West Hampshire Community Learning Disability Service  
Dr Robert Chandler (Principal Clinical Psychologist), Jodie Tuik (Senior Community Learning Disability Nurse), Chloe Judd (Physiotherapist), Kerry Smith (Occupational Therapist), Steve Kemish (Occupational Therapy Technician), Sally Harding (Clinical Support Worker)

A quality improvement project to reduce community health clinician’s mileage & improve service efficiency

AIM
To reduce the number of miles travelled, by 20%, across a ten-month period (January – October 2018).

BACKGROUND
- In the UK 50,000 deaths a year are attributed to air pollution, and Southampton is in the UK’s top five most polluted cities (Royal College of Physicians, 2016).
- The NHS in England alone has a carbon footprint that exceeds emissions from all planes departing Heathrow Airport (The Kings Fund, 2012).
- The NHS is an organisation that is widely publicized to suffer from a lack of funding (The Kings Fund, 2017).
- Interventions that aim to improve efficiency and reduce wastage are likely to be beneficial to the overall financial state of the NHS.
- There is currently a drive in NHS services to reduce the ‘carbon footprint’ omitted; Karl Marlow (Medical Director, Southern Health NHS Foundation Trust) has recently implemented an initiative to encourage teams to reduce their carbon footprint by 20% over six months.
- The more time spent travelling reduces clinician’s time delivering health care interventions to our service user group. This is likely to contribute to increased waiting lists and a delay in service users receiving care.

METHOD
Two interventions were implemented over a ten-month period.
1. Concerted effort by the team to undertake a number of strategies to reduce team mileage.
2. Implementation of Store and Forward, a real time computer based program used to complete records on the go, reducing need to return to work base to complete patient records.
Staff travel claims were analysed to track mileage travelled across the year in light of the above interventions.

RESULTS
Team mileage MONTHLY TOTAL

- The green oval (above) indicates a shift in the run chart – evidence of a positive non-random signal of change.
- Total team mileage from January to February reduced by 1253 miles after first intervention.
- January to July demonstrates a general downward trend in mileage rates, especially Nursing being most significant.
- There was a significant drop of 1943 miles (monthly average) from July to August when Store & Forward was introduced. However unsure if linked to this intervention or the increase annual leave taken by staff at this time.

ANALYSIS
- The run chart provides evidence of a positive non-random signal of change, with the project demonstrating a 16% reduction between January and October’s total mileage. Although we have not quantified the cost benefits of reduced mileage at this time, we know it is multifaceted and significant.

ANTICIPATED COST BENEFITS
- Service users = increased clinician’s time to see service users leading to reduced waiting lists, quicker allocation from waiting list.
- Environment = reduced carbon footprint. Improved air quality contributing to helping protect the heart and circulatory health of our local population.
- Cost = reduced financial cost to team and Trust, contributing to Trust’s Cost Improvement Programme.

CONCLUSION
The run chart provides evidence of a positive non-random signal of change, with the project demonstrating a 16% reduction between January and October’s total mileage. Although we have not quantified the cost benefits of reduced mileage at this time, we know it is multifaceted and significant.

LIMITATIONS
- Confounding variables that affected mileage, including; increased annual leave, reduced staffing in specific professional groups at different time periods and natural variation in mileage across months. Thus, it is difficult to attribute cause and effect.
- There were technical issues with Store and Forward, which affected its uptake by clinicians.

REFLECTIONS / LESSONS LEARNT
Problem before the solution! During the journey of our QI project, our aims changed as our knowledge of research verses quality improvement developed. This changed the nature of the project causing confusion, disengagement and reduced motivation.

WHAT NEXT?
- Over the course of the coming year, the team will continue to track mileage and look for alternative interventions with the aim of meeting our 20% reduction in mileage, likely through group based health interventions to minimise travel.
- Disseminating information to the wider team to increase awareness of the financial and environmental impact of travel.