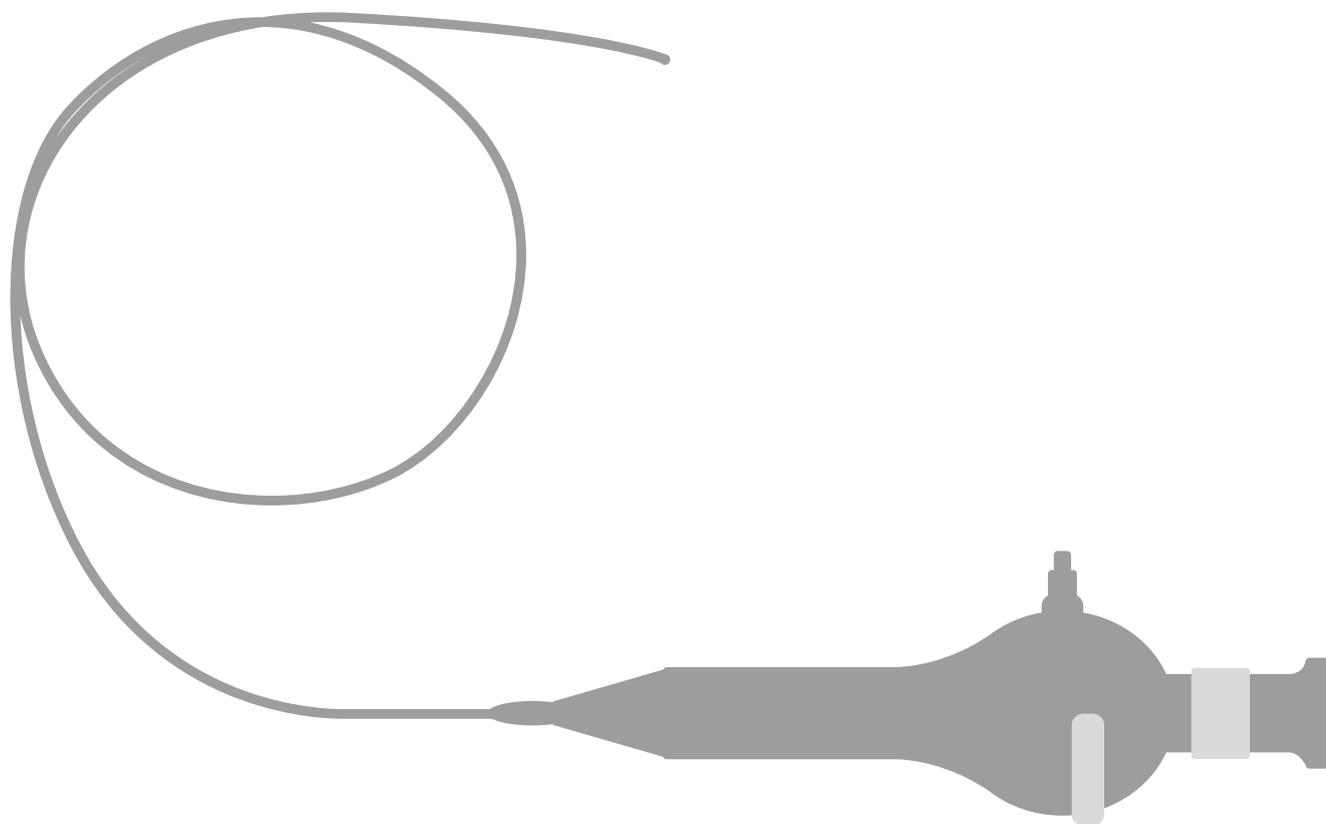


Case Study: Invest in your medical equipment and alleviate financial pressures

This case study demonstrates how NHS Supply Chain's Strategic Investment Planning service enabled Oxford University Hospitals NHS Foundation Trust to establish a long term plan for the replacement of its endoscopy equipment.



The challenge

With over 45,000 assets within the medical equipment inventory, the trust must manage and commit significant investment in order to replace aging equipment and upgrade with new technologies.

Over recent years, a key challenge has been the delivery of large financial savings and, as a result, capital investment has fallen below the levels required to ensure medical equipment is replaced on time.

There is a backlog in the replacement of endoscopy equipment and, as a result, some assets are over 10 years old. This prompted the trust to approach NHS Supply Chain to establish new ways of working aimed at improving forward planning and prioritisation. The clinical area of focus agreed for the project was endoscopy.

“Capital budgets in the NHS are constrained, it is very important that we understand the challenges on our trust’s capital equipment programme. We therefore wanted a plan setting out our long term endoscopy equipment requirements.”

Dominic Balchin, Divisional Project Manager, Oxford University Hospitals NHS Foundation Trust

About the trust

Oxford University Hospitals NHS Foundation Trust is one of the largest NHS teaching hospitals in the UK.

It is made up of four hospitals providing a wide range of clinical and specialist services (including cardiac, cancer, musculoskeletal and neurological rehabilitation), medical education, training and research.

The trust serves more than one million patient contacts per year including over 100,000 planned admissions and 145,000 emergency department attendances.

Key project objectives	Trust’s equipment overview
Establish a multi-year medical equipment replacement plan for endoscopy equipment and develop trust’s strategic view on equipment replacement.	Endoscopy equipment comprises over 150 individual items (valued over £4.5 million) including endoscopes, endoscopic ultrasound machines and ancillary equipment.
Provide analysis to help the trust assess the condition of the equipment and manage equipment related risks.	The equipment is based in the endoscopy departments at the John Radcliffe and Horton Hospitals.
Identify various options to finance the equipment.	The John Radcliffe Hospital Endoscopy Department has six procedure rooms and undertakes a wide range of diagnostic and therapeutic GI procedures, treating about 15,000 patients per year. The recently refurbished Horton Endoscopy Department treats about 4000 patients per year in two procedure rooms and a state of the art decontamination facility.
Determine ways to generate financial savings through procurement.	
Assist with business case approval process.	

How did we support the trust?

After consultation with the trust, it was agreed that NHS Supply Chain's Strategic Investment Planning service would meet their overall objectives and so a dedicated Solutions Development Manager was appointed to lead the project.



Strategic investment planning

NHS Supply Chain's Strategic Investment Planning service is designed to help the NHS plan and finance the replacement of medical equipment. It is a data driven, systematic approach that enables trust's to establish credible, long term medical equipment replacement plans and financing strategies.

The aim is to improve financial planning, support the delivery of savings and align equipment replacement with clinical needs.

“ The process provides a robust prioritisation model which will underpin service planning and business cases once fully rolled out. The replacement of endoscopy equipment has been stratified based on risk in a non-biased way. This enables the service to better understand and communicate our priorities and capital expenditure requirements each year. ”

Julia Wood, Matron for Gastroenterology, Endoscopy and Churchill Theatres, Oxford University Hospitals NHS Foundation Trust

A project team was established which included key stakeholders from the trust who have an in-depth knowledge of the medical equipment, understand the needs of the endoscopy department and have influence over the capital programme.



Julia - Wood Matron for Gastroenterology, Endoscopy and Churchill Theatres



Dominic - Balchin Divisional Project Manager



Richard - Osman Head of Clinical Engineering



Jane - Edwards Deputy Director of Procurement

The project followed three key steps:

Assess the trust's endoscopy equipment

#1

Establish a prioritised long term replacement plan

#2

Assess different financing options and identify procurement savings

#3



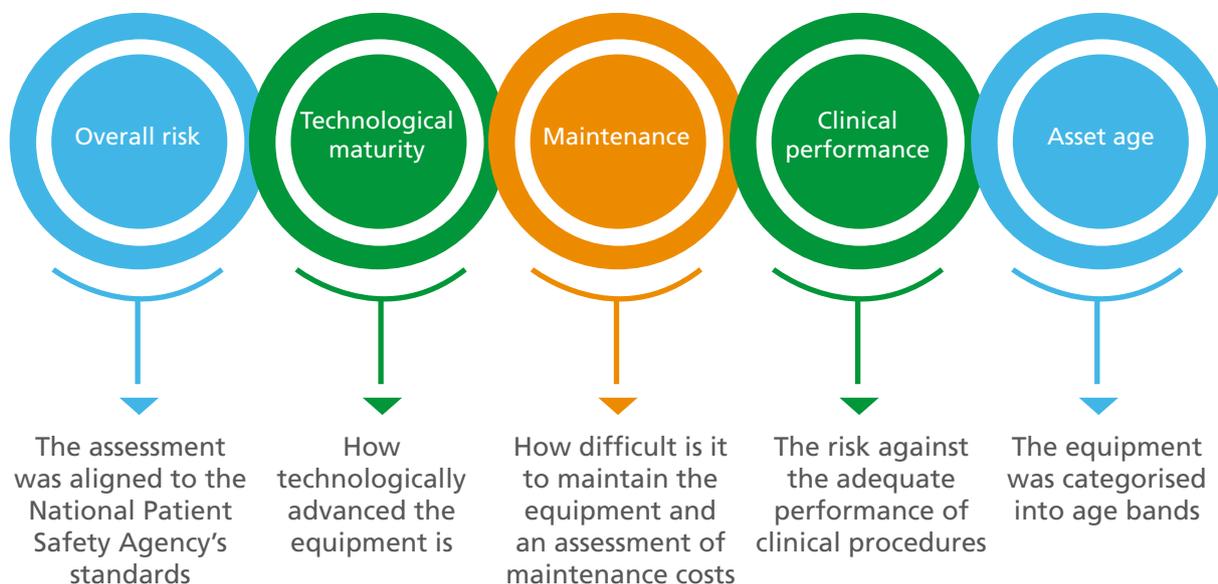
Step #1

Assess the trust's endoscopy equipment

The first step in the process involved collating the trust's asset data and populating it into a risk-based planning model. Through a series of workshops, a structured assessment of the condition of the medical equipment was then carried out.

Assessment of the condition of the trust's medical equipment.

Each item of endoscopy equipment was assessed against a range of criteria:



“ Without NHS Supply Chain's support and guidance in driving this project forward, we wouldn't have the evidence base to justify our need for Capital investment. ”

Dominic Balchin, Divisional Project Manager, Oxford University Hospitals NHS Foundation Trust

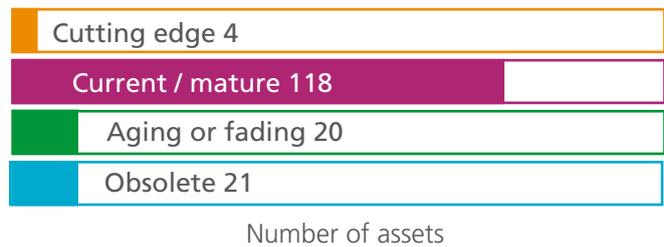
Julia Wood, Matron for Gastroenterology, Endoscopy and Churchill Theatres

Key findings

Technological maturity

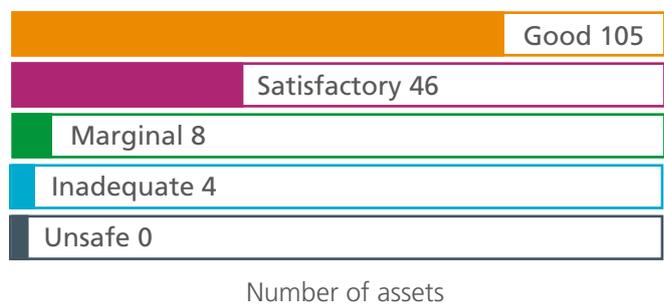
There are a large number of current / mature technologies but also a number of obsolete and aging items.

Over £1.6 million of the assets are aging / fading or obsolete whilst over £3 million of assets are current or cutting edge technologies.



Fitness for purpose

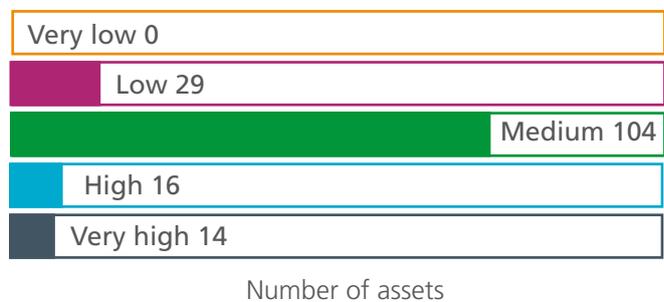
The majority of assets are good / satisfactory for clinical procedures, however, approximately £700,000 of assets are marginal or inadequate.



Risk of equipment failure

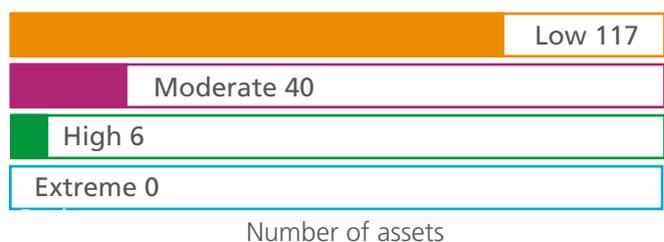
A number of items may not be restored to operational status in a timely manner due to the difficulty obtaining parts and spares.

Over £1 million of assets have a high or very high maintainability risk.



Risk profile of equipment

The overall risk status is generally low with the exception of a few assets.



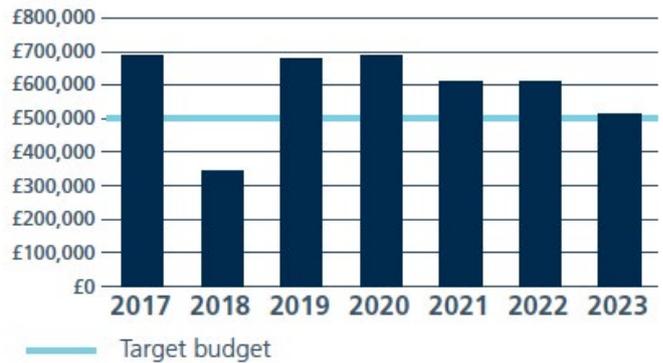
Step #2

Establish a prioritised long term replacement plan

The equipment replacement priorities were ranked in order of criticality and an overall capital budget limit was set. This provided the basis to establish the long term equipment replacement plan.

- Priority 1 Obsolete equipment
- Priority 2 Almost certain to fail
- Priority 3 High risk and marginal fail
- Priority 4 Likely to fail and moderate risk
- Priority 5 Asset age

Prioritised equipment replacement plan



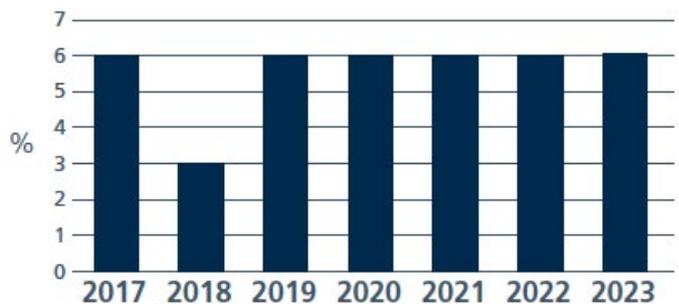
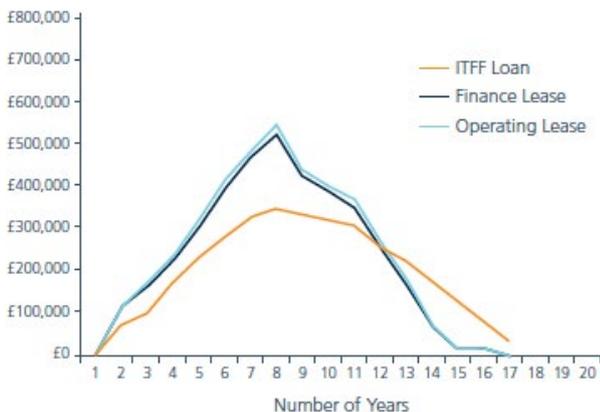
Step #3

Assess financing options and procurement savings

The trust wanted to consider a range of financing options including leasing and loans. In response, NHS Supply Chain was able to model these different routes to purchase and provide high level cash-flow forecasts with maintenance estimations.

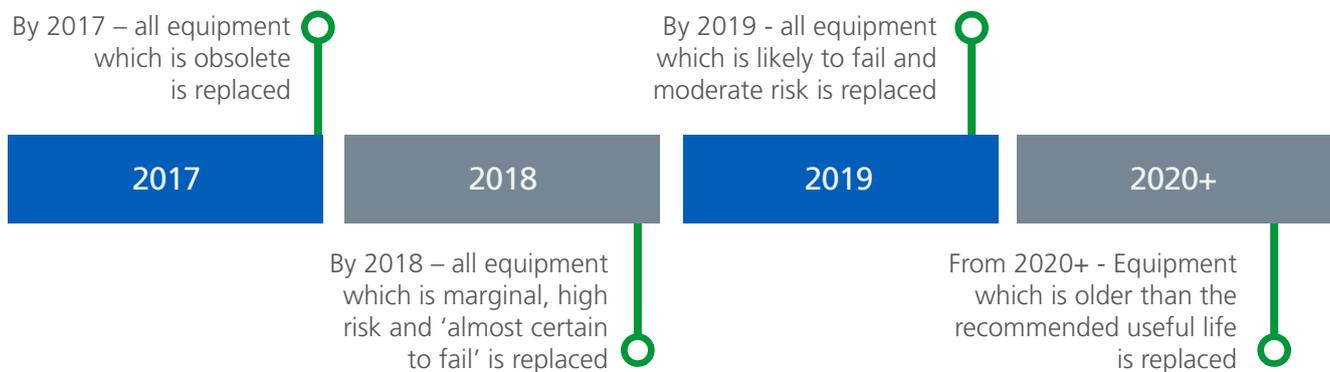
Potential additional percentage saving achievable through aggregation of spend

NHS Supply Chain is able to drive financial savings by aggregating spend to leverage the buying power of the NHS. Analysis was undertaken to present the potential savings that could be achieved across the trust's equipment replacement plan.



Conclusion - What impact did the project have?

By carrying out a detailed equipment assessment, and using the outcomes to prioritise the most critical equipment, the trust was able to articulate the potential risk reduction made possible through implementing the equipment replacement plan.



“ The Strategic Investment Planning work has enabled us to prioritise our long term equipment replacement plan by considering additional factors alongside the age of the equipment. ”
Julia Wood, Matron for Gastroenterology, Endoscopy and Churchill Theatres

Strategic Investment Planning - trust benefits

As a result of the Strategic Investment Planning project the trust identified a number of benefits:

- Establish a robust and credible long term replacement plan for equipment.
- Increased understanding of equipment related risks.
- Identified opportunities to aggregate spend and achieve savings.
- Evidence assists with the business case approval process.
- The service helps to develop a strategic view on equipment replacement.

“ Working with NHS Supply Chain to introduce a Strategic Investment Plan has many long term benefits. The accuracy of the data produced will help to reinforce business cases and provide a credible evidence base to influence senior stakeholders within the organisation and support the case for investment. ”
Julia Wood, Matron for Gastroenterology, Endoscopy and Churchill Theatres

Contact us

If you would like to hear how we could support you, or would like further information on our service offering, please contact:

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