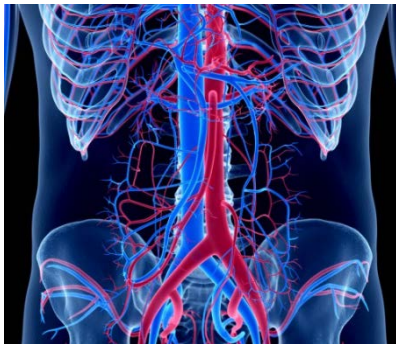


Clinical Effectiveness Unit: The Royal College of Surgeons of England National Vascular Registry (NVR)



Team members:

- **Vascular Society of Great Britain and Ireland**
 - Prof Ian Loftus, Consultant Vascular Surgeon
 - Mr Jon Boyle, Consultant Vascular Surgeon

- **Clinical Effectiveness Unit, Royal College of Surgeons**
 - Mr Sam Waton, NVR Project Manager
 - Dr Amundeeep Johal, Statistician
 - Dr Katriina Heikkila, Assistant Professor
 - Prof David Cromwell, Prof of Health Services Research / CEU Director

The NCAPOP project journey so far

- National Vascular Registry evolved from National Vascular Database, starting in December 2013.
- Simplified old datasets & developed new consultant and trust-level indicators
- Annually audited stroke and mortality rates
- Assessed patient pathways by analysing waiting times
- Improving case ascertainment and data quality for all procedures via continuous communication with trusts
- Provided all NVR users with online tools to measure and improve performance, such as tables, graphs, funnel plots and continuous monitoring plots.
- Developed and continually improved public facing website to contain national and trust level results.

All Teach, All Learn

- Quality Improvements
 - on-going communication with consultants to discuss data quality issues
 - discussions with web developers to improve NVR IT system
 - Adding tools within NVR IT system to measure performance
- Impactful recommendations
 - Identify changing trends in practises and adapting as necessary
 - Recognising concerns with patient waiting times and making suitable recommendations in annual report
 - Adapting risk models to accommodate changing trends

Insights from work

- Lessons learned
 - Transparency with consultants
 - Developing confidence with Trusts and working collaboratively on improving care
 - Understand consultant concerns by learning more about their practice
 - Use appropriate language and terminology, depending on type of communication

Advice to peers

- Try to keep approach simple and easy to understand for everyone
- Try to find novel ways of communicating rather than sticking with status quo
- Identify what works for each medium:
 - Paper/pdf report
 - Static webpage
 - Interactive webpage
 - Spreadsheet
- Establish and maintain relationships with external stakeholders who utilise your audit results (e.g. GIRFT, CQC, NHS Choices, NICE)
- Don't underestimate the scale of publishing results at individual consultant level for the first time!

We are keen to learn:

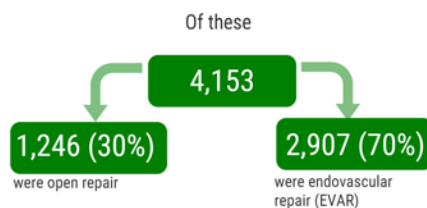
- Better ways of involving patients and the public
- Ways of communicating audits results that have proved effective, and those that haven't been as effective
- Ways of managing external stakeholders (e.g. NHS Digital, GIRFT, CQC).

Sharing effective and impactful ways of presenting data/recommendations

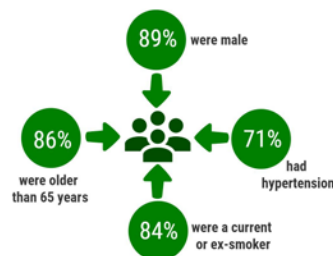
Elective repair of infra-renal abdominal aortic aneurysm (AAA)

AAA is an abnormal expansion of the aorta. If left untreated, it may enlarge and rupture causing fatal internal bleeding. An infra-renal aneurysm occurs below the level of the renal (kidney) arteries within the aorta.

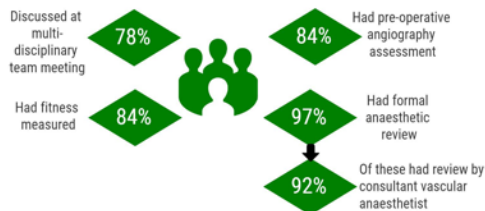
There were 4,153 elective infra-renal AAA repairs submitted to the NVR in 2016, which is approximately 86% of all procedures carried out in the UK.



Which people had surgery?



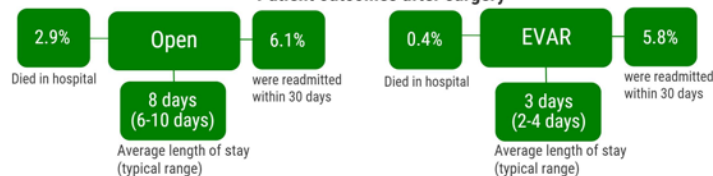
How were patients assessed?



Most patients waited 70 days between vascular assessment and AAA repair

However for 14/72 vascular units, 19% of patients waited more than 140 days

Patient outcomes after surgery

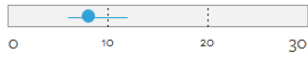

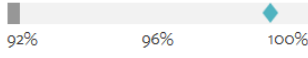


The average is the median "typically between" is the interquartile range

Sharing effective and impactful ways of presenting data/recommendations

<https://www.vsqip.org.uk/surgeon-outcomes/>

The Trust performed the following procedure(s); **AAA Repair, Carotid Endarterectomy, Lower Limb Angioplasty/Stent, Lower Limb Bypass, Lower Limb Amputation.**

Metric	Time period	Trust figures	National figures	Graph of trust figures
AAA Repair +				
Carotid Endarterectomy ×				
Cases	2016	26 ●●●●		
Median (IQR) time from symptom to procedure (14 days – NICE Guidance)	2016	8 (6,12)	13 (7,27)	
Median (IQR) length of stay	2016	4 (3,7)	3 (2,5)	
Risk adjusted stroke free survival	2014-2016	99.4%	97.8%	
View detailed information >				
Lower Limb Angioplasty/Stent +				
Lower Limb Bypass +				
Lower Limb Amputation +				

Sharing effective and impactful ways of presenting data/recommendations

Time Period: Start: 01/01/2012 End (based on discharge date): 22/09/2016

Variable Filter

Procedure Type: AAA repair

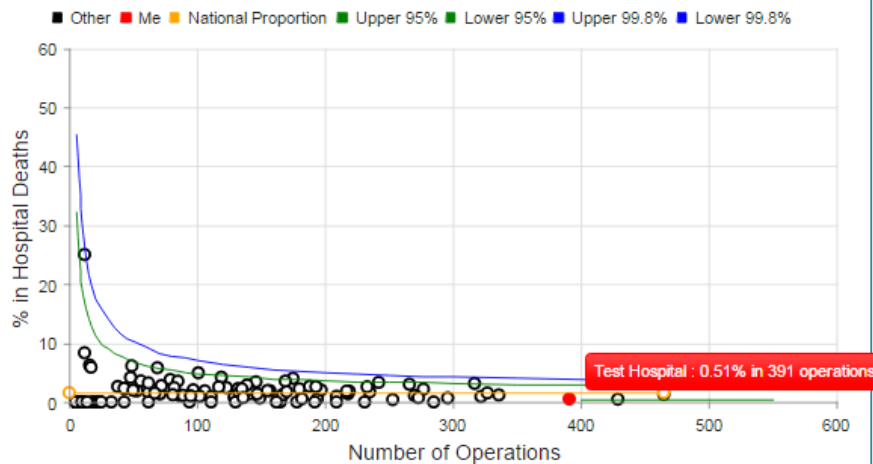
Admission Mode: Elective

AAA site: Infra-renal

AAA repair type: All

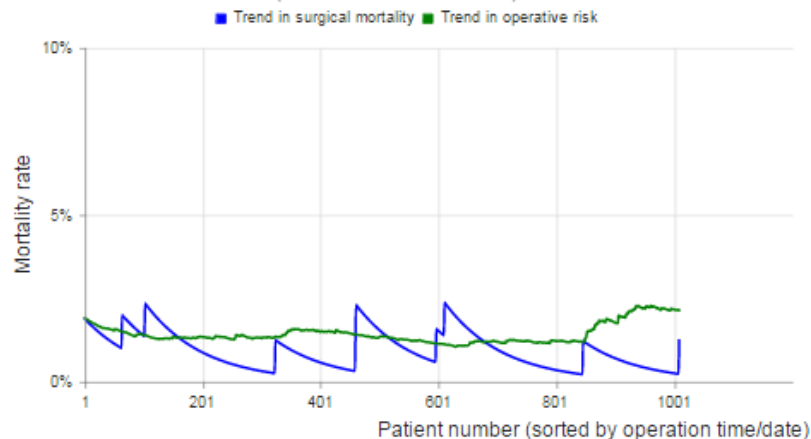
Run

Test Hospital-AAA Crude Mortality rate

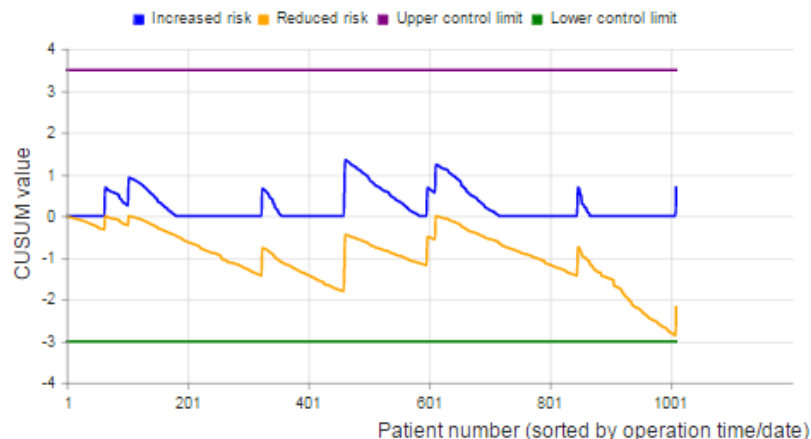


OrganisationName	All Cases	Cases with Outcome Data	In Hospital Deaths	Mortality Rate
Test Hospital	391	391	2	0.51

AAA Trend in mortality rate (Exponential weighted moving average)
(13/01/2007 - 21/12/2015)



AAA Risk -adjusted tabular CUSUM chart (13/01/2007 - 21/12/2015)



Next Steps

- Obtain data linkage approvals to determine post-discharge outcomes
 - Ability to assess longer term survival
 - Perform validation checks using administrative data against NVR
 - Drive up case-ascertainment

How can HQIP help?

- Promote methods of communicating results that have had a high impact:
 - Websites
 - Infographics
 - Reports
 - Patient friendly materials