

7.01 Exploring the effectiveness of a Joint Cardiology-Respiratory Clinic as a Greener Healthcare Model

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Background: Globally, the healthcare sector accounts for over 4% of greenhouse gas (GHG) emissions yearly (1). Health services have a duty to protect, promote and improve the health and welfare of the public today and future generations (2). The HSE Climate Action Strategy 2023-2050 also identifies greener healthcare models as a priority (3). This project aims to explore the environmental impact of a new Joint Cardiology-Respiratory Clinic, particularly focusing on patients' travel to appointments.

Methods: Carbon footprint (CF) is expressed as kilograms of Carbon Dioxide equivalents (kgCO₂E). Patients' travel-related GHG emissions for actual journeys to the joint clinic were estimated using the Centre for Sustainable Healthcare Guide (4). These results were compared against patient travel-related GHG emissions for multiple appointments.

Results: Based on our analysis of 10 patients, the total CF for each patient taking 1 car trip was 54.894KgCO₂e/km. The total avoided CF was 181.217KgCO₂e/Km, equivalent to taking one round trip by aeroplane from Dublin to Amsterdam.

Conclusions: The findings demonstrate that the new Joint Cardiology-Respiratory Clinic initiative ensures sustainability via a reduction in our CF. Therefore, high quality service development should incorporate environmental sustainability considering the gravity of the current climate situation.

Key Words: greenhouse gas, carbon footprint

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