status	Version 1
Author(s)	Anna Boyden (Lead reviewer) Cathy Jiang

Review process

Medibank commissioned Edge Impact to conduct a life cycle assessment comparing their Better Knee Better Me (BKBM) virtual program to total knee replacement for treatment of osteoarthritis. The report is intended to be used by Medibank decision makers and members.

Through Edge Impact, Medibank has commissioned Lifecycles with the peer-review of the report against the requirements set out in the ISO 14044:2006 standard. They have requested that the report be reviewed as a 'comparative assertion intended to be disclosed to the public' as a means to validate the methodology and provide confidence in the results of the study.

Lifecycles is a specialised consultancy in sustainability measurement, life cycle assessment and the circular economy. Anna Boyden conducted the review of the report and inventory with support from Cathy Jiang.

This review was done against ISO 14044:2006. The review procedure follows the recommendations of ISO 14071, and aimed to confirm if:

- The method used to carry out the study is consistent with the international LCA-framework standard ISO 14044;
- The methods used to carry out the LCA are scientifically and technically valid;
- The data used are appropriate and reasonable in relation to the goal of the study;
- The interpretations reflect the limitations identified and the goal of the study;
 and
- The study report is transparent and consistent.

This is an LCA expert review performed at the end of the study. It includes a review of the report developed by Edge Impact for Medibank as part of the project. The LCA inventory used to perform the study was provided to help assess the transparency of the results.

On engagement, Lifecycles conducted a preliminary scan and identified some initial comments, suggesting these be addressed prior to conducting the full review. The comments concerned the comparability of scenarios and required sections for ISO 14044 compliance. Once these comments were addressed, Edge Impact provided the following files for review:

- Medibank LCA Report V1.2 (verification).pptx
- Medibank LCA Inventory V1.1.pdf

The initial review was completed on August 12th 2024 and provided to Edge Impact in the form of a detailed review log. Edge Impact made some changes to the account based on the comments and provided updated files to Lifecycles on September 25th 2024. After a further two iterations, Edge Impact provided the final files, addressing the comments laid out in the initial review log, as well as the second and third iterations of the review log (sent 9/10/24 and 6/11/24 respectively):

- Medibank LCA Report V1.7.pdf
- Medibank LCA Inventory V1.7.pdf

A copy of the review log, including all comments and successive responses is attached to this document:

ISO 14044 Critical Review - Edge Impact Medibank LCA (4).xlsx

Review statement

The reviewed LCA report is considered to meet the requirements of the LCA standard ISO 14044:2006.

Signed 12th November 2024,

Anna Boyden

Research Scientist (LCA)

Lifecycles