National Vascular Registry Aortic Devices Update

ICVR May 2022

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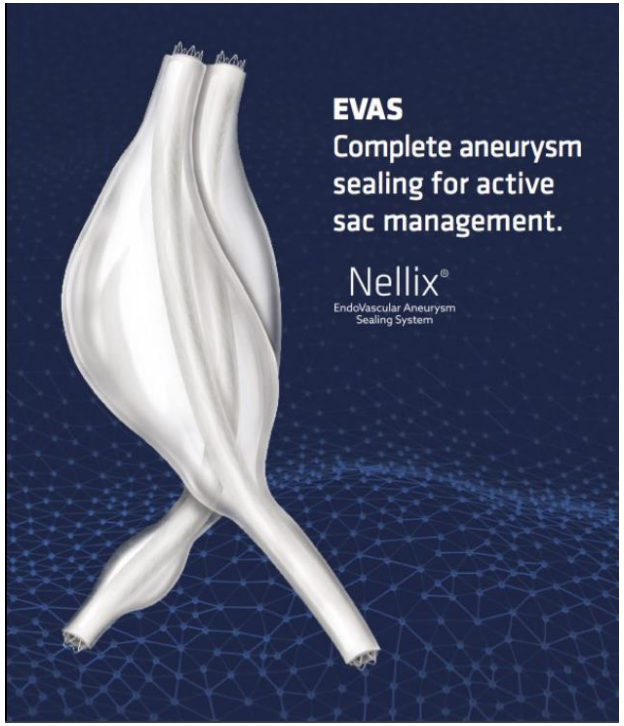
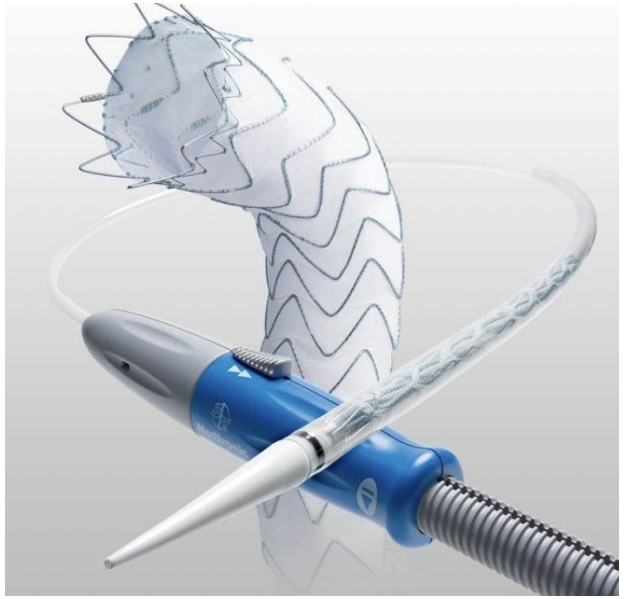
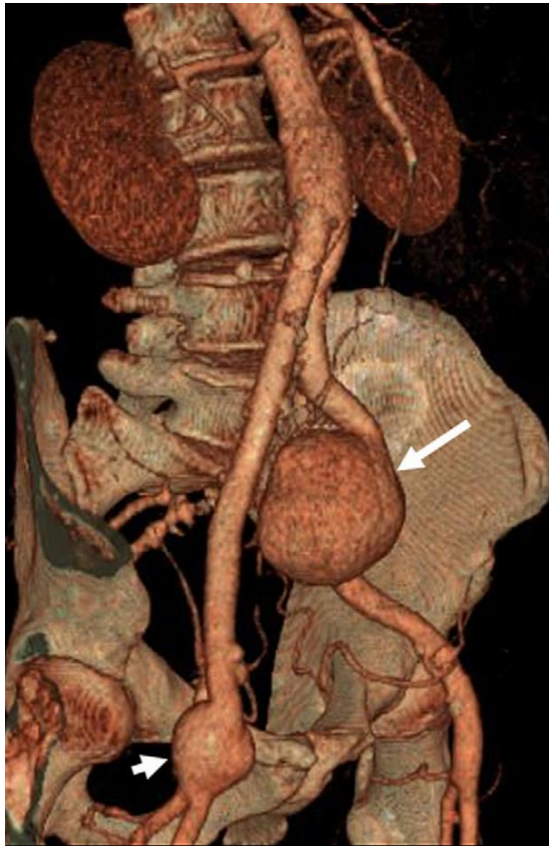
National Vascular Registry

- 2013: Data collection in current format (some data exists back to 2005)
  - Carotid interventions (endarterectomy and stenting)
  - Aortic repairs (open, EVAR, complex); Aortic Devices July 2020 onwards
  - Lower limb angioplasty/stents
  - Lower limb surgical revascularisation (bypass, endarterectomy)
  - Lower limb amputations.
- Commissioned with government funding
- National Clinical Audit and Patient Outcomes Programme (NCAPOP) for England and Wales (although NVR is UK-wide).
  - NCAPOP comprises around 40 national clinical audits







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Pictorial Review

Imaging and management of complications of open surgical repair of abdominal aortic aneurysms

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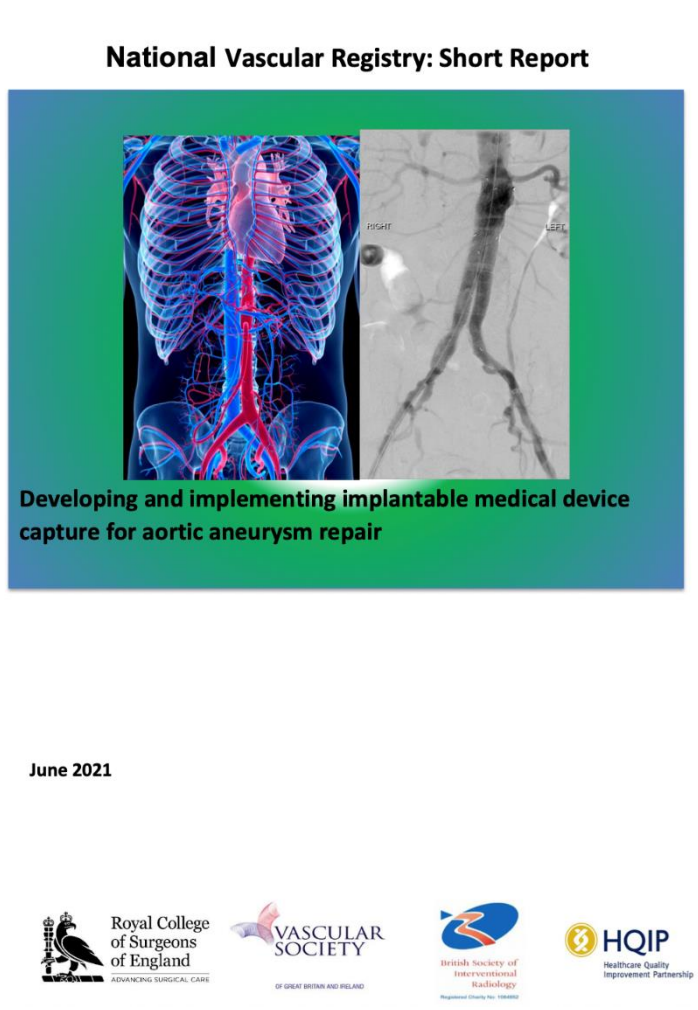
Aortic Devices report



'collect and publish information on implantable medical devices to monitor safety'
'prioritise the collection of implantable medical devices especially in novel procedures on medical registries'
https://www.vsqip.org.uk/reports/developing-and-implementing-implantable-medical-device-capture-for-aortic-aneurysm-repair/

AAA devices & revisions data entry – guide

VSQIP VASCULAR SERVICES QUALITY IMPROVEMENT PROGRAMME — National Vascular Registry (NVR)

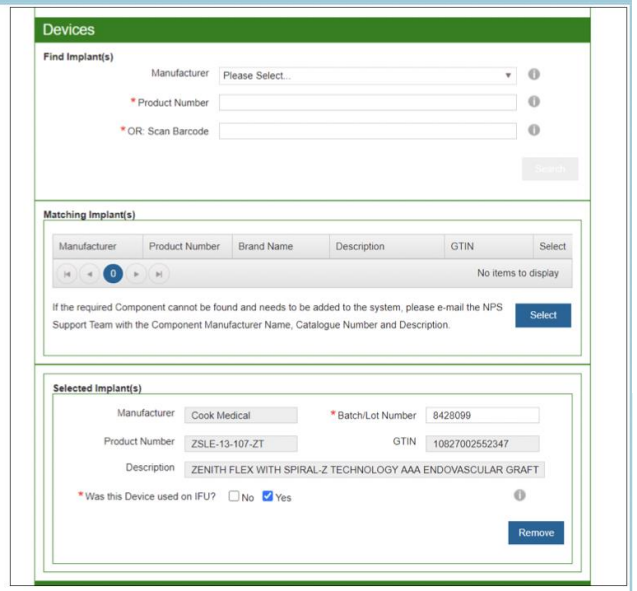
AAA Devices and Revision Procedures FAQs

Entering an aortic device

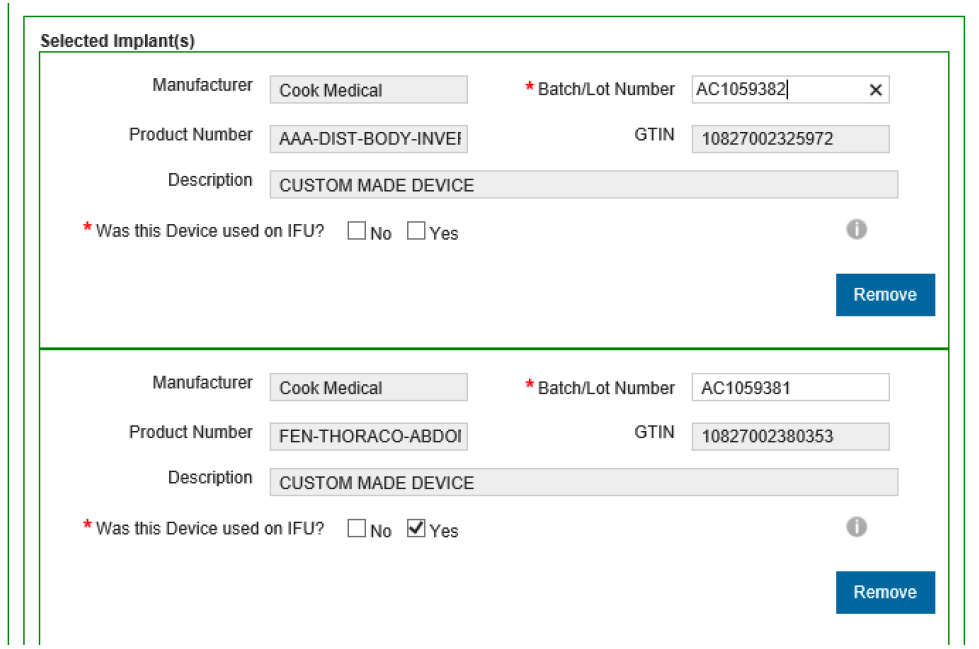
Within the procedure page of a AAA repair record on the NVR, there is now a devices section where you can record the implanted devices used.

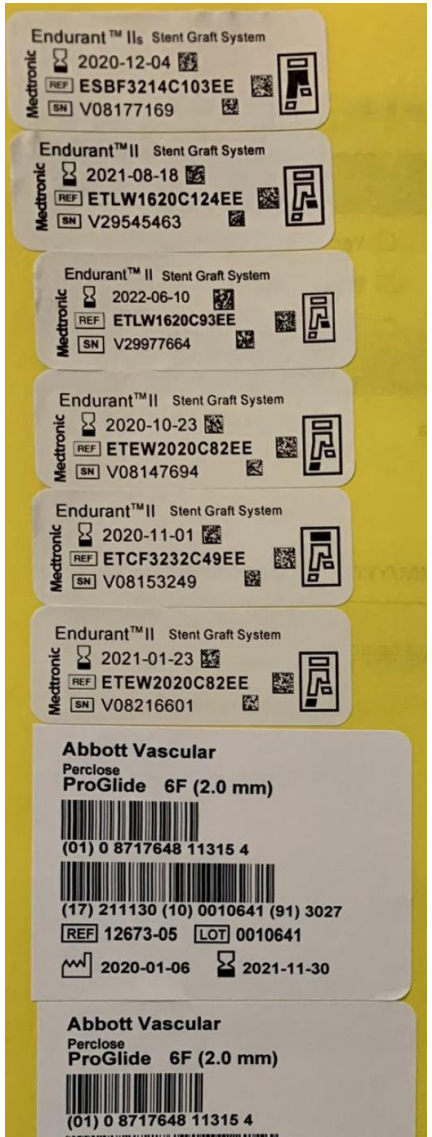
There are two main ways to enter a device:

1. Select the manufacturer from the dropdown list and search for it using the product code
2. Scan the long barcode on the device sticker label



We have worked with the Association of British HealthTech Industries (ABHI) to approach all the companies that manufacturer aortic devices and accessories. The vast majority of companies and devices should be included in the NVR, but we appreciate that not all are. If you are unable to find a device, please email the NVR inbox (nvr@rcseng.ac.uk) with the company's name, device name/description, product code and barcode number. We will then endeavour to see if the device can be added in the future.

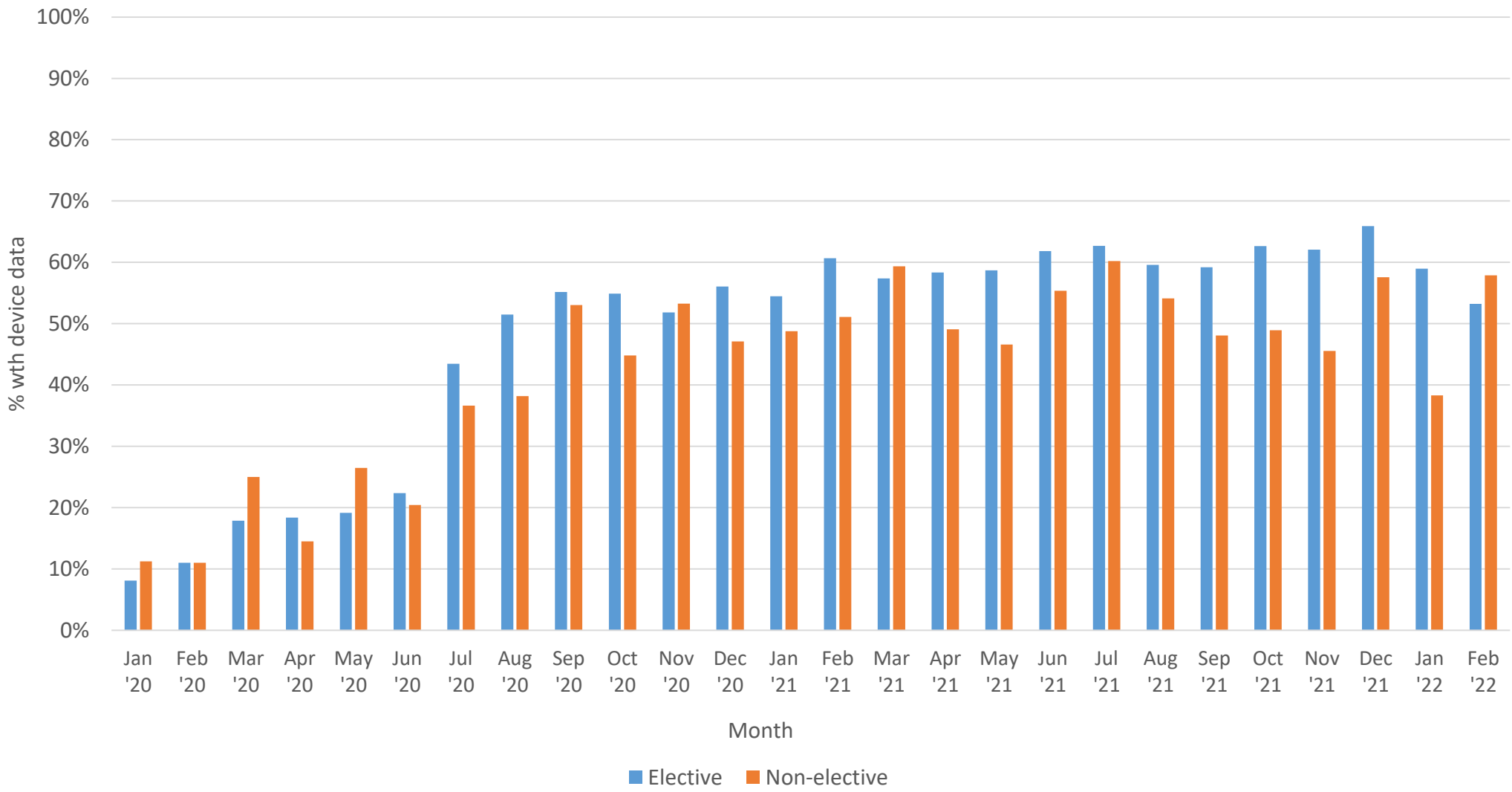




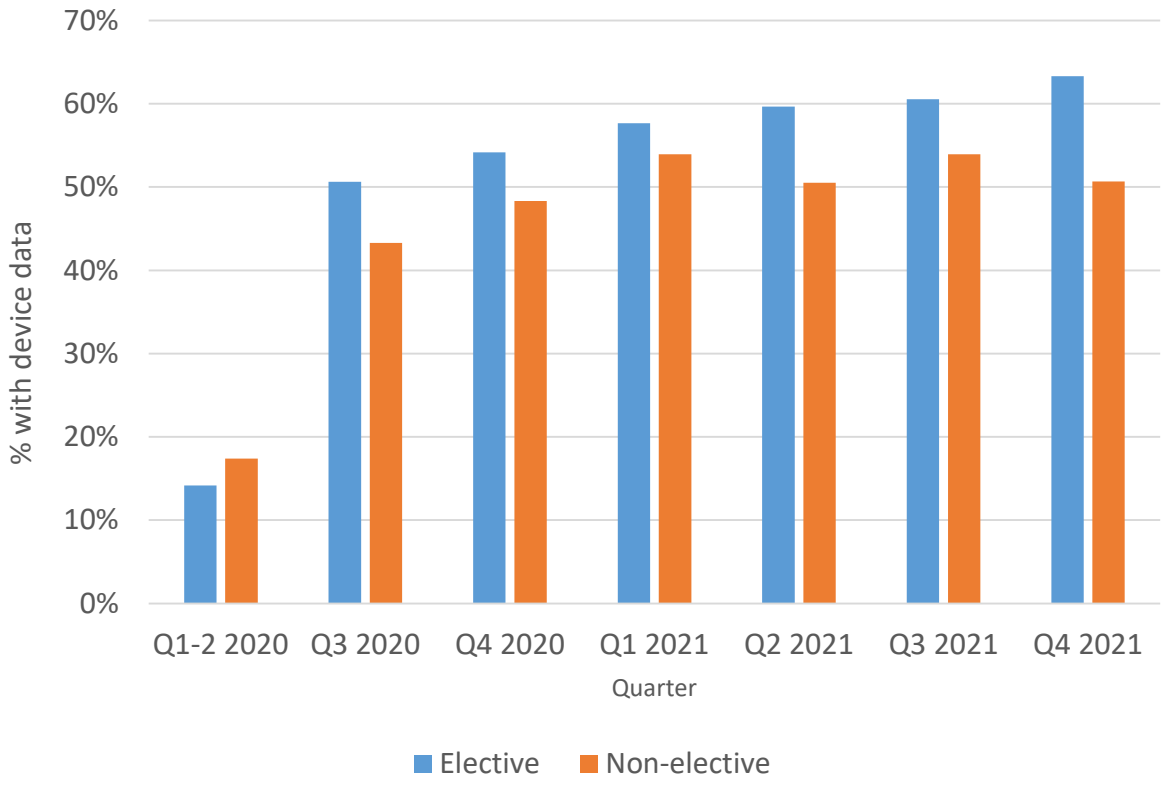
https://www.vsqip.org.uk/content/uploads/2021/06/AAA-Revision-Devices-FAQs.pdf

Percentage of AAA procedures with device information between January 2020 and February 2022, by month of operation and mode of admission

(4,341 submitted procedures)

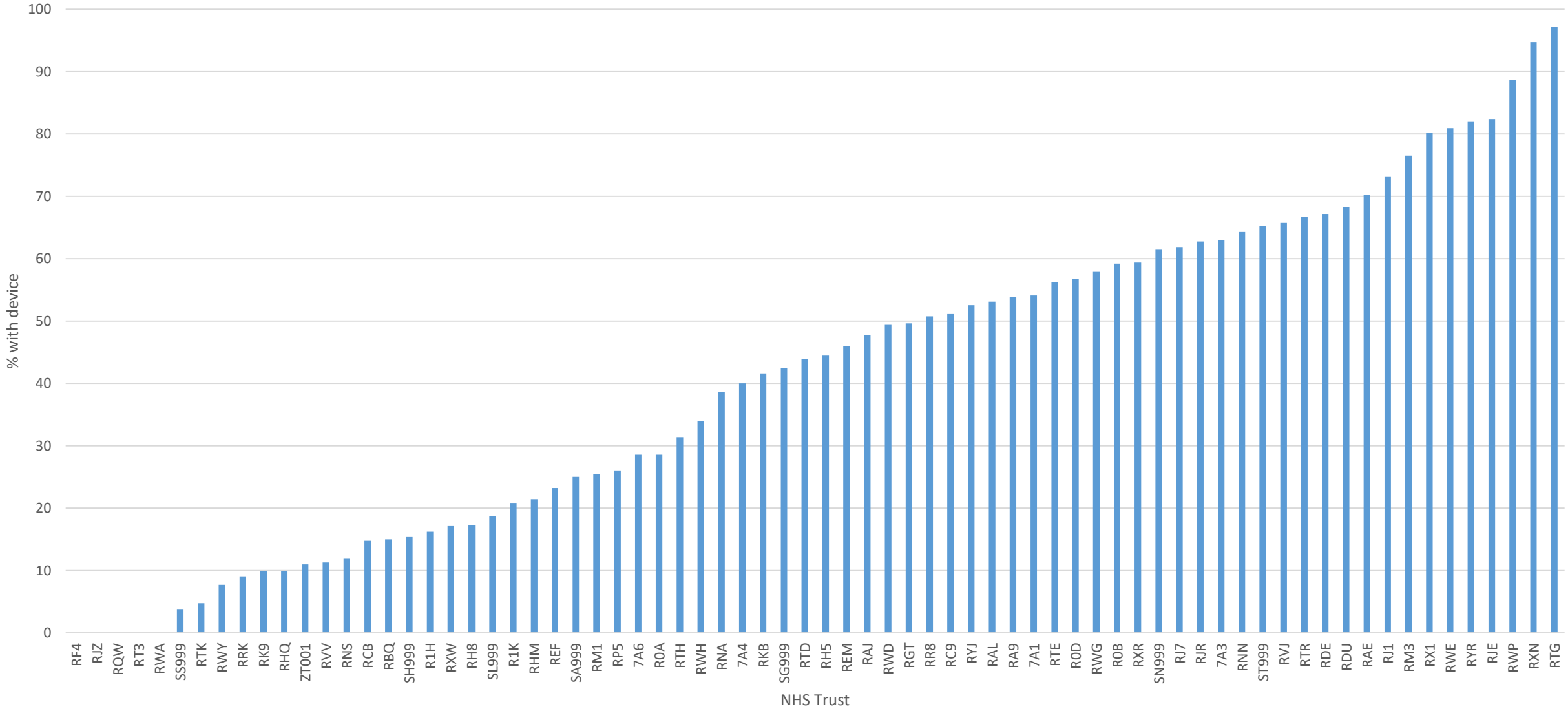


Device data capture by quarter



	Number of AAA procedures with device data	Total AAA procedures submitted	% of AAA procedures with device data
Q1-2 2020	276	1,829	15%
Q3 2020	538	1,107	49%
Q4 2020	665	1,263	53%
Q1 2021	553	978	57%
Q2 2021	793	1,375	58%
Q3 2021	676	1,150	59%
Q4 2021	673	1,122	60%
Total	4,174	8,824	40%

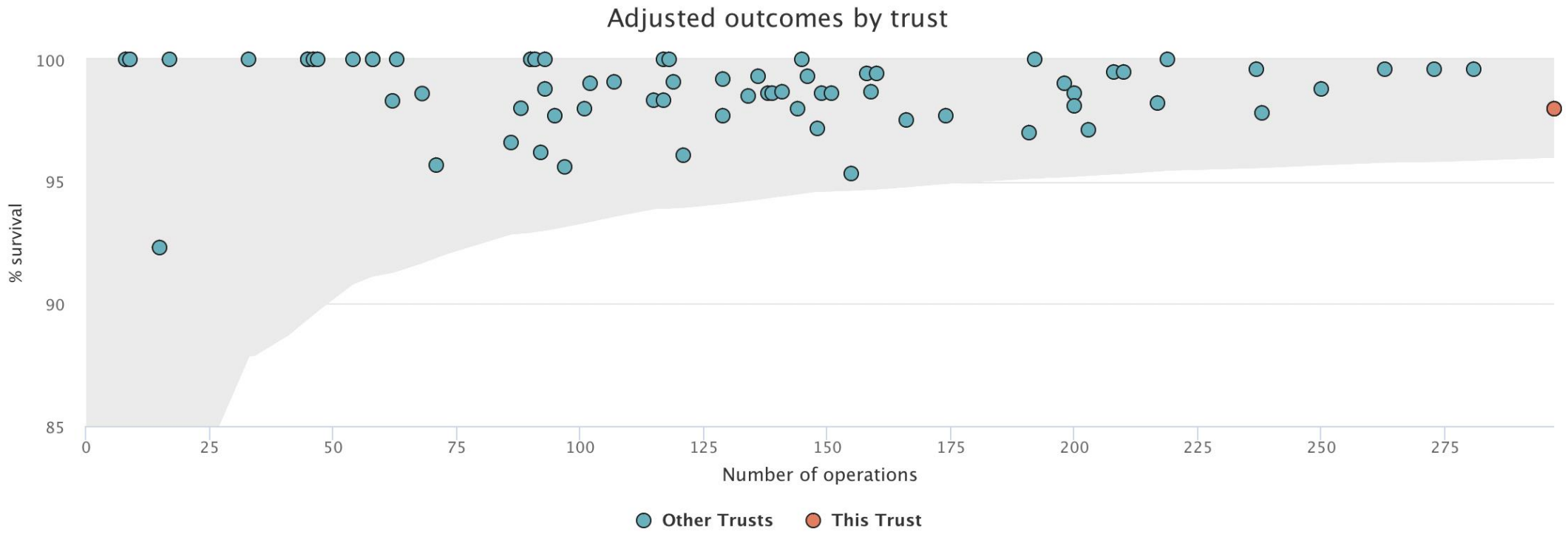
AAA Device capture by NHS Trust



AAA Repair

University Hospital of North Midlands NHS Trust

Trust outcomes

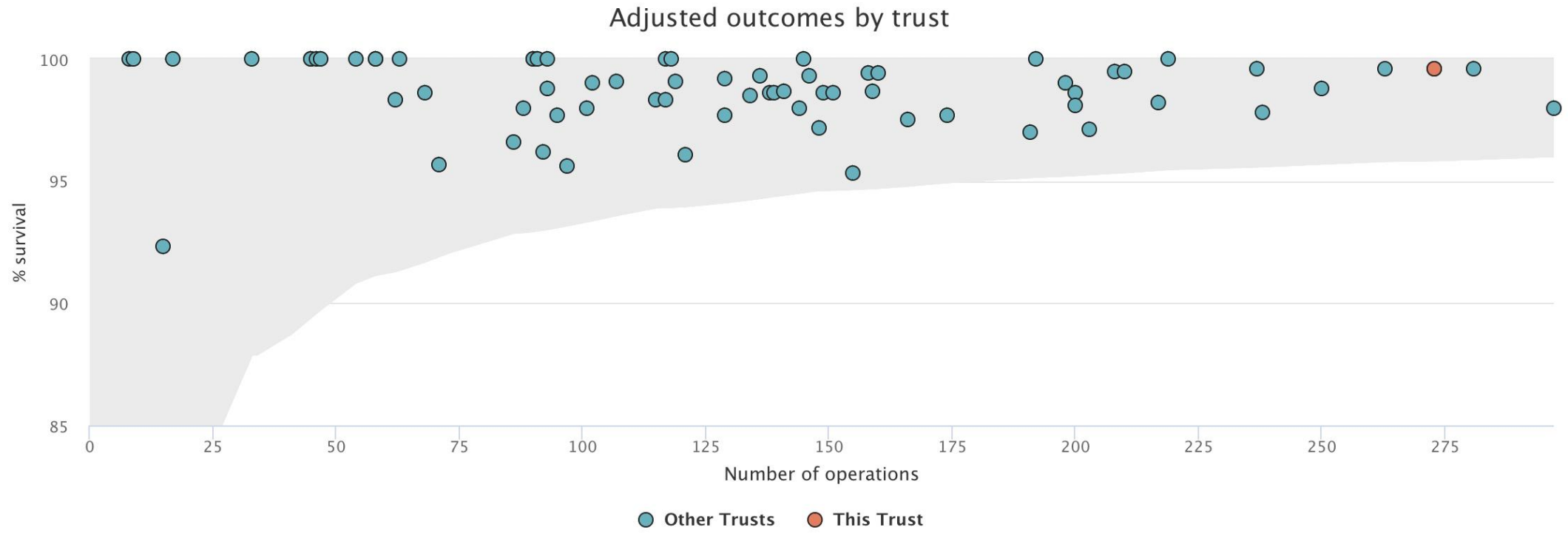


No. of procedures	Adjusted survival rate %	Length of stay for open repairs Average (typical range)	Length of stay for EVAR Average (typical range)
297	98	7 (6,9)	2 (1,3)

AAA Repair

Cambridge University Hospitals NHS Foundation Trust

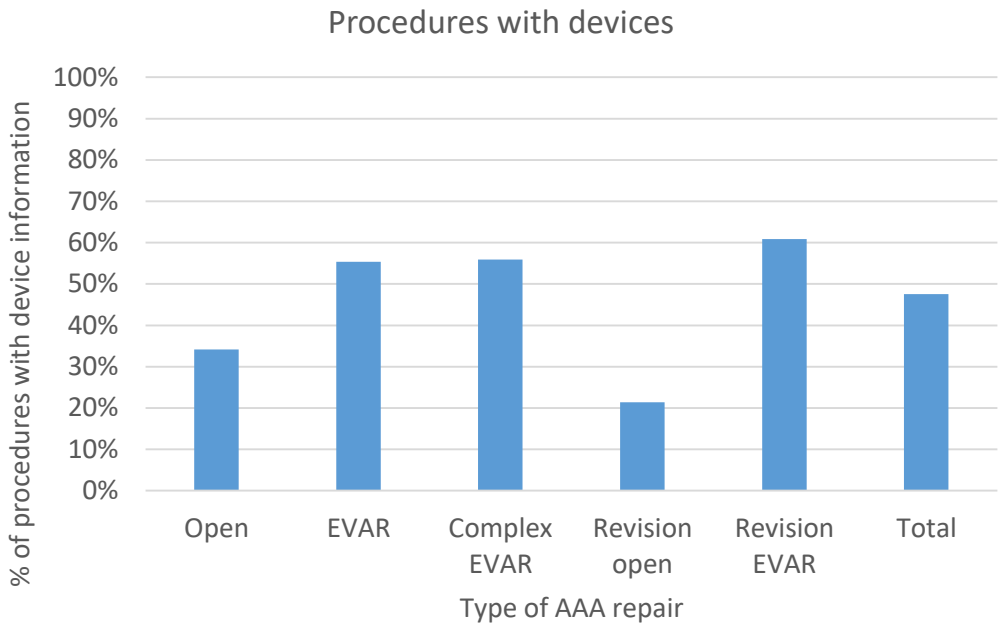
Trust outcomes



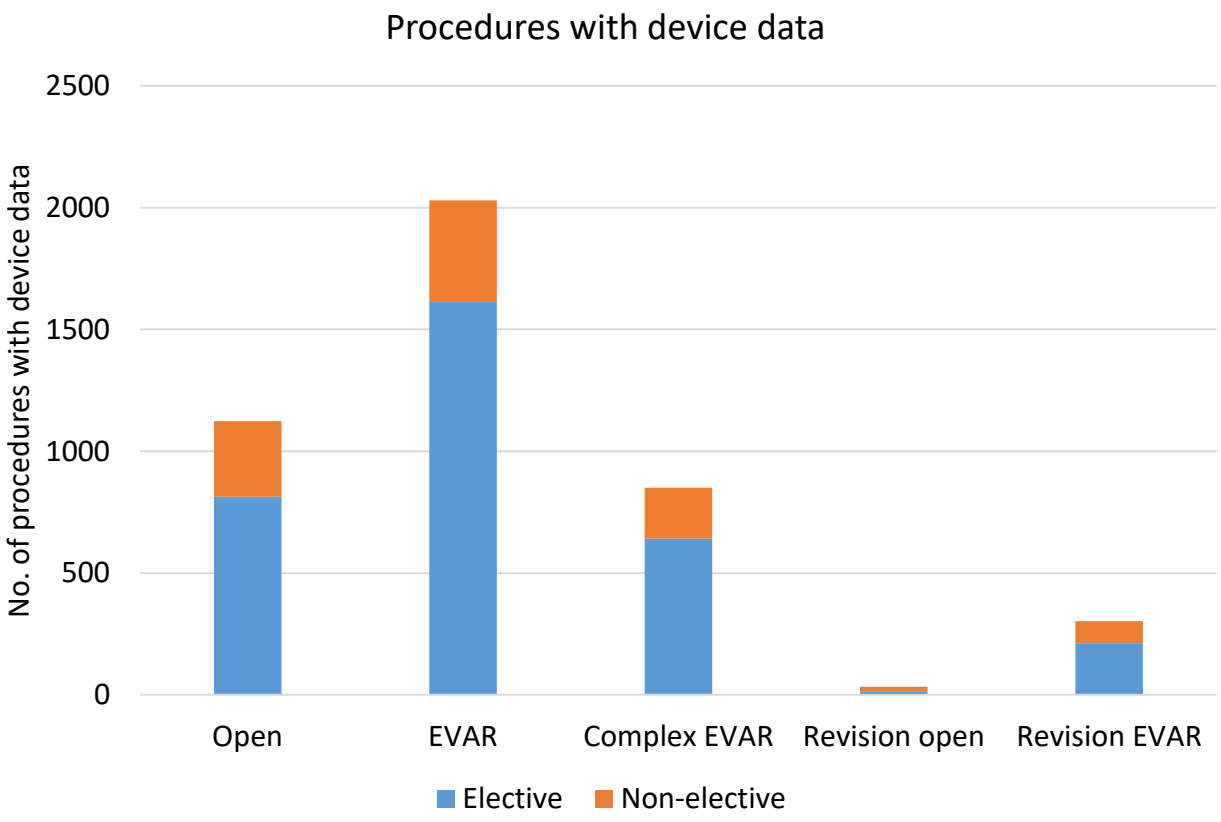
No. of procedures	Adjusted survival rate %	Length of stay for open repairs Average (typical range)	Length of stay for EVAR Average (typical range)
273	99.6	7 (6,9)	2 (1,3)

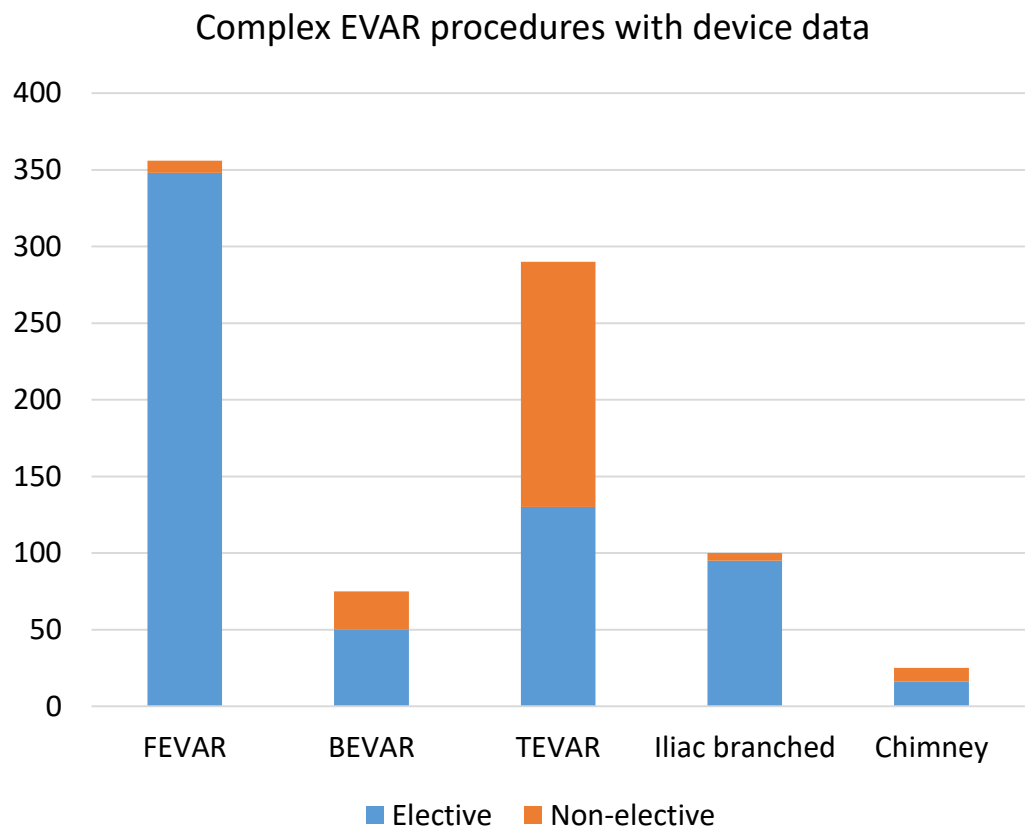
Device information available by type of AAA repair

Repair type	Elective	Non-elective	Total	% with device data
Open	813	310	1,123	34%
EVAR	1,616	414	2,030	55%
Complex EVAR	642	209	851	56%
Revision open	15	19	34	21%
Revision EVAR	212	91	303	61%
Total	3,298	1,043	4,341	48%

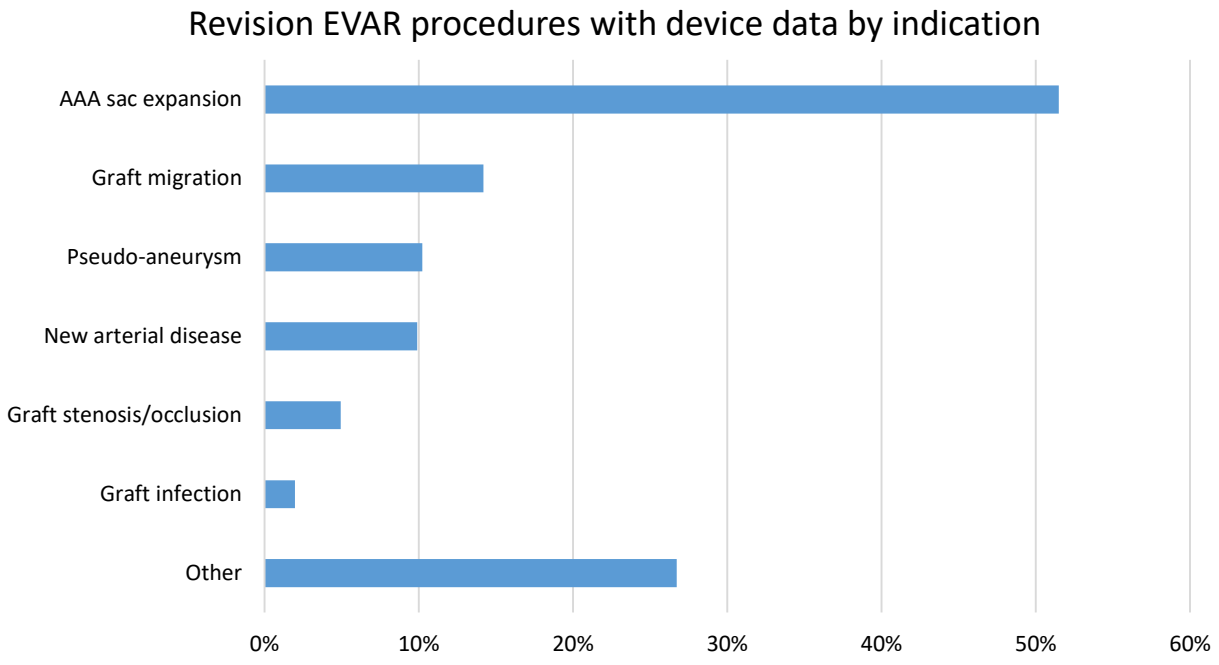


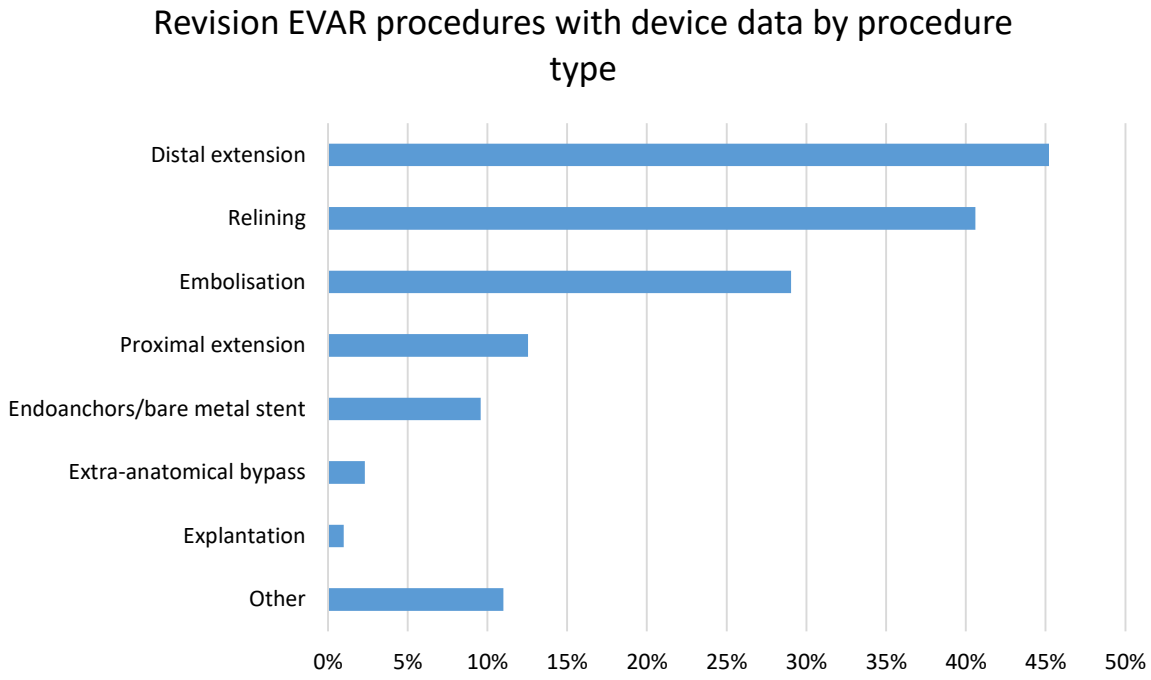
Procedures with device information, by admission mode





Revision EVAR procedures





Next steps

- Aortic devices updated report – November 2022
- Medical Devices Safety & Registration Programme – Vascular & IR
- Carotid – patches, stents
- Lower limb – stents, drug eluting technology
- National Registries should take the responsibility of accountability – procedures, outcomes and device data capture
- Support colleagues with device data capture

NVR Team

- **Staff at Clinical Effectiveness Unit, Royal College of Surgeons of England**
  - Sam Waton, NVR Manager
  - Amundeep Johal, Senior statistician
  - Qiuju Li, Research Fellow in Medical Statistics
  - Panagiota Birmpili, NVR Clinical Fellow
  - Ellie Atkins, NVR Clinical Fellow
  - David Cromwell, CEU Director

Previous Chair – Jonathan Boyle

- **Clinical leads**
  - Arun Pherwani, Consultant Vascular Surgeon
  - Robin Williams Consultant Interventional Radiologists

- **Partner organisations**
  - Vascular Society for Great Britain & Ireland
  - British Society of Interventional Radiology
  - Vascular Anaesthesia Society of Great Britain & Ireland