

## CASE STUDY

### Remanufacturing EP Catheters

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#### Case Setting

Electrophysiology is a speciality treating patients with a condition called arrhythmia. These patients are treated in our Cath Labs using single use EP catheters. We perform approximately 683 cases per annum. The catheters contain precious metals such as platinum. These devices are thrown away creating a significant waste burden by incineration which has a large environmental impact too. A new device is then purchased ready to replenish supply made and delivered via a global supply chain.

#### Intervention

We send used devices away from waste to be remanufactured and reused extending their life cycle. We have reduced waste, plus the company we worked with (Vanguard) also pays us for the accepted collected devices, money that we can put into our savings or re-invest into new sustainability initiatives. We also use the remanufactured devices which are approx. 50% the cost of a new one and have a 50.4% reduction in greenhouse gases. Some devices can be safely re-used 4 times.

#### Measurement

Vanguard produces quarterly reports that detail the metrics we have delivered through our remanufacturing programme. In calendar 2022, through that 12 month period we achieved the following:

- Waste diversion: 109.30 Kgs
- Income from collections: £16,738.20
- Estimated savings via re-use: £85,310
- Estimated reduction in CO<sub>2</sub> production: 575.07 Kgs

The positive connotations of this programme go beyond these numbers though, It has started conversations in the labs about what else can be done to reduce waste and greenhouse gas production. It has also shown that the environmentally better option is not necessarily more expensive and conversations are happening about how the cost down of the procedure can translate into more cases being completed which benefits the wider population. It has also put positive pressure on the original manufacturers to do a better job themselves.

## **Challenges and Enablers**

### Challenges:

1. Getting the buy-in of busy clinicians and changing mindset.
2. Original Equipment Manufacturers (OEMs). They will want you to keep buying new single use devices.

### Enablers

1. We trialled the handling of products before rolling out.
2. The fact that 70+ hospitals now have a remanufacturing programme established in the UK so there is growing clinical momentum.
3. NHS England have produced a 'How to guide' and are fully supportive
4. Remanufactured devices are available on NHSSC frameworks.
5. This whole project has been a very smooth transition, we can see no draw back.