

Making Orthotics Green

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Introduction

Air pollution has significant, immediate, and long-term effects on human health. Achieving NET Zero targets and becoming a more sustainable health service is a key NHS target¹. For the emissions the NHS control directly (the NHS Carbon Footprint), the aim is to reach NET Zero by 2040, with an ambition to reach an 80% reduction by 2028 to 2032².

In 2021 the orthotics department at the Royal Wolverhampton NHS Trust agreed to be the pilot service for going green. On average we see approximately 13,000 patients per year and have a team of 13 staff. We looked at what contributes to our carbon footprint directly and indirectly, and ultimately, how we could help the NHS achieve its target.

Method

As part of a quality improvement project, we implemented the following:

- Telehealth
- Reviewed all our packing from suppliers
- Reviewed our deliveries and changed the frequency
- Implemented re-useable delivery boxes
- Stopped using plastic bags when they were not required
- Introduced electronic triaging, ward logs, and postbooks
- Introduced electric vehicles for deliveries
- Introduced separate bins for recycling
- Introduced recycled paper
- Introduced recycled tape for packages
- Sending used orthoses to developing countries

Results

By reviewing how the service operates via a green lens, we were able to make significant CO₂ reductions.

- We reduced the average miles patients travelled to our appointments by 151,913 miles, this is the equivalent of 6 times around the globe.
- We reduced the number of used car parking spaces by an average of 5621 per year.
- The total impact of all the initiatives we implemented equated to a saving of approximately 28 tonnes of CO₂ in the local area. To put that into perspective it would take a forest of 14.7 hectares to save up 28 tonnes of CO₂.



The orthotics team, winners of the FAB award for sustainability and the 2022 CAHPO award for Greener AHPs.



Discussion

The results show that small changes can have a significant impact on the local environment. Our service is now considering other ways to increase sustainability and reduce our carbon footprint, including the introduction of iPads for recording patient collections instead of paper, LED lighting, radiators with individual thermostats, and recycling used plastic. Orthotic services have an important role to play in helping the NHS achieve its Net Zero target.

Our service was the 2021 winner of the FAB award for sustainability and the 2022 winner of the CAHPO award for Greener AHPs. We are proud that this quality improvement study was led by our orthotic clerks.

References

1. The NHS Net Zero Expert Panel. Delivering a "Net Zero" National Health Service [Internet]. Nhs. 2020. Available from: <https://www.england.nhs.uk/greenernhs/wp-content/uploads/sites/51/2020/10/delivering-a-net-zero-national-health-service.pdf>.
2. Delivering a net zero NHS [internet]. 2022. Available from: <https://www.england.nhs.uk/greenernhs/a-net-zero-nhs/>

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