WorkLink

Decarbonisation Project summary

Call: https://www.nihr.ac.uk/funding/decarbonising-health-and-social-care-system/2024217

Industry needs and challenges in brief:

NHS faces the dual challenge of achieving net-zero targets and managing rising operational costs, this is especially challenging in mental health where there are high levels of logistical and safety considerations due to patient vulnerability and specialised transportation requirements. Worklink addresses these issues directly by reducing vehicle journeys, consolidating transport resources, and digitizing a paper-intensive process. This is a less cost intensive solution as opposed to fleet swapping to electrical vehicles.

Worklink Ltd as an organisation has been working on a project to develop a system that addresses:

Mental Health Patient Secure Transportation: Patient & staff safety, care and service quality improvement and addressing inefficiencies.

The project aims to improve the safety and quality of care for mental health patients during transportation, addressing a critical gap in the existing literature, technology and protocols. By developing and implementing evidence-based transportation protocols and piloting innovation to address identified challenges, the project outcomes can positively impact patient outcomes, improve staff confidence and readiness, clinical decision-making processes and significantly contribute to lowering carbon emissions.

In line with a national mandate to decarbonise health and social care, Worklink has drawn focus on identified gaps and challenges in mental health transportation paving way for innovation and technological advancements that address inefficiencies and carbon emission reductions.

In addition to addressing safety challenges, we have streamlined Worklink's innovative digital solution for NIHR Research funding call: *Decarbonisation of health & social system* to focus on decarbonizing the NHS's mental health patient transportation system while enhancing efficiency and reducing costs. The project addresses both the environmental and logistical challenges within NHS patient transport by introducing unique features and technological advancements.

Key elements of Worklink; streamlined to decarbonisation:

1. Optimized Secure Transport for Patients: Our system facilitates the secure booking of mental health patient transport, allowing NHS Trusts and Integrated Care Services to plan, schedule, and optimize transfer routes. By identifying and consolidating journeys, the system minimizes single-use trips, cutting down both carbon emissions and operational costs associated with patient transfers.

2. Carpooling for NHS Staff: We have developed a mobile app that allows NHS staff working the same shifts to match for carpooling. By coordinating transportation for healthcare professionals, Worklink reduces the need for multiple car journeys, significantly decreasing carbon emissions and commuting costs. The carpooling feature is directly linked to the rota planning used to mobilise staff escorting a mental health patient during transportation.

NHS and other stakeholders can incentivize staff to share transport via the app by introducing a points system to earn rewards.

3. Digitalization of Paper Processes: Worklink digitizes transport booking forms, patient transfer documents, and communications, transforming previously paper-based processes into a streamlined digital format. This innovation improves data accuracy, speeds up communications, and ensures critical patient information is readily accessible.

On average a single patient transfer uses 9 paper processes, Worklink digitalisation eliminates use of paper processes.

What makes Worklink truly innovative is its dual focus on reducing the NHS and broader health sector's inefficiencies and carbon footprint, focusing on mental health transportation, where existing solutions are largely fragmented or paper dependent. By facilitating staff carpooling and efficient journey planning for patients, Worklink offers a practical, scalable solution that aligns with NHS decarbonization goals and operational efficiency needs.

Primary Research Questions:

1.What measures can be taken by transport providers and mental healthcare providers to lower carbon emissions in line with the net zero CO_2e mandate of the NHS?
2. How can transportation protocols be optimized while ensuring the safety and quality of care for mental health patients during transfer between facilities.
3.How can secure transport be made readily available and accessible to mental health patients for urgent and emergency care transfers?
4.What measures can be implemented to ensure workforce supporting mental health patients are fully supported in their job and actively engaged in lowering carbon emissions?
5.Can digital technology sustainably aid clinicians and decision makers to swiftly make decisions to create the best care packages and transport bookings for mental health patients and promote quality care delivery, socio-economic and environmental benefits?

Research Objectives

1. Quantitative analysis: Evaluate the impact and carbon emissions contribution of mental health patient transportation and explore technological innovations for CO_2e reduction
2. Cost Containment: To optimize transportation protocols, reducing costs associated with adverse events and associated inefficiencies.
3. Evidence-Based Practice: To develop evidence-based transportation protocols, informing best practices that are sustainable for staff and patients.
4. Innovation and Improvement: To explore innovative solutions and technologies that deliver sustainable patient transportation and lower carbon emissions
5. Socio-economic and environmental benefits: explore outcomes that deliver an all-rounded benefit and involvement of all stakeholders in the social health care that are scalable

Project Plan – 18 months

Team/Collaborators

- Worklink (SME project owner and innovator)
- Health Innovation Network (Project Evaluation)
- NHS Trusts (Implementation Site)
- Secure Ambulance service providers (System users)

- NIHR RSS (support services)
- NIHR (Research Sponsor)
- *Academic researcher (call for collaborators)*