

REDUCTION OF THE CARBON FOOTPRINT OF THE EARLY STROKE DISCHARGE SERVICE, 2020

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Aim: To reduce the carbon footprint of stroke discharges by

- a) Reviewing and adapting our transport process.
- b) Reducing delays to planned discharges and wasted home visits.

Background: Prior to the project the team visited patients at home post-discharge using their own cars, all of which run on petrol. The team find that they sometimes visit the patient and find that the patient is not at home, sometimes due to a delayed discharge, which means that they have a wasted journey that has financial and environmental impact as well as an impact on the team's workflow.

Strategic choice of project: Transport is a key element of the carbon footprint of the NHS. 5% of vehicles on the road are travelling on NHS business. Journeys to and from hospital sites contribute to poor air quality in the local area, which has a negative effect on the health of the local population.

Approach:

Project A: An electric pool car was hired from the car pool for one month and used by the 2 team technicians to carry out assessments in patient's homes. The technicians cover a greater mileage each day than the other team members, so supplying the car to the technicians makes the car hire better value for money and maximises environmental benefit.

Project B: The team surveyed how patients were getting home and patient preferences. They then worked with the ward to consider using the Stroke ESD team to transport some patients home and offer to carry out their visit at the same time with the aim of reducing the length of hospital stay and reduce wasted journeys for the Stroke ESD team. The Stroke ESD team devised a draft discharge checklist that they then refined in collaboration with the ward team and discharge nurse. They worked with their inpatient physiotherapy colleagues who are based on the ward to remind staff to use the checklist and communicate with the Stroke ESD team regarding discharges.

Robust measurement of impact:

- A survey was completed by patients on their preferred mode of transport home and their discharge experience.
- Data was gathered on the mileage covered in the electric car and emissions calculated during November 2019. This was compared with emissions from previous months when staff used their own, petrol-fuelled cars; these emissions were calculated from retrospective data from travel expenses claims made by staff.
- The number of patients travelling home with the Stroke ESD team was measured.

Engaged colleagues/patients:

- Engaged patients through a survey.
- Worked with ward staff on a discharge checklist.
- Engaged ward physios to flag up the potential of patients being taken home by stroke ESD.

Steps taken to ensure lasting change:

- Business case submitted for a pool car to be bought for exclusive use of the stroke ESD team.
- Discharge checklist in use on the stroke ward.

Evidence of Impact:

Project A: The impact of the use of the pool car for booked visits was calculated.

Environmental impact: A forecast reduction in 4,380 kgCO₂e/year. If adopted at scale air pollution could be reduced and if sufficient reductions were made this would improve health of the local population.

Financial Impact: Over the one-month project period in November 2019, £9.07 was saved from using a single electric car, with forecast annual savings of £111. The team plan to start using two cars so that each of the technicians can carry out all their visits in an electric care; the forecast savings over 1 year would then rise to £222.

Social sustainability & Engagement: This project has the potential to reduce wear & tear on staff own cars (grey fleet). Staff reported feeling pleased to be able to make changes towards their service being more 'eco-friendly'. The project had additional benefits, shown through the quotes below;

"Useful to have guidance from [the Centre for Sustainable Healthcare in setting up and running] the project and [this] ensured the project stayed on track."

"Project reinforced the importance of good preparation and data collection prior to change in order to demonstrate change outcomes."

"The whole team got behind the project and having a joint focus aided morale."

"Exciting to be part of a project that could benefit the team and patients long-term. It has also helped to support a business case for a team pool car."

Project B: 14 patients were surveyed on their preferences on transport home; There was too little time between project implementation and close of the project period in December 2019 for the new discharge process to be embedded and only 1 patient was taken home from the stroke ward by the Stroke ESD team in November 2019. However, since the close of the competition more patients are being transported home using the Stroke ESD service and data on the impact of this new service is continuing to be collected.