VANGUARD
MEDICAL REMANUFACTURING

Medical Remanufacturing bringing the circular economy to Leeds Teaching Hospitals NHS Trust.

Single use devices don't need to be single use.

The Earth is home to more than seven billion people and its population is projected to rise to 10 billion by 2050.

Waste, CO2 emissions and climate change pose existential threats and a major threat to our health as well as our planet. The environment is changing and that change is accelerating.

A new social awareness of the importance of a sustainable and climate neutral economy has also ushered in a new era for healthcare.

The NHS is responsible for 5.4 % of the UK's greenhouse gas emissions, more than the aviation and the shipping industries combined. The NHS also produces 590,000 tonnes of waste per annum which is more than some European Countries.

To address the environmental challenges and consequential impact to public health the NHS has launched the 'For a greener NHS' programme. Leeds Teaching Hospitals has the aspiration to become one of the greenest NHS Trusts in the UK.

The Challenge

Leeds Teaching Hospitals summarised its sustainability goals in a "Green Plan".

This, together with the "NHS Sustainable Action Plan" which includes targets for the reduction of carbon, air pollution and waste, outlines the sustainability objectives set to achieve this goal. [1]

According to the "NHS Carbon Footprint Plus", the greatest areas of opportunity for change are in the optimisation of the supply chain, the hospital's energy supply and pharmaceuticals/medical devices. Based on this information one of the pursued environmental initiatives was to introduce medical remanufacturing for single use devices into the Trust.

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Rethink. Remanufacture.

Leeds Teaching Hospitals has partnered with Vanguard since November 2019.

UK medical remanufacturing is a recognised solution widely adopted in countries such as the USA, Canada and Germany and a practice rapidly expanding in the UK. Approved by the Medicines & Healthcare products Regulatory Agency who have published guidance dedicated to single-use device (SUD) remanufacturing [2].

Vanguard's remanufactured single-use devices are fully compliant with this guidance.

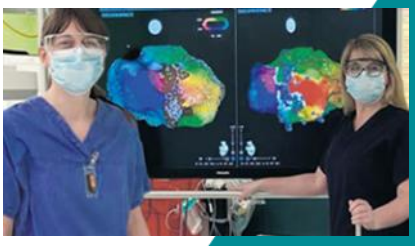
Introducing a medical remanufacturing program to Leeds Teaching Hospitals started with the collection of used medical devices. This made an important contribution to Leeds Teaching Hospitals' sustainability plan delivery.

In 2021, **75.33** KGs of used devices were diverted away from the waste stream. Additionally, the Trust was paid **£22,923** for these collected devices. To further support the Green Plan Initiative the Physicians in Leeds Cath Labs are now using Vanguard remanufactured EP Catheters too. In doing so further benefits have been delivered in terms of a significant cost saving versus using a new device and a 50.4 % reduction in the trusts C02 footprint every time a remanufactured device is used.[3]

Reduce CO2 Footprint and Deliver Savings

In 2021 by using 604 devices Leeds Teaching Hospitals have reduced their C02 footprint by **524.88** KGs and saved an estimated **£76,610** (Vanguard remanufactured devices cost circa 50 % less than the equivalent OEM product).

Interview



Quotation provided by:
Nicola Hill & Lindsay Davison
Highly Specialist Cardiac Physiologists

"Our experience within Leeds Teaching Hospitals Cath labs of collecting discarded catheters and then using the remanufactured devices has been a positive one.

All stakeholders have embraced the programme and recognise the benefits remanufacturing brings to the department, the wider trust and the environment.

We have found the collection/pick up process extremely simple.

The whole process is not time consuming at all and we really value both the environmental benefits and saving of public spending we are contributing to. The next phase of the programme is to widen the portfolio of products that the department uses and by so doing this will deliver further savings, waste reduction and C02 avoidance.

We would certainly recommend remanufacturing to any healthcare institution looking for ways to reduce costs and improve their environmental credentials."

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NHS and the Environment

The NHS is responsible for 5.4% of the UKs greenhouse gas emissions (4). The NHS also produces 590,000 tonnes of waste per annum (5).

In a forward written by Sir Simon Stevens he acknowledges the role that the NHS has to play to help with sustainability; "… undoubtedly climate change poses the most profound long-term threat to the health of the nation."

"It is not enough for the NHS to treat the problems caused by air pollution and climate change…we need to play our part in tackling them at source"

"As the largest employer in Britain… the NHS has to be a major part of the solution if this country is to succeed in its overarching climate goals." [6]

Medical Remanufacturing

Medical remanufacturing restores a used medical device to "as new" functional and safety standard with matching warranty.

Medical remanufacturing enables a circular economy within the medical device sector. It helps conserve the planet's valuable resources while keeping costs low — without compromising on safety or performance.

In an article on medical remanufacturing in the Journal of Interventional Cardiac Electrophysiology, the authors conclude that "The use of remanufactured circular mapping catheters is safe, efficient and reliable. Widespread use of remanufactured SUDs offers the possibility of significant economic benefit" [8].

Globally, over 8,000 hospitals and surgical centres have partnered with remanufacturers and saved their hospitals and surgical centre more than $20 million in 1999. That number grew to $544 million by 2019 – more than doubling savings every year for 20 years [7].

About Vanguard

Vanguard is a European medical remanufacturer. Since its foundation in 1998, Vanguard has pursued the goal of enabling the circular economy for complex medical devices.

For over 20 years, Vanguard AG has been setting global standards for medical remanufacturing, empowering healthcare institutions to operate more sustainably. Offering sophisticated and environmentally-friendly product solutions, Vanguard AG uses innovative and certified medical remanufacturing processes.

With its advanced technology, superior quality and expertise, Vanguard AG has established itself as a market leader in Europe. Vanguard's remanufactured single-use devices fully comply with all regulatory requirements in the UK.

The remanufacturing of diagnostic catheters, cooled ablation catheters and catheters with 3D mapping systems are just some of our specialties.

For further information on our service and range of products, please log onto our website and go to our 'Contact' section.

www.vanguard.de

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