National Hiatal Surgical Registry

Annual Report 2022

NATIONAL HIATAL SURGICAL REGISTRY

Benchmarking Surgical Outcomes for UK Hiatal Surgery

Message from the NHSR Chair and Society Presidents:

We delightfully present the first Annual Report of the National Hiatal Surgery Registry (NHSR). NHSR is the first Surgical Registry in the UK for Benign Hiatal Surgical Disease with outcomes being decided by the experience of end-users, our patients.

Since its inauguration at the Annual AUGIS Conference in Belfast 2021, NHSR has been engaged widely by the UK hiatal surgeons in England, Wales and Northern Ireland. Other Upper GI specialities (bariatrics and cancer resection) have benefited from detailed analysis of the quality and effectiveness of these procedures for some time by using Registry data input.
We do not currently know how effective outcomes from hiatal surgery in the UK are at a national level.
On behalf of AUGIS and the entire NHSR Committee, we would like to thank all our peer Upper Gastrointestinal Surgeons for taking the time to input their valuable data into this long overdue Registry.
We aim to publish our Annual Reports and deliver them to all the AUGIS/BBUGSS/ALSGBI members. We also aim to present this first report at the AUGIS National Conference in 2022. Needless to say, the reports will be based on the outcomes of Trusts and Private Healthcare Organisations rather than individual surgeons.
We look forward to your ongoing contribution to this novel project and a more considerable success in years to come.
Best Wishes

Sayan Bhattacharya

Mr Sayan Bhattacharya
NHSR Chair

Nick

Mr Nick Maynard
President AUGIS

S Andrews

Mr Stuart Andrews
President BBUGSS

D. Mahon

Mr David Mahon
President ALSGBI

Contents:

Executive Summary of Report

The purpose of the National Hiatal Surgical Registry (NHSR) is to provide surgeons with an effective tool to be reflective about their practice in the treatment of hiatal surgical disease and at a national level, benchmark outcomes for hiatal surgical procedures across the UK.

The NHSR is a database that will allow surgeons voluntarily to enter meaningful and useful information about the hiatal surgery they perform to audit their outcomes, reference themselves against peer outcomes and assist with an appraisal.

The Registry is free to use for all GMC registered surgeons concerning hiatal surgery conducted in the UK within the NHS and Independent Healthcare Sector, that are members of BBUGSS/AUGIS or ALSGBI.

Hiatal surgery encompasses surgical procedures for treating benign upper gastrointestinal conditions related to the hiatus of the diaphragm. These pathological conditions include gastro-oesophageal reflux disease, symptomatic hiatus hernias, hybrid reflux/hiatus hernia disease and achalasia. The surgical procedures described under hiatal surgery include- Primary Anti-Reflux Surgery (both Fundoplication and Magnetic Sphincter Augmentation LINX™), Primary Hiatus Hernia Repair, Hybrid Anti-Reflux /Hiatus Hernia Surgery and Cardiomyotomy. Also included is Revisional surgery of these procedure types.

The Registry does not at present include endoluminal procedures.

NHSR uses a classification system of hiatal disease defined by the British Benign Upper GI Surgical Society Home | British Benign Upper Gastro Intestinal Society (bbugss.com) for Registry reporting.

The Registry records patient selection, pre-operative investigations, intra-operative techniques, volumes of practice and most importantly, Quality of Life (QoL) outcomes before and after procedures.

The Registry uses Patient Reported Outcome Measures (PROMs) to record the profile of pre and post-procedure QoL scores and reflect procedure effectiveness.

The Registry will automatically contact patients that have been entered (with their consent-see GDPR policy Downloads – National Hiatal Surgery Registry (nhsr.org)) concerning their symptoms using the QoL evaluation relevant for their condition at -6 months /-1 year /-2 years /-3 years/-4 years /-5 years after their surgery. The data will automatically be entered into Users accounts.

For Primary Anti-Reflux procedures and Hybrid Anti-Reflux/Hiatus Hernia procedures, the Registry will use GORD-QoL (Downloads – National Hiatal Surgery Registry (nhsr.org)) scores and the need for continued anti-acid medication use as outcome measures.

For Cardiomyotomy surgery, Eckhardt scores (Downloads – National Hiatal Surgery Registry (nhsr.org)) are used.

For Hiatus Hernia Repair pre-operative and post-operative Hiatus Hernia-QoL score will be used (Downloads – National Hiatal Surgery Registry (nhsr.org)).

Surgeons will be able to download a personal report populated by information they have entered and data the NHSR follow-up system has provided, for the purpose of their appraisal.

A National Annual Report will also be delivered each year at the AUGIS Annual Scientific Meeting and be publicly available.

This report will not be at the Surgeon level but at the Unit level. Volumes of activity, complication rates, and follow up QoL outcomes will be reported.

Individual surgeon users will only be able to see their outcomes, and these will be statistically referenced against the average of other surgeons anonymised outcomes for the same conditions.

As an NHSR User, you will not be able to see other surgeons outcomes.

The information collected about both surgeons and patients is entirely confidential and will never be shared with any other organisation without your/their permission (see GDPR policy).

The Registry will not monitor/report/act on any individual or Unit data outcomes, individual outcomes are for confidential interpretation and reflection, Unit outcomes can be seen publicly.

The Registry is governed by the AUGIS Executive/BBUGSS Council and a surgeons committee (NHSR Committee).

NHSR is operated on behalf of AUGIS by an IT Healthcare Company bound by GDPR confidentiality law. NHSR is Information Commissioner Office (ICO), Care Quality Commission (CQC) and NHS Digital registered and regulated that is data safety compliant.

The Registry is not recognised as a research tool and cannot be used as a research tool but maybe provide pilot data for research activity.

The Registry aims to more specifically classify hiatal surgery to report a more meaningful comparison of outcomes.

NHSR Patient Status Definition

Active Patients- A patient entered into the NHSR, but not all data fields for that patient completed. These patients are thus not included in statistical analysis and not eligible for Patient Report Outcome Measures (PROMs).

Complete Patients- Patients have all data fields completed and thus are eligible for progression into PROMs and their data is included in statistical analysis.

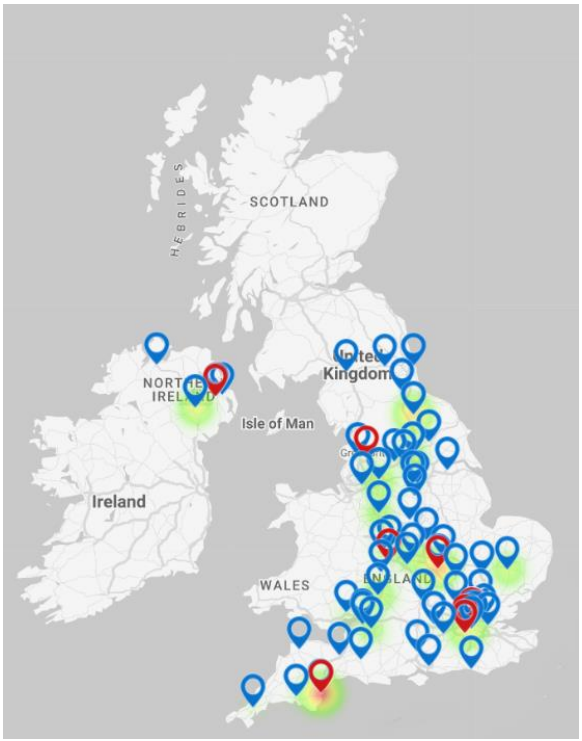
PROMs Patients- Patients who have completed their data entry and are passing through their post-operative period of PROMs follow-up for 5 years and are included for statistical analysis.

At the time of this report there are currently 92 Consultant users from 70 registered centres in both NHS and Independent Healthcare Sector, with 240 patients registered either in the Active or Complete phase.

Centres and Patients Registered with NHSR in the UK (Active and Complete)

Trust/Organisation Name	Consultants		Patients		
	Total	Active	Active	Complete	Total
All Trusts/Organisations	**92**	**27**	**141**	**66**	**207**
BMI Healthcare	12	2	1	6	7
Croydon Health Services NHS Trust	1	1	13	0	13
Epsom and St. Helier University Hospitals NHS Trust	1	1	9	0	9
Gloucestershire Hospitals NHS Foundation Trust	3	1	3	8	11
Leeds Teaching Hospitals NHS Trust	2	2	3	4	7
Manchester University NHS Foundation Trust	2	1	4	7	11
Northamptonshire Healthcare NHS Foundation Trust	3	2	14	4	18
Nuffield Health	12	1	1	0	1
Ramsay Health Care UK	10	1	1	0	1
Royal Berkshire NHS Foundation Trust	1	1	1	0	1
Royal Cornwall Hospitals NHS Trust	1	1	1	0	1
Royal United Hospitals Bath NHS Foundation Trust	1	1	4	1	5
Sandwell and West Birmingham Hospitals NHS Trust	2	2	4	1	5
Sheffield Teaching Hospitals NHS Foundation Trust	1	1	1	0	1
South Tees Hospitals NHS Foundation Trust	1	1	31	2	33
Southern Health and Social Care Trust	1	1	15	3	18
The Dudley Group NHS Foundation Trust	1	1	3	0	3
Torbay and South Devon NHS Foundation Trust	6	6	18	19	37
University Hospitals Coventry and Warwickshire NHS Trust	3	1	1	5	6
University Hospitals of North Midlands NHS Trust	2	1	3	3	6
West Suffolk NHS Foundation Trust	2	2	10	3	13

Summary of NHS/Private Healthcare Providers that have registered with NHSR and submitted at least one patient.



NHS Trusts and Private Healthcare Organization's Registered with NHSR

NHS Centres of Practice Registered with NHSR

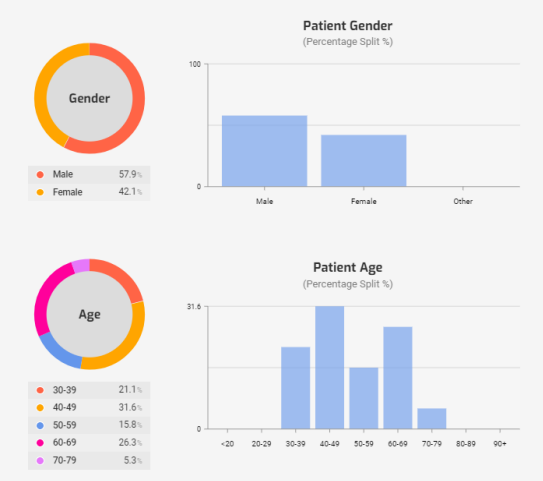
Private Centres of Practice Registered with NHSR

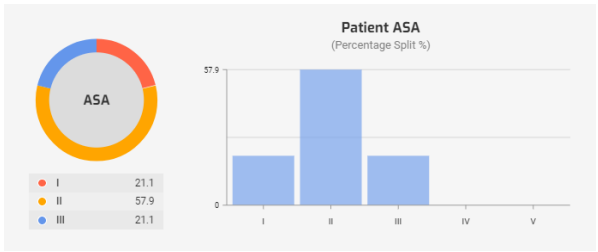
Quality of Life outcome data for registered NHSR patients that are either complete or in PROMs stage of Registry.

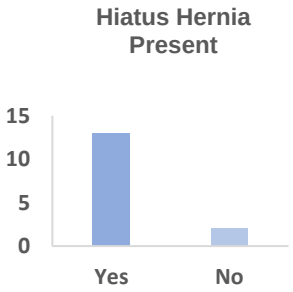
Primary Anti-Reflux Surgery (Fundoplication)- All Trusts/Organisations

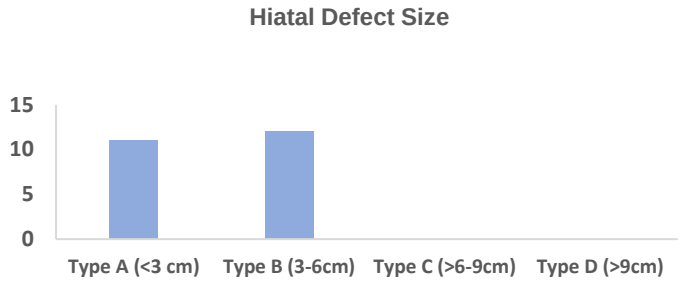
75 registered patients, 52 active, 23 complete

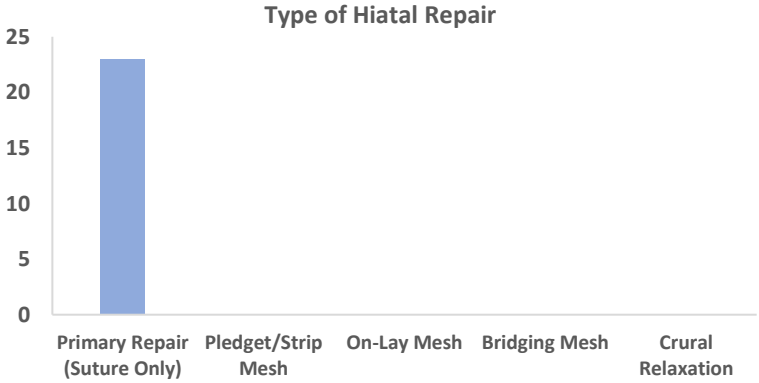
*To appear in statistical analysis the patient must have a complete or in PROM status

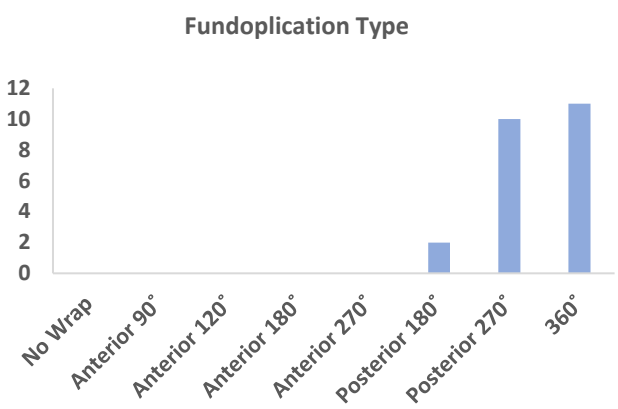


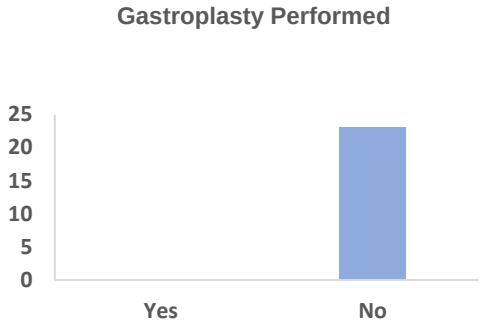


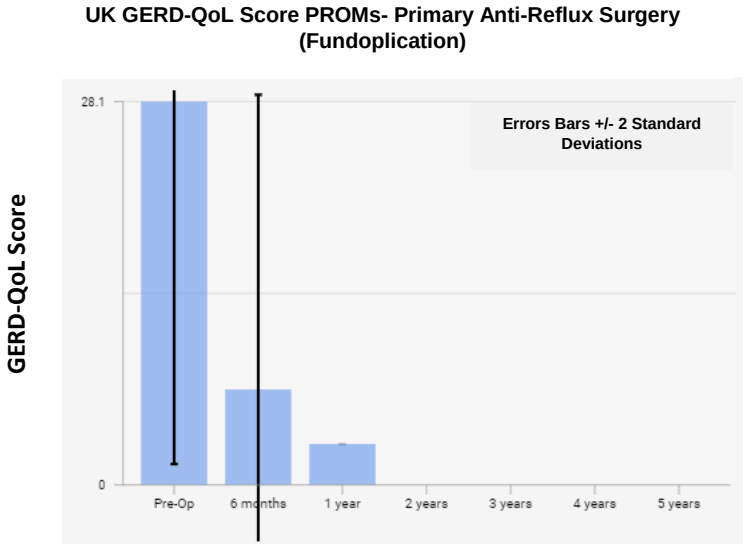












UK GERD-QoL Score PROMs- Primary Anti-Reflux Surgery (Fundoplication)

Individual Trusts and Organisations compared to Overall Trusts/Organisations Data — Inside 2 -/+ Standard Deviations — Outside 2 -/+ Standard Deviations

Trust/Organisation Name	Complete Cases	Morbidity	Mortality	Pre-Op QoL (Mean Ave.)	6 month QoL Improvement Score	6 month QoL Improvement -/+	1 year QoL Improvement Score	1 year QoL Improvement -/+	2 year QoL Improvement Score	2 year QoL Improvement -/+	3 year QoL Improvement Score	3 year QoL Improvement -/+	4 year QoL Improvement Score	4 year QoL Improvement -/+	5 year QoL Improvement Score	5 year QoL Improvement -/+
Overall Trusts/Organisations	**23**	**0%**	**0%**	**28.1**	**6.7**	**76.2%**	**3.0**	**89.3%**	-	-	-	-	-	-	-	-
BMI Healthcare [12]	4	0%	0%	24.0	7.0	70.8%	-	-	-	-	-	-	-	-	-	-
Gloucestershire Hospitals NHS Foundation Trust [3]	3	0%	0%	28.0	2.3	91.8%	-	-	-	-	-	-	-	-	-	-
Leeds Teaching Hospitals NHS Trust [2]	2	0%	0%	33.0	10.0	69.7%	-	-	-	-	-	-	-	-	-	-
Manchester University NHS Foundation Trust [2]	4	0%	0%	41.3	5.8	86.0%	-	-	-	-	-	-	-	-	-	-
Northamptonshire Healthcare NHS Foundation Trust [3]	1	0%	0%	8.0	1.0	87.5%	-	-	-	-	-	-	-	-	-	-
Sandwell and West Birmingham Hospitals NHS Trust [2]	1	0%	0%	19.0	1.0	94.7%	-	-	-	-	-	-	-	-	-	-
South Tees Hospitals NHS Foundation Trust [1]	1	0%	0%	24.0	1.0	95.8%	-	-	-	-	-	-	-	-	-	-
Torbay and South Devon NHS Foundation Trust [6]	2	0%	0%	27.0	2.0	92.6%	3.0	88.9%	-	-	-	-	-	-	-	-
University Hospitals Coventry and Warwickshire NHS Trust [3]	2	0%	0%	31.5	20.5	34.9%	-	-	-	-	-	-	-	-	-	-
University Hospitals of North Midlands NHS Trust [2]	1	0%	0%	15.0	9.0	40.0%	-	-	-	-	-	-	-	-	-	-
West Suffolk NHS Foundation Trust [2]	2	0%	0%	26.5	9.0	66.0%	-	-	-	-	-	-	-	-	-	-

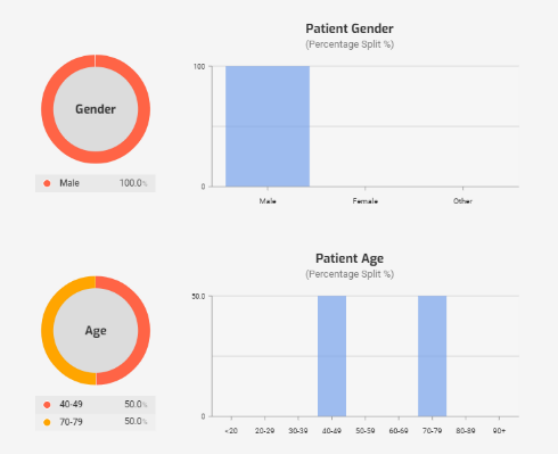
173 trusts found for **Primary Anti-Reflux Surgery (Fundoplication)** sorted by name (alphabetically ascending).

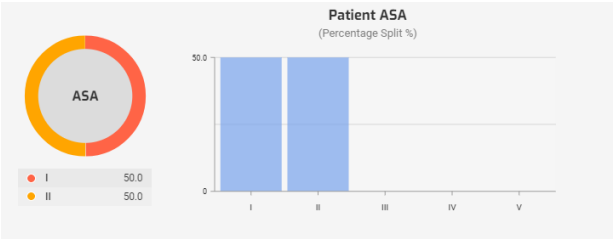
* Outcome data may or may not be representative of all activity in a specific Trust/Organisation.

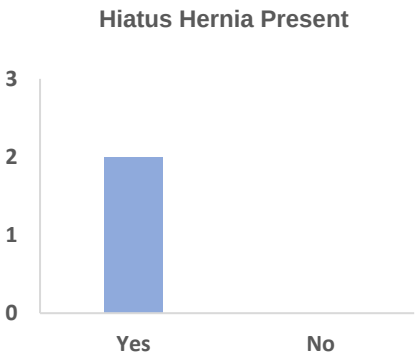
Primary Anti-Reflux Surgery (Magnetic Sphincter Augmentation LINX™)- All Trusts/Organisations

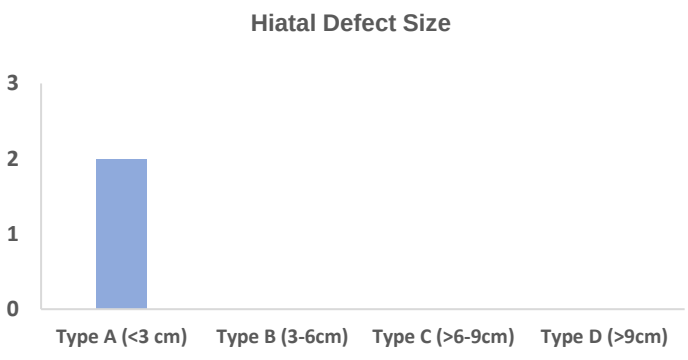
16 registered patients, 14 active, 2 complete

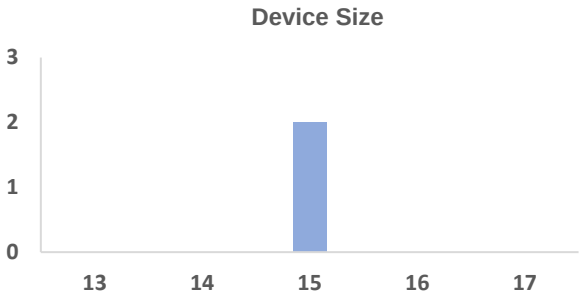
*To appear in statistical analysis the patient must have a complete or in PROM status

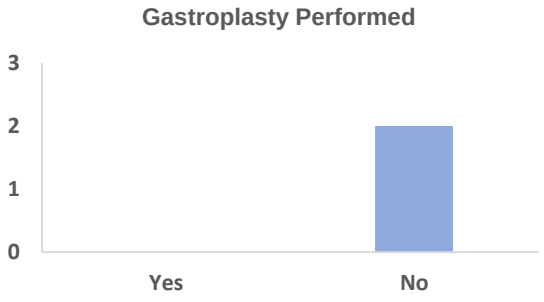




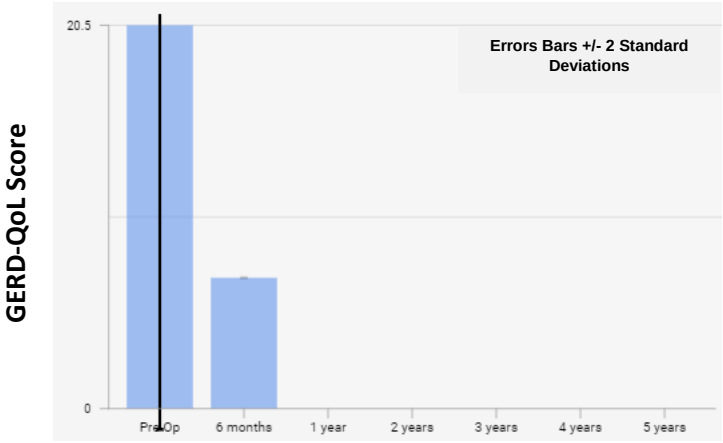








UK GERD-QoL Score PROMs- Primary Anti-Reflux Surgery (Magnetic Sphincter Augmentation LINX™)



UK GERD-QoL Score PROMs- Primary Anti-Reflux Surgery (Magnetic Sphincter Augmentation LINX™)

Individual Trusts and Organisations compared to Overall Trusts/Organisations Data Inside 2 -/+ Standard Deviations Outside 2 -/+ Standard Deviations

Trust/Organisation Name	Complete Cases	Morbidity	Mortality	Pre-Op QoL (Mean Ave.)	6 month QoL Improvement Score	6 month QoL Improvement -/+	1 year QoL Improvement Score	1 year QoL Improvement -/+	2 year QoL Improvement Score	2 year QoL Improvement -/+	3 year QoL Improvement Score	3 year QoL Improvement -/+	4 year QoL Improvement Score	4 year QoL Improvement -/+	5 year QoL Improvement Score	5 year QoL Improvement -/+
Overall Trusts/Organisations	2	0%	0%	20.5	3.5	82.9%	-	-	-	-	-	-	-	-	-	-
Torbay and South Devon NHS Foundation Trust [6]	2	0%	0%	20.5	3.5	82.9%	-	-	-	-	-	-	-	-	-	-

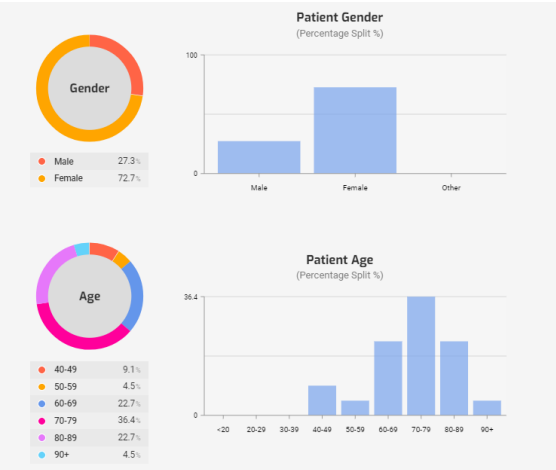
173 trusts found for **Primary Anti-Reflux Surgery (Magnetic Sphincter Augmentation LINX™)** sorted by name (alphabetically ascending).

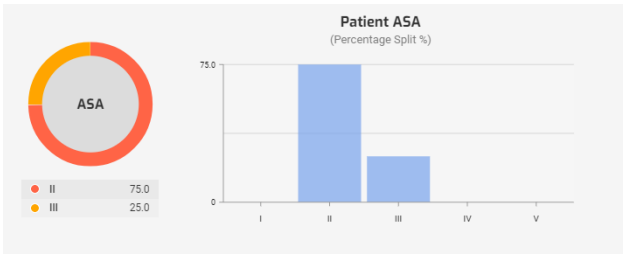
* Outcome data may or may not be representative of all activity in a specific Trust/Organisation.

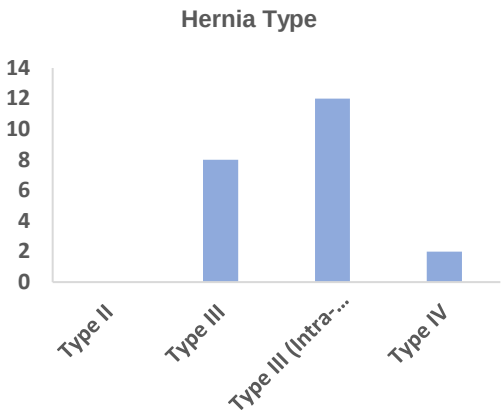
Primary Hiatus Hernia Repair- All Trusts/Organisations

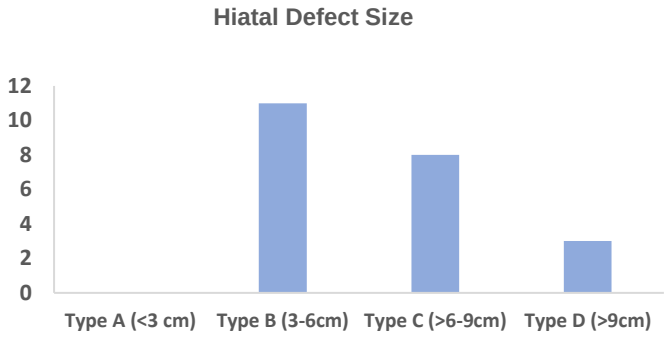
74 registered patients, 52 active, 22 complete

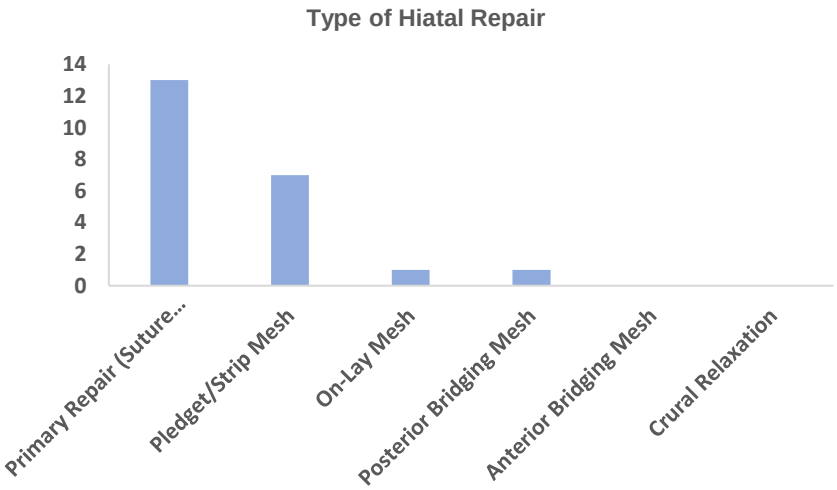
*To appear in statistical analysis the patient must have a complete or in PROM status

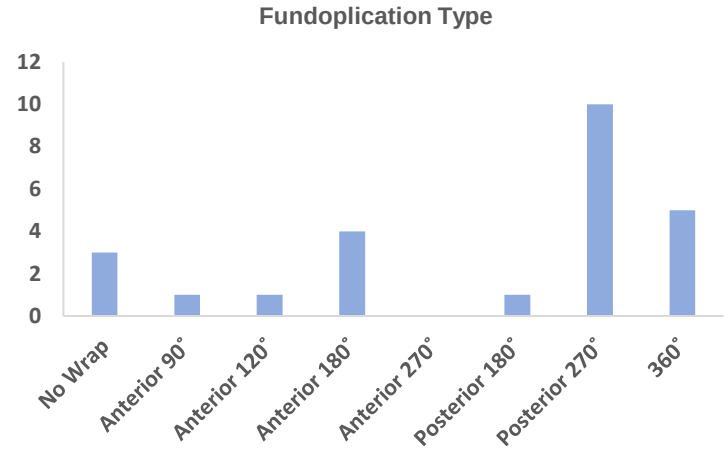


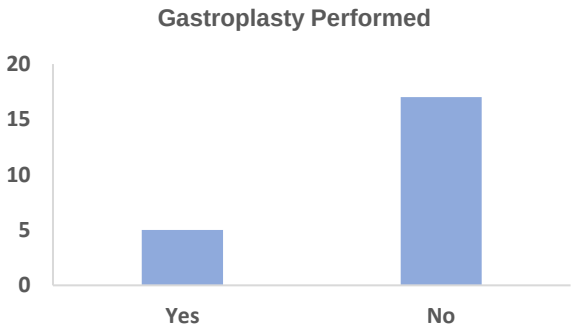




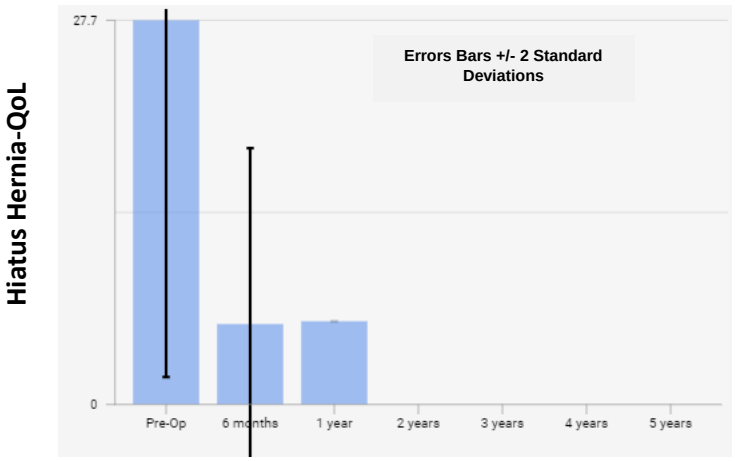








UK Hiatus Hernia-QoL Score PROMs- Primary Hiatus Hernia Repair



UK Hiatus Hernia-QoL Score PROMs- Primary Hiatus Hernia Repair

Individual Trusts and Organisations compared to Overall Trusts/Organisations Data Inside 2 -/+ Standard Deviations Outside 2 -/+ Standard Deviations

Trust/Organisation Name	Complete Cases	Morbidity	Mortality	Pre-Op QoL (Mean Ave.)	6 month QoL Improvement Score	6 month QoL Improvement -/+	1 year QoL Improvement Score	1 year QoL Improvement -/+	2 year QoL Improvement Score	2 year QoL Improvement -/+	3 year QoL Improvement Score	3 year QoL Improvement -/+	4 year QoL Improvement Score	4 year QoL Improvement -/+	5 year QoL Improvement Score	5 year QoL Improvement -/+
Overall Trusts/Organisations	**22**	**0%**	**0%**	**27.7**	**6.5**	**76.5%**	**6.0**	**78.3%**	-	-	-	-	-	-	-	-
BMI Healthcare	2	0%	0%	17.5	6.0	65.7%	-	-	-	-	-	-	-	-	-	-
Gloucestershire Hospitals NHS Foundation Trust	3	0%	0%	20.7	19.0	8.2%	-	-	-	-	-	-	-	-	-	-
Leeds Teaching Hospitals NHS Trust	2	0%	0%	42.0	3.0	92.9%	-	-	-	-	-	-	-	-	-	-
Manchester University NHS Foundation Trust	1	0%	0%	34.0	3.0	91.2%	-	-	-	-	-	-	-	-	-	-
Northamptonshire Healthcare NHS Foundation Trust	2	0%	0%	33.5	2.5	92.5%	-	-	-	-	-	-	-	-	-	-
South Tees Hospitals NHS Foundation Trust	1	0%	0%	26.0	4.0	84.6%	-	-	-	-	-	-	-	-	-	-
Southern Health and Social Care Trust	1	0%	0%	26.0	3.0	88.5%	-	-	-	-	-	-	-	-	-	-
Torbay and South Devon NHS Foundation Trust	7	0%	0%	32.4	3.7	88.6%	6.0	81.5%	-	-	-	-	-	-	-	-
University Hospitals Coventry and Warwickshire NHS Trust	3	0%	0%	16.0	9.0	43.8%	-	-	-	-	-	-	-	-	-	-

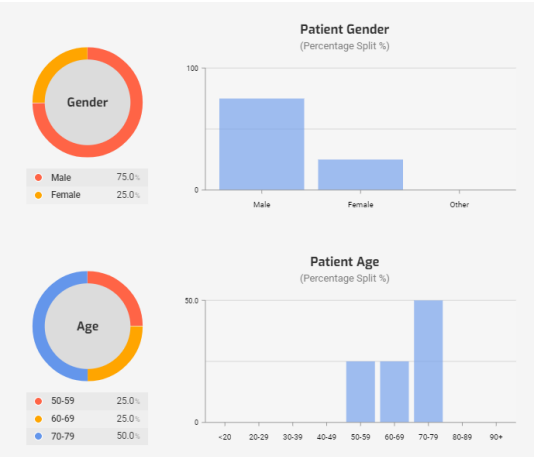
173 trusts found for **Primary Hiatus Hernia Repair Surgery** sorted by name (alphabetically ascending).

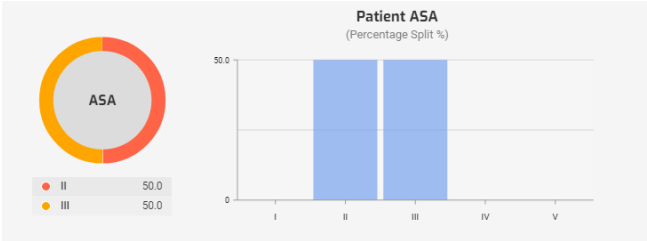
* Outcome data may or may not be representative of all activity in a specific Trust/Organisation.

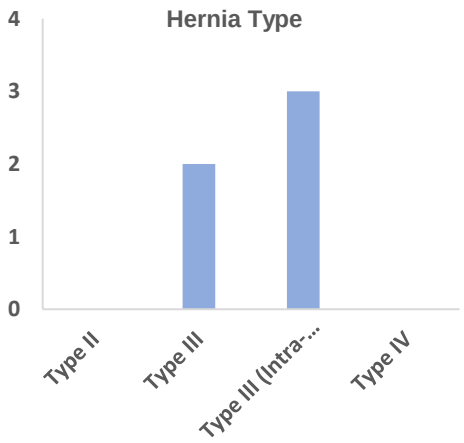
Hybrid Anti-Reflux/Hiatus Hernia Surgery- All Trusts/Organisations

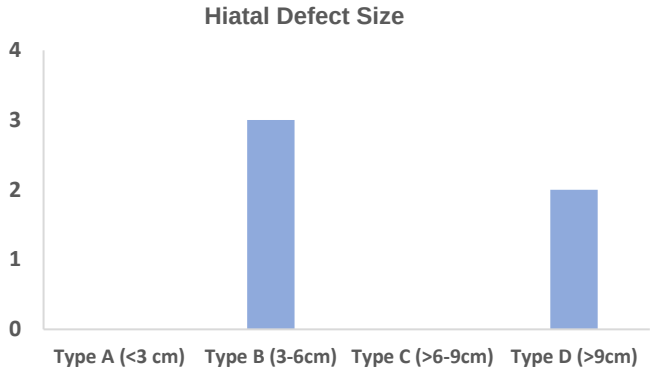
26 registered patients, 21 active, 5 complete

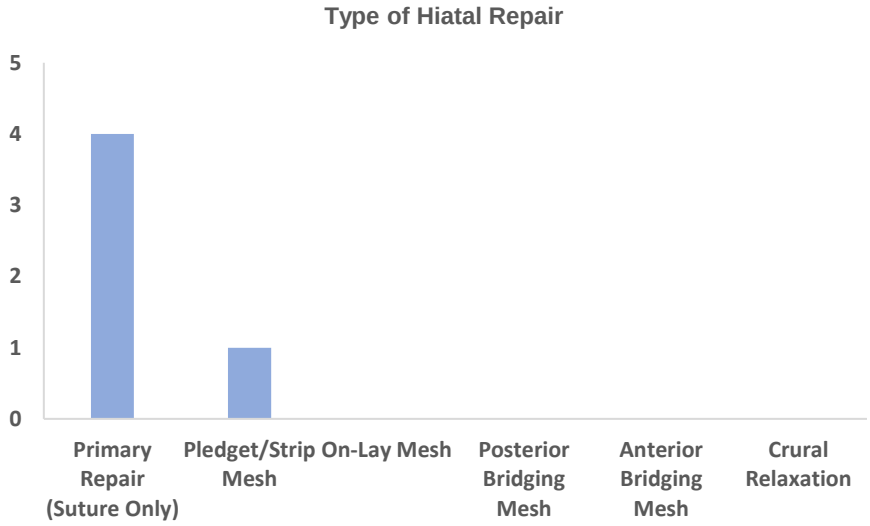
*To appear in statistical analysis the patient must have a complete or in PROM status

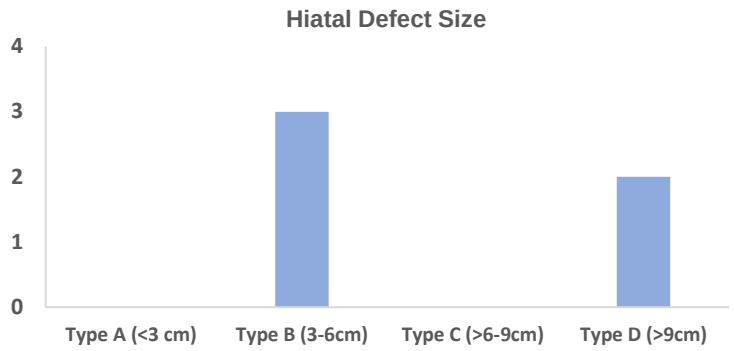


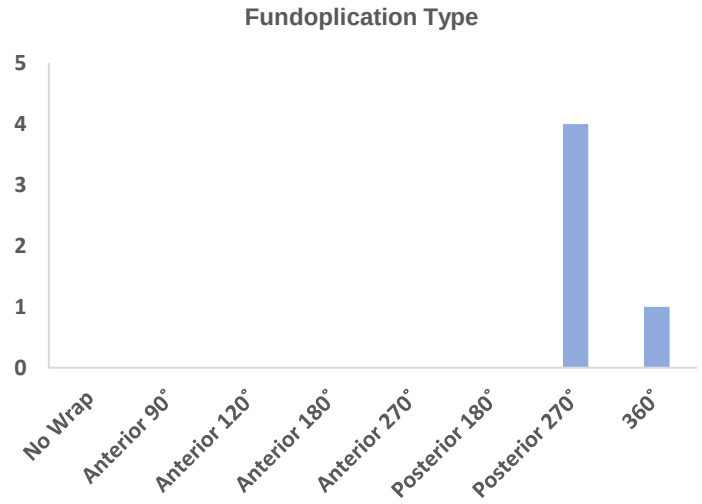


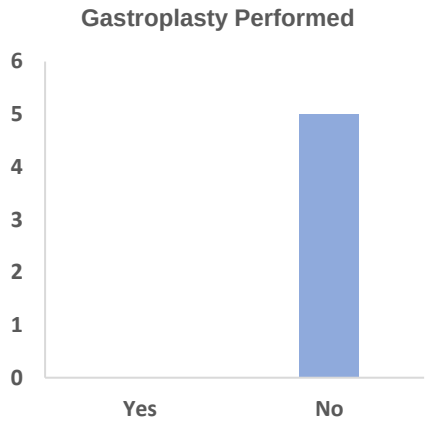




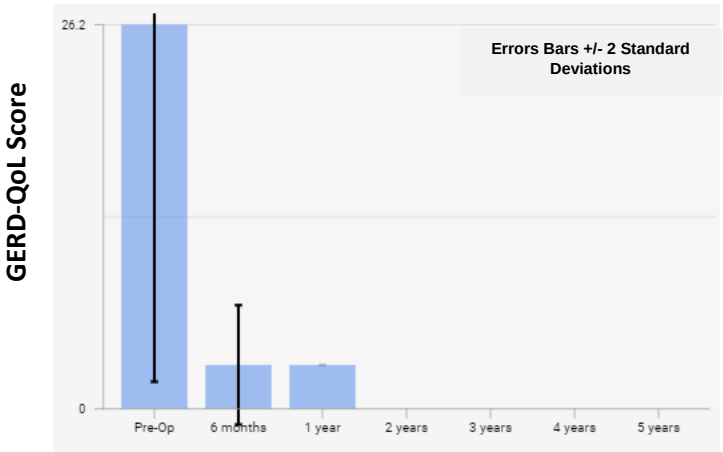








UK GERD-QoL Score PROMs- Hybrid Anti-Reflux/Hiatus Hernia Surgery



UK GERD-QoL Score PROMs- Hybrid Anti-Reflux/Hiatus Hernia Surgery

Individual Trusts and Organisations compared to Overall Trusts/Organisations Data Inside 2 -/+ Standard Deviations Outside 2 -/+ Standard Deviations

Trust/Organisation Name	Complete Cases	Morbidity	Mortality	Pre-Op QoL (Mean Ave.)	6 month QoL Improvement Score	6 month QoL Improvement -/+	1 year QoL Improvement Score	1 year QoL Improvement -/+	2 year QoL Improvement Score	2 year QoL Improvement -/+	3 year QoL Improvement Score	3 year QoL Improvement -/+	4 year QoL Improvement Score	4 year QoL Improvement -/+	5 year QoL Improvement Score	5 year QoL Improvement -/+
Overall Trusts/Organisations	**5**	**0%**	**0%**	**26.2**	**2.6**	**90.1%**	**3.0**	**88.5%**	-	-	-	-	-	-	-	-
Manchester University NHS Foundation Trust [2]	2	0%	0%	37.0	2.5	93.2%	-	-	-	-	-	-	-	-	-	-
Northamptonshire Healthcare NHS Foundation Trust [3]	1	0%	0%	16.0	-	-	-	-	-	-	-	-	-	-	-	-
Torbay and South Devon NHS Foundation Trust [6]	1	0%	0%	17.0	4.0	76.5%	3.0	82.4%	-	-	-	-	-	-	-	-
West Suffolk NHS Foundation Trust [2]	1	0%	0%	24.0	4.0	83.3%	3.0	87.5%	-	-	-	-	-	-	-	-

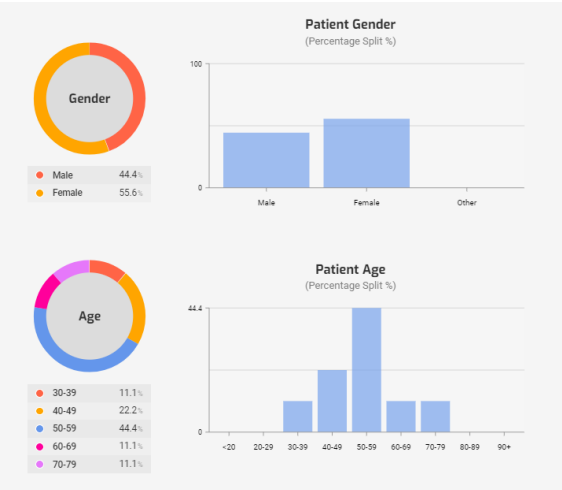
173 trusts found for **Hybrid Anti-Reflux / Hiatus Hernia Surgery** sorted by name (alphabetically ascending).

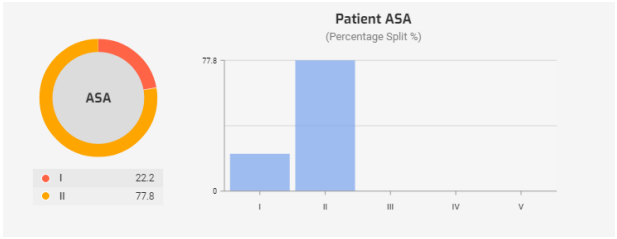
* Outcome data may or may not be representative of all activity in a specific Trust/Organisation.

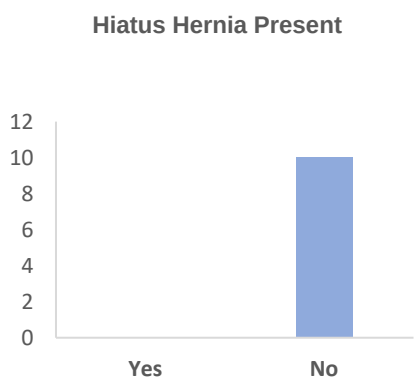
Cardiomyotomy Surgery- All Trusts/Organisations

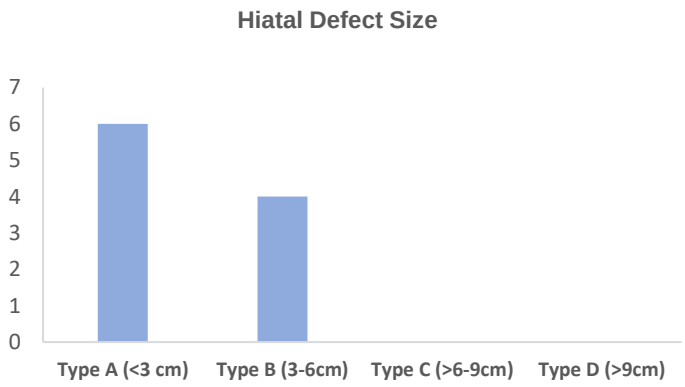
21 registered patients, 11 active, 10 complete

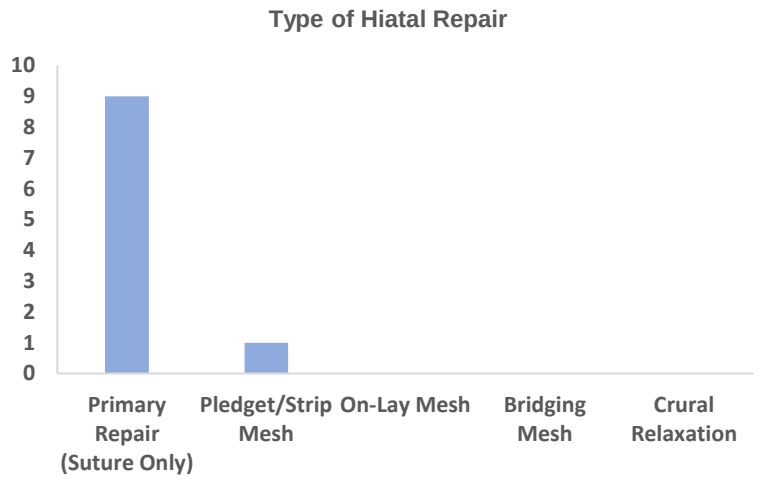
*To appear in statistical analysis the patient must have a complete or in PROM status

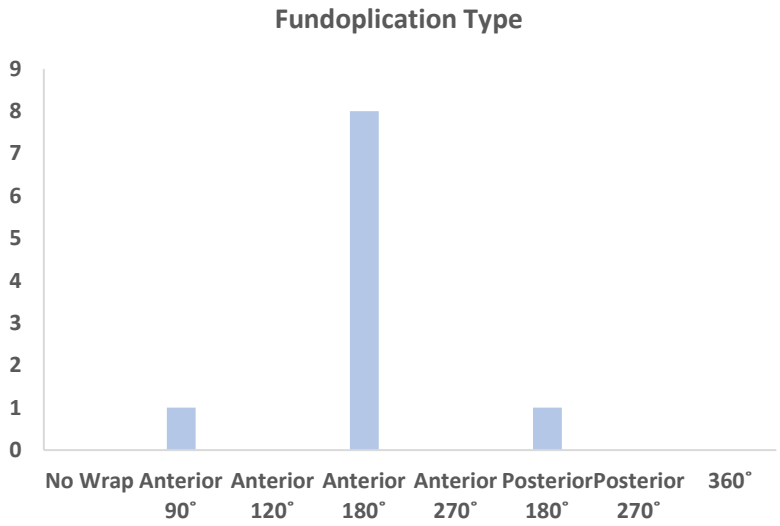




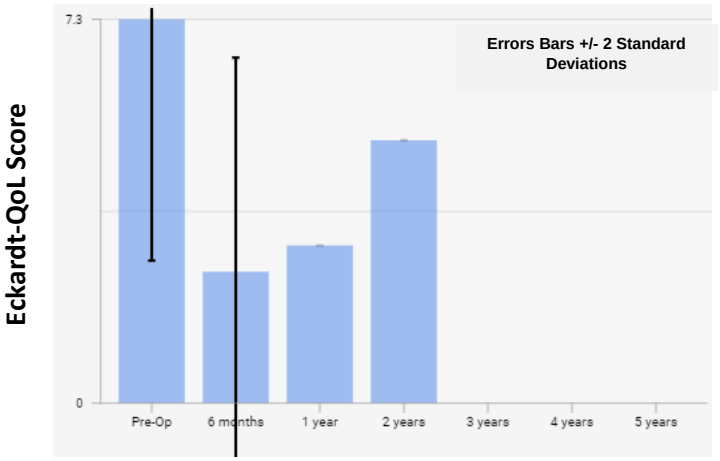








UK Eckardt-QoL Score PROMs- Cardiomyotomy



UK Eckardt-QoL Score PROMs- Cardiomyotomy

Individual Trusts and Organisations compared to Overall Trusts/Organisations Data — Inside 2 -/+ Standard Deviations — Outside 2 -/+ Standard Deviations

Trust/Organisation Name	Complete Cases	Morbidity	Mortality	Pre-Op QoL (Mean Ave.)	6 month QoL Improvement Score	6 month QoL Improvement -/+	1 year QoL Improvement Score	1 year QoL Improvement -/+	2 year QoL Improvement Score	2 year QoL Improvement -/+	3 year QoL Improvement Score	3 year QoL Improvement -/+	4 year QoL Improvement Score	4 year QoL Improvement -/+	5 year QoL Improvement Score	5 year QoL Improvement -/+
Overall Trusts/Organisations	**10**	**0%**	**0%**	**7.3**	**1.6**	**78.1%**	**3.0**	**58.9%**	**5.0**	**31.5%**	-	-	-	-	-	-
Royal United Hospitals Bath NHS Foundation Trust [1]	1	0%	0%	4.0	4.0	0.0%	-	-	-	-	-	-	-	-	-	-
Southern Health and Social Care Trust [1]	1	0%	0%	6.0	4.0	33.3%	-	-	-	-	-	-	-	-	-	-
Torbay and South Devon NHS Foundation Trust [6]	6	0%	0%	8.5	1.0	88.2%	3.0	64.7%	-	-	-	-	-	-	-	-
University Hospitals of North Midlands NHS Trust [2]	2	0%	0%	6.0	-	-	-	-	5.0	16.7%	-	-	-	-	-	-

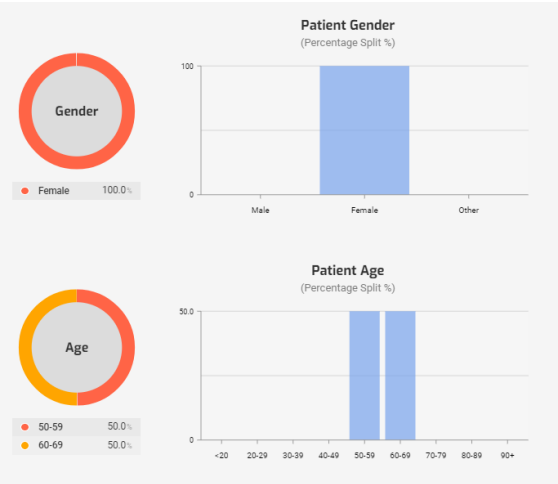
173 trusts found for **Cardiomyotomy Surgery (Achalasia)** sorted by name (alphabetically ascending).

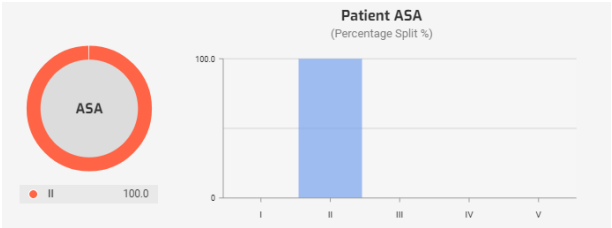
* Outcome data may or may not be representative of all activity in a specific Trust/Organisation.

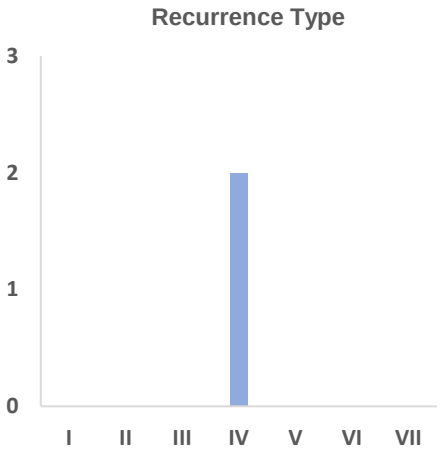
Revisional Anti-Reflux Surgery- All Trusts/Organisations

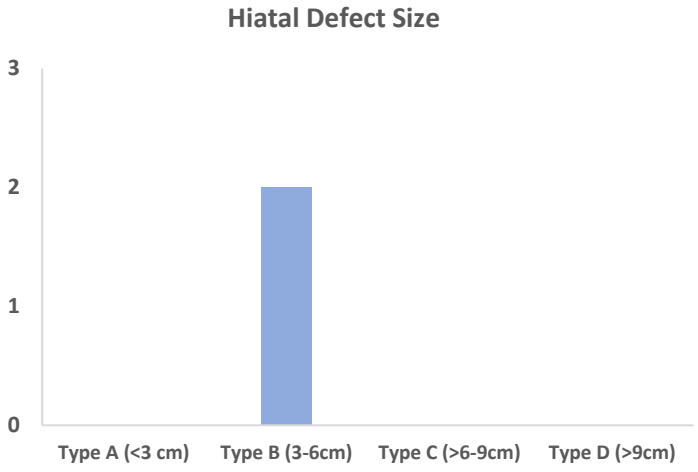
7 registered patients, 5 active, 2 complete

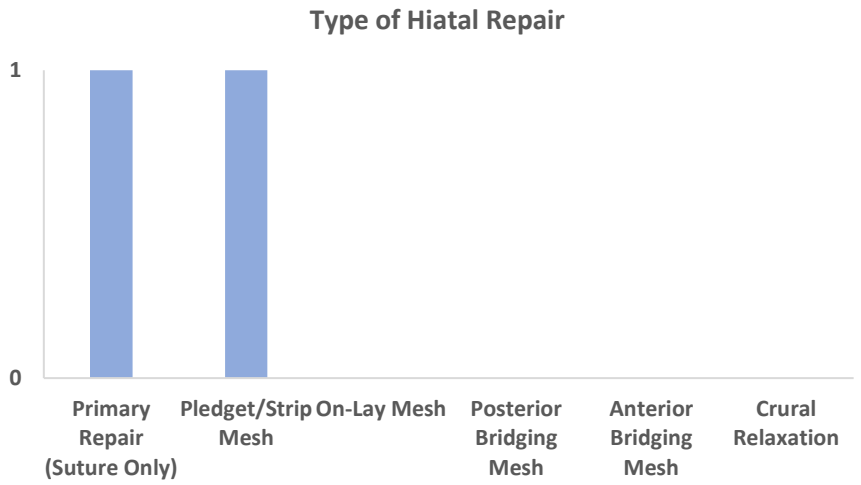
*To appear in statistical analysis the patient must have a complete or in PROM status

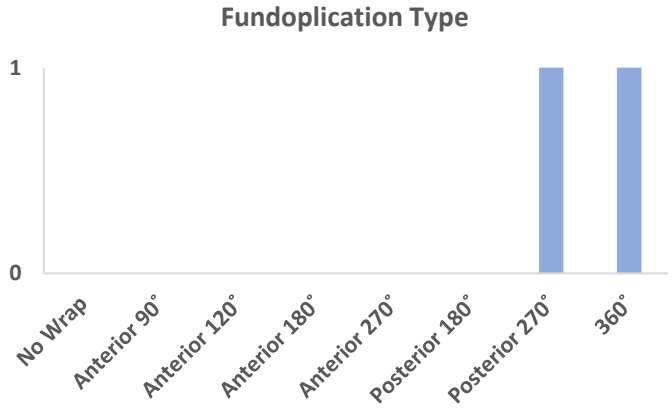


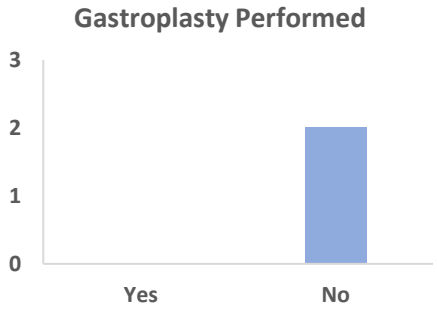




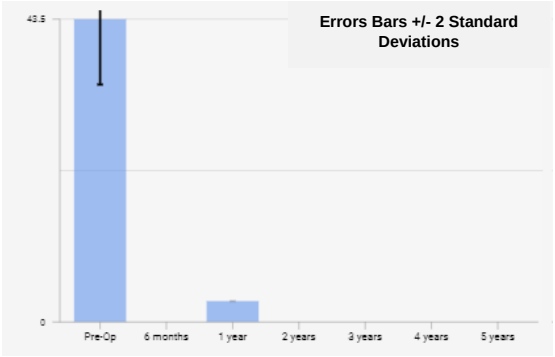








UK GERD-QoL Score PROMs- Revisional Anti-Reflux Surgery



UK GERD-QoL Score PROMs- Revisional Anti-Reflux Surgery

Individual Trusts and Organisations compared to Overall Trusts/Organisations Data — Inside 2 -/+ Standard Deviations — Outside 2 -/+ Standard Deviations

Trust/Organisation Name	Complete Cases	Morbidity	Mortality	Pre-Op QoL (Mean Ave.)	6 month QoL Improvement Score	6 month QoL Improvement -/+	1 year QoL Improvement Score	1 year QoL Improvement -/+	2 year QoL Improvement Score	2 year QoL Improvement -/+	3 year QoL Improvement Score	3 year QoL Improvement -/+	4 year QoL Improvement Score	4 year QoL Improvement -/+	5 year QoL Improvement Score	5 year QoL Improvement -/+
Overall Trusts/Organisations	2	0%	0%	43.5	-	-	3.0	93.1%	-	-	-	-	-	-	-	-
Gloucestershire Hospitals NHS Foundation Trust	1	0%	0%	37.0	-	-	-	-	-	-	-	-	-	-	-	-
Torbay and South Devon NHS Foundation Trust	1	0%	0%	50.0	-	-	3.0	94.0%	-	-	-	-	-	-	-	-

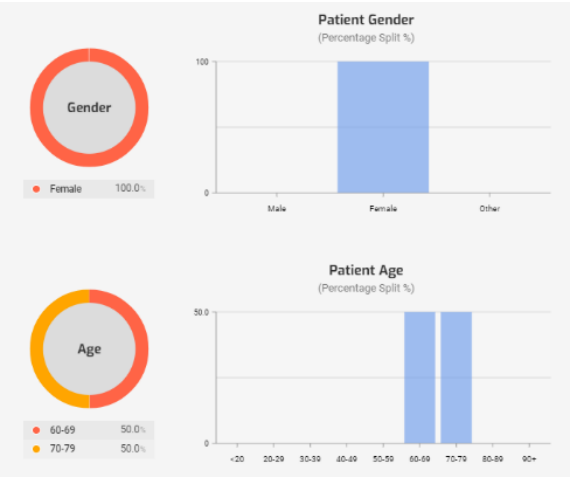
173 trusts found for **Revisional Anti-Reflux Surgery** sorted by name (alphabetically ascending).

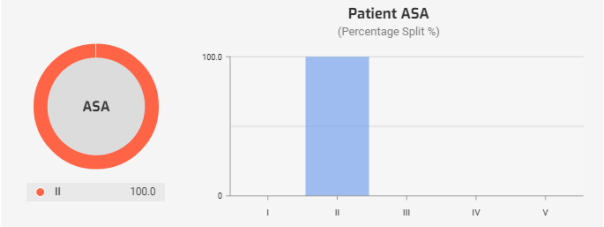
* Outcome data may or may not be representative of all activity in a specific Trust/Organisation.

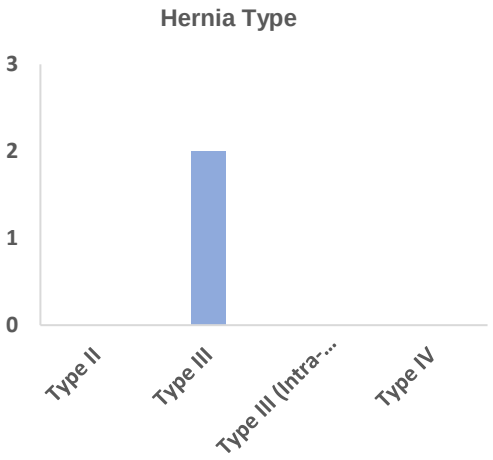
Revisional Hiatal Hernia Surgery- All Trusts/Organisations

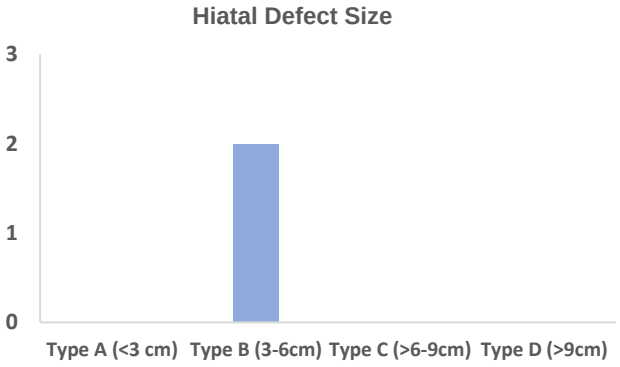
10 registered patients, 8 active, 2 complete

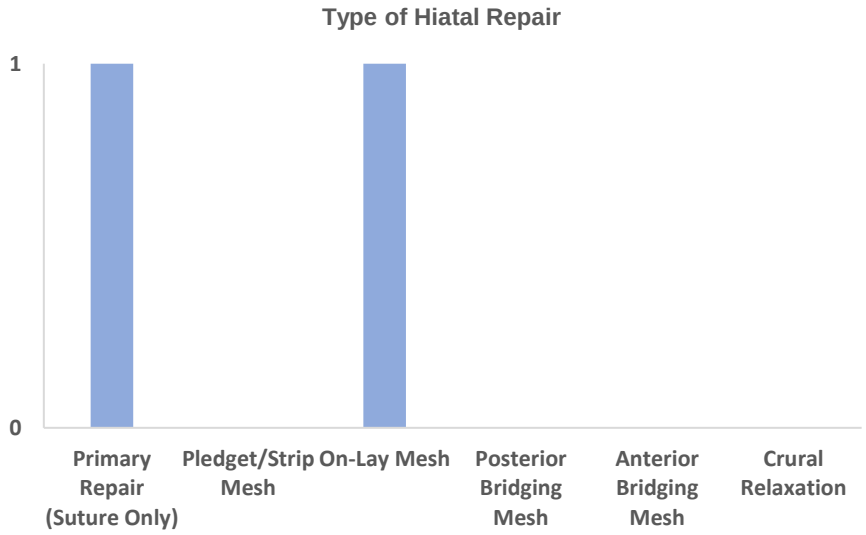
*To appear in statistical analysis the patient must have a complete or in PROM status



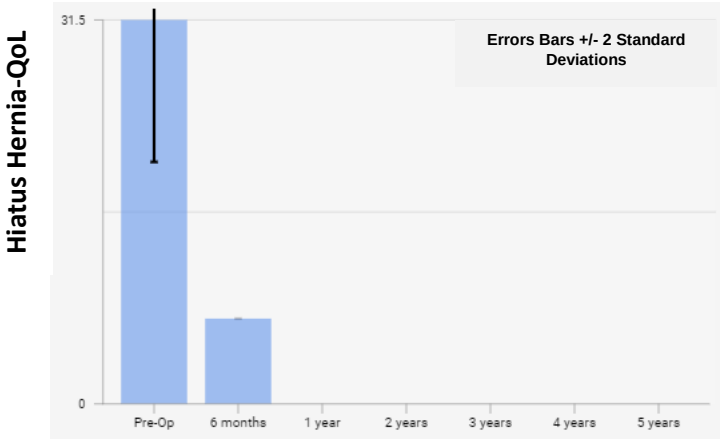








UK Hiatus Hernia-QoL Score PROMs- Revisional Hiatus Hernia Repair



UK Hiatus Hernia-QoL Score PROMs- Revisional Hiatus Hernia Repair

Individual Trusts and Organisations compared to Overall Trusts/Organisations Data Inside 2 -/+ Standard Deviations Outside 2 -/+ Standard Deviations

Trust/Organisation Name	Complete Cases	Morbidity	Mortality	Pre-Op QoL (Mean Ave.)	6 month QoL Improvement Score	6 month QoL Improvement -/+	1 year QoL Improvement Score	1 year QoL Improvement -/+	2 year QoL Improvement Score	2 year QoL Improvement -/+	3 year QoL Improvement Score	3 year QoL Improvement -/+	4 year QoL Improvement Score	4 year QoL Improvement -/+	5 year QoL Improvement Score	5 year QoL Improvement -/+
Overall Trusts/Organisations	2	0%	0%	31.5	-	-	-	-	-	-	-	-	-	-	-	-
Gloucestershire Hospitals NHS Foundation Trust	1	0%	0%	28.0	-	-	-	-	-	-	-	-	-	-	-	-
Southern Health and Social Care Trust	1	0%	0%	35.0	-	-	-	-	-	-	-	-	-	-	-	-

173 trusts found for **Revisional Hiatus Hernia Surgery** sorted by name (alphabetically ascending).

* Outcome data may or may not be representative of all activity in a specific Trust/Organisation.

Currently from the centres that have engaged, the NHSR reports excellent improvement in patient-reported QoL outcomes for all aspects of benign hiatal surgery. Although not yet showing statistically significant improvements in QoL score from pre-procedure baseline, as data sets increase in size, we expect this to become apparent.

Data is currently limited as the Registry is in the infancy of its growth, and only those patients with 'complete or PROM' status can be included for statistical analysis.

We anticipate next year's report to be heavily populated with data (1000+ patients) based on the level of engagement with the first year of the Registry's launch.

1. Introduction to National Hiatal Surgery Registry (NHSR)

Hiatal surgery encompasses surgical procedures for treating benign upper gastrointestinal conditions related to the hiatus of the diaphragm. These pathological conditions include Gastro-Oesophageal Reflux Disease, symptomatic Hiatus Hernias and Achalasia. The surgical procedures described under hiatal surgery include- Anti-Reflux Surgery (both Fundoplication and Magnetic Sphincter Augmentation LINX™), Hybrid Anti-Reflux/Hiatus Hernia Surgery, Primary Hiatus Hernia Repair and Cardiomyotomy; the Registry does not at present include endoluminal procedures.

The current focus in surgery is to ensure standards of safety and quality. Outcomes for the vast majority of hiatal surgery outside the context of emergency intervention (acute hiatus hernia volvulus) are primarily based on long term Quality of Life Improvement (QoLs), of which we have little or no data on a national level. Multiple publications from different centres on long-term outcomes after anti-reflux surgery show us what good outcomes look like in high-volume units with interest in the condition. What is unknown is whether or not all UK providers of hiatal surgery have similar outcomes and patients are receiving equity of care. Experience from other disciplines in Upper GI Surgery suggest the link between outcome quality and volume, it is a reasonable assumption that hiatal surgery is similar.

Hospital Episode Statistics (HES) data can provide a broad measurement of hiatal surgery's safety and quality by providing information on the volume of activity, conversion rates, length of stay and readmission rates. These are essentially short-term outcome performance indicators, but do not provide important information about the longer-term QoL outcome benefits for patients having hiatal procedures. HES has no ability to record this data both now or in the near future.

Currently, hiatal operations are classified by coders using Office of Population Censuses and Surveys (OPCS4) codes to report specific operation types. These codes do not accurately allow classification of the symptoms that are being treated or the operation being performed

anti-reflux surgery carries code G243/G249

hiatus hernia carries code G233

The codes are often bundled together when the primary intent of the surgery is variable, and thus interpretation of outcomes based on these codes is confused. This Registry will use a classification system for defining which type of hiatal pathology is being treated and the specific procedure being provided rather than using the broad OPCS4 codes used by HES. NHSR moves away from the ambiguous system currently used.

Definitions for procedures can be found on the NHSR website or when entering data into the live database and are also detailed below in this report.

The level of detail recorded by the Registry pre-operatively and intra-operatively is currently far beyond what can be obtained and reported from HES. The NHSR committee has selected the information it believes is of most value for surgeons to

audit, compare, and help future practice. The most important function of this Registry is to provide an automated system to collect and report Patient Reported Outcome Measures (PROMs). The Registry is designed to allow patient data entry for both the NHS and Independent Healthcare Sector. Users will be able to download a report about their practice from the Registry dashboard and also be able to download a Surgeons Report benchmarking them against the average outcomes and performance of their peers nationwide. Users can select multiple centres they deliver care from. If Users move hospital, their personal outcomes will follow them, but historical activity will stay within the centre where they performed the surgery.

The process of PROMs follow-up will be automated and conducted by the NHSR administration team, and the data reported back will automatically appear in Users procedure dashboard when received back from patients. NHSR will inform Users if their patient is not responding to follow-up information requests.

The National Hiatal Surgical Registry (NHSR) aims to provide surgeons with an effective tool to be reflective in their surgical practice in treating hiatal disease and benchmark outcomes for hiatal surgical procedures across the UK.

The Registry is free for all GMC registered surgeons with respect to hiatal surgery conducted within the UK for NHS and Independent Sector Practice. That are members of BBUGSS/AUGIS or ALSGBI.

The Registry will record details about patient selection, pre-operative investigations, intra-operative techniques, volumes of practice and, most importantly, outcomes. The Registry has patient reporting outcome measures (PROMs) integral within it. The Registry will automatically contact patients (with their consent-see GDPR policy) about their symptoms at 6 months, 1 year, 2 years, 3 years, 4 years and 5 years after their surgery. For anti-reflux procedures Registry, they will use pre-operative and post-operative GORD-QoL (see downloads page-Downloads – National Hiatal Surgery Registry (nhsr.org)) scores and need for continued anti-acid medication use as outcome measures. For cardiomyotomy surgery, comparison of pre-operative and post-operative Eckhardt scores (see downloads page- Downloads – National Hiatal Surgery Registry (nhsr.org)) are used, and for hiatus hernia repair pre-operative and post-operative Hiatus Hernia-QoL score (see downloads page- Downloads – National Hiatal Surgery Registry (nhsr.org))).

Surgeons will be able to download a personal report based on the information they have entered for the purpose of their appraisal. A National Annual Report will also be delivered yearly at the AUGIS Annual Scientific Meeting. This report will not be at the surgeon level, but at the unit level. Volumes of activity, complication rates, and follow up outcomes will be reported.

Individual surgeon users will only be able to see their individual outcomes, which will be statistically referenced against the average of other surgeons anonymised outcomes for the same conditions. As an NHSR User you will not be able to see other surgeon's outcomes.

The information collected about both surgeons and patients is entirely confidential and will never be shared with any other organisation (see GDPR policy) without Users/their permission. The Registry is governed by AUGIS/BBUGSS and a committee of surgeons and run and maintained by an IT healthcare company bound by GDPR confidentiality law.

2. NHSR Committee:

The NHSR committee members are formally nominated and voted to post by the British Benign Upper Gastrointestinal Surgical Society (BBUGSS) council. The NHSR Committee is overseen by Association of Upper Gastrointestinal Surgeons (AUGIS) Executive Team.

The NHSR constitutes a 6-member Committee, which is as follows:

A. Chairperson
Current Post Holder: Mr. Sayan Bhattacharya, Consultant Surgeon Manchester

B. Clinical Risk Management Lead
Current Post Holder: Prof. Kamal Mahawar, Consultant Surgeon Sunderland

C. Data Protection Lead
Current Post Holder: Prof. YKS Viswanath, Consultant Surgeon South Tees

D. Content Lead
Current Post Holder: Mr. Nagammapudur Balaji, Consultant Surgeon North Midlands

E. Data Analysis Lead
Current Post Holder: Mr. Scott McCain, Consultant Surgeon Belfast

F. Procedure Classification Lead
Current Post Holder: Mr. Guy Finch, Consultant Surgeon Northampton

The structure and function of the committee are as follows:

This consists of 6 voting members, including a chairperson (who carries a casting vote). The quorum comprises at least 3 voting members, including the chairperson (or deputy) and two other NHSR Committee members.

All NHSR committee members including the chair, are selected by application, addressed to the president of BBUGSS and voted in by a transparent process with a 3-year tenancy.

The NHSR Committee is responsible for:

a. Advising on the NHSR dataset, regarding its scope, structure, functionality, compatibility and confidentiality issues.

b. Liaising with the Database provider and other stakeholders.

c. Managing finance agreements and external sponsorship (if necessary) to run the database.

d. Generating and editing annual database reports. Such a report will be initially presented to AUGIS and BBUGSS councils before general release.

e. Address any governance or duty of candour issues that may arise from the NHSR database in conjunction with the Database Provider.

f. All disclosure of outcomes from the NHSR database to external organisations or public members will be through the NHSR Chair/AUGIS Executive Team and Database Provider.

NHSR Committee members are unable to access any individual NHSR User's data.

3. Procedure Definitions/Classifications

There is considerable variation in the description and classification of hiatal surgery throughout the published literature. For the NHSR to be consistent with what is reported by the Registry, Users of the NHSR are asked to follow a classification system described by the British Benign Upper GI Surgical Society Home | British Benign Upper Gastro Intestinal Society (bbugss.com) when entering data.

The Registry's classification system is detailed below.

Primary Anti-Reflux Surgery (Fundoplication)

Primary Anti-Reflux Surgery (Magnetic Sphincter Augmentation LINX™)

Hybrid Anti-Reflux/Hiatus Hernia Repair

Primary Hiatus Hernia Repair

Primary Cardiomyotomy

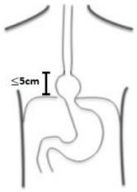
Revisional Anti-Reflux Surgery

Revisional Hiatus Hernia Repair

Revisional Cardiomyotomy

Primary Anti-Reflux Surgery (Fundoplication)

Definition: Elective, lifestyle, anti-reflux surgery with or without a synchronous hiatus hernia repair (type I/type II/type III hiatus hernia <1/3 of the stomach in the chest or ≤ 5 cm migration of GOJ from hiatus) that are associated with small and medium size hiatal defects.



Primary indications for surgery:

Patients in whom the primary symptom is volume reflux/regurgitation.

A confirmed diagnosis of acid reflux and adequate symptom control with medical therapy but do not wish to continue with long-term therapy.

Patient with breakthrough symptoms despite maximum medical therapy.

A confirmed diagnosis of acid reflux and symptoms that respond to medical therapy but who are intolerant of medication side effects.

Atypical symptoms such as aspiration, cough or hoarse voice and confirmed evidence of GORD *(these patients as a group have less successful outcomes than patients with typical symptoms)*.

Anti-Reflux Surgery (Magnetic Sphincter Augmentation LINX)

Definition: Non-anatomical altering**,** life style anti-reflux surgery with or without synchronous hiatus hernia repair with the use of prosthetic implant.

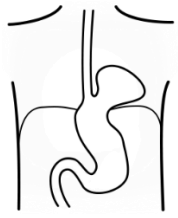
Primary Hiatus Hernia Repair Surgery

Definition: Elective/Urgent/Emergency surgery to correct a primary symptom * +/- associated secondary symptoms ** of a large hiatus hernia (>1/3 of stomach in the chest or GOJ >5 cm from hiatus, includes intra-thoracic stomach). These hernias are para-oesophageal and classified as type III and type IV (very rare type II). They are associated with medium and large hiatal defects. This classification of surgery does not include type I and II smaller hiatus hernias repaired as part of an anti-reflux procedure or large hiatus hernias repaired for a primary indication of reflux.

*** Primary Symptom**
Episode of emergency volvulus/post-prandial chest pain/shortness of breath/nausea and weight loss/dysphagia and weight loss /iron deficiency anaemia (other causes excluded)/major respiratory aspiration event.

**** Secondary Symptom**
Reflux/dyspepsia/post-prandial chest pain/shortness of breath/nausea/dysphagia/weight loss/iron deficiency anaemia (other causes excluded)/minor aspiration respiratory events.

Classification



Type III (Large)

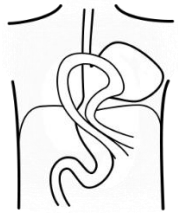
Type III (Large)

Displacement of GOJ >5cm above diaphragmatic hiatus or >1/3 of stomach volume within chest on CT/contrast study.

Type III Intra-Thoracic Stomach

Type III Intra-Thoracic Stomach

Pylorus at, or above level of diaphragmatic hiatus, or if within the abdomen < 5cm distance from diaphragmatic hiatus.



Type IV

Type IV

Another organ above the level of the diaphragmatic hiatus, small/large bowel, pancreas, spleen (not inclusive of omentum).

Type II (Large)

Type II (Large)

>1/3 of stomach volume above level of the hiatus with the GOJ remaining at or below level of diaphragmatic hiatus (RARE).

Hybrid Anti-Reflux/Hiatus Hernia Surgery

Definition: Elective, life style primary intention anti-reflux surgery* +/- associated secondary symptoms ** in the presence of a synchronous large hiatus hernia (>1/3 of stomach in chest or GOJ >5 cm from hiatus, includes intra-thoracic stomach). These hernias are associated with medium and large hiatal defects. This classification of anti-reflux surgery is separate to primary anti-reflux procedures in the presence of smaller type I, II and III hiatus hernias, and does not fall into the same classification as primary hiatus hernia surgery.

*** Primary Symptom**
Reflux

Patients in whom the primary symptom is volume reflux/regurgitation.

A confirmed diagnosis of acid reflux and adequate symptom control with medical therapy but do not wish to continue with long term therapy.

Patient with breakthrough symptoms despite maximum medical therapy.

A confirmed diagnosis of acid reflux and symptoms that respond to medical therapy but who are intolerant of medication side effects.

Atypical symptoms such as aspiration, cough or hoarse voice and confirmed evidence of GORD *(these patients as a group have less successful outcomes than patients with typical symptoms)*.

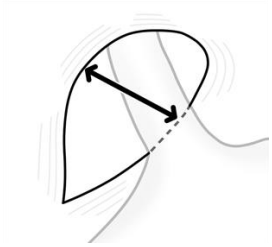
**** Secondary Symptom**
Post-prandial chest pain/shortness of breath/Nausea/Dysphagia/ weight loss/Iron deficiency anaemia.

Primary Cardiomyotomy Surgery

Elective surgery to correct symptoms of a diagnosis of Achalasia which may or may not have previously been treated with Botox or pneumatic dilation.

Hiatal Defects

Classification System
The defect is measured intra-operatively at the widest transverse point of the hiatus after oesophageal mobilisation.



Hiatal Defect Measurement

Hiatal Defect Measurements

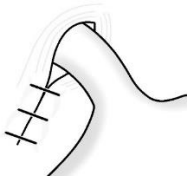
Type A (Small Hiatal Defect) < 3 cm

Type B (Medium Hiatal Defect) 3 - 6 cm

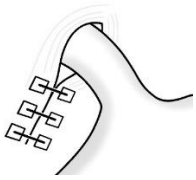
Type C (Large Hiatal Defect) > 6 – 9 cm

Type D (Giant Hiatal Defect) > 9 cm

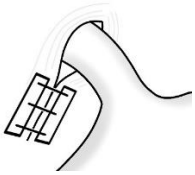
Hiatal Defect Repair Classification



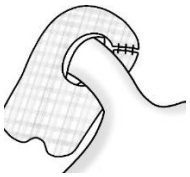
Primary Suture Repair



Pledget Mesh Repair



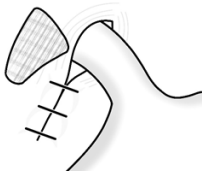
Strip Mesh Repair



On-Lay Mesh Repair

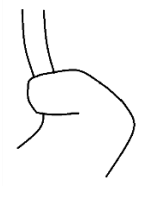
Posterior Bridge Mesh Repair

Anterior Bridge Mesh Repair



Diaphragm Relaxation Mesh

Fundoplication Types



Partial Anterior Fundoplication (Including 90˚/120˚/180˚)

Partial Posterior Fundoplication (Including 180˚/270˚)

360 Degree Fundoplication

Revisional Anti-Reflux Surgery (BBUGSS Classification)

Definition: Elective revisional surgery to correct symptoms after previous fundoplication or LINX procedures (excludes acute complications of primary procedure).

Classification of previous Anti-Reflux surgery failure requiring revisional surgery

Type I: In-situ fundoplication disruption.

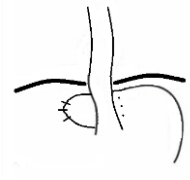
Type II: In-situ fundoplication slip.

Type III: Trans-hiatal fundoplication migration.

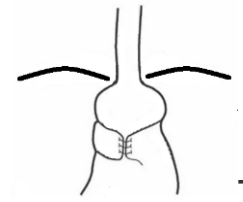
Type IV: Mixed fundoplication disruption and trans-hiatal fundoplication migration.

Type V: Trans-hiatal fundoplication slip.

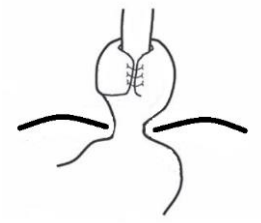
Type VI: LINX failure (migration/erosion/persistent dysphagia/poor symptom control).



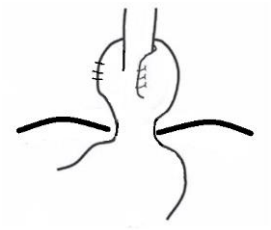
Type I In-Situ Fundoplication Disruption



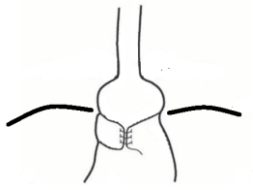
Type II In-Situ Fundoplication Slip



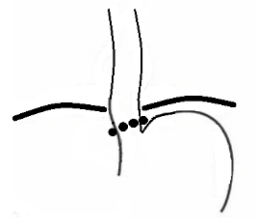
Type III Trans-Hiatal Fundoplication Herniation



Type IV Mixed Fundoplication Disruption and Trans-Hiatal Wrap Herniation



Type V Fundoplication Slip Herniation



Type VI LINX Failure

Indications for surgery

Troublesome persistent dysphagia following previous anti-reflux/LINX surgery (resistant to non-surgical therapy).

Patients in whom the primary symptom is volume reflux/regurgitation despite previous anti-reflux/LINX surgery.

A confirmed diagnosis of recurrent acid reflux after previous anti-reflux/LINX surgery and adequate symptom control with medical therapy but do not wish to continue with long term therapy.

Patient with breakthrough symptoms despite maximum medical therapy for recurrent reflux after previous anti-reflux/LINX surgery.

A confirmed diagnosis of acid reflux in patients following previous anti-reflux surgery/LINX and symptoms that respond to medical therapy but who are intolerant of medication side effects.

Atypical symptoms such as aspiration, cough or hoarse voice and confirmed evidence of GORD in patients treated previously with anti-reflux/LINX surgery *(these patients as a group have less successful outcomes than patients with typical symptoms)*.

LINX explant for erosion/migration.

LINX explant for psychological reasons.

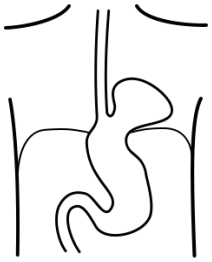
Revisional Hiatus Hernia Surgery

Definition: Elective/Urgent/Emergency *revisional surgery* to correct a recurrent primary symptom * +/- associated secondary symptoms ** with evidence of a recurrent hiatus hernia (>1/3 of stomach in chest or GOJ >5 cm from hiatus), excludes acute complications of primary procedure.

*** Primary Symptom**
Episode of emergency volvulus/post-prandial chest pain/shortness of breath/nausea and weight loss/dysphagia and weight loss /iron deficiency anaemia (other causes excluded)/major respiratory aspiration event.

**** Secondary Symptom**
Reflux/dyspepsia/post-prandial chest pain/shortness of breath/nausea/dysphagia/weight loss/iron deficiency anaemia (other causes excluded)/minor aspiration respiratory events.

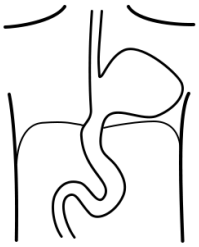
Classification of Recurrence



Type III (Large)

Recurrent Type III (Large)

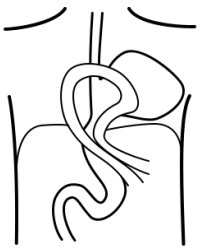
Displacement of GOJ >5cm above diaphragmatic hiatus or >1/3 of stomach volume within chest on CT/contrast study.



Type III Intra-Thoracic Stomach

Recurrent Type III Intra-Thoracic Stomach

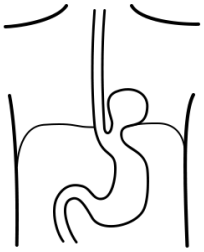
Pylorus at, or above level of diaphragmatic hiatus, or if within the abdomen < 5cm distance from diaphragmatic hiatus.



Type IV

Recurrent Type IV

Another organ above the level of the diaphragmatic hiatus, small/large bowel, pancreas, spleen (not inclusive of omentum).



Type II (Large)

Recurrent Type II (Large)

>1/3 of stomach volume above level of the hiatus with the GOJ remaining at or below level of diaphragmatic hiatus (RARE).

Revisional Cardiomyotomy Surgery

Elective revisional surgery to correct symptoms of a diagnosis of recurrent Achalasia after previous treatment- includes previous cardiomyotomy surgery or POEM, *not Botox and pneumatic dilatation (*excludes acute complications of the primary procedure).

4. Outcome Measures Recorded for NHSR

The Registry will record User entered details about patient selection, pre-operative investigations, intra-operative techniques, volumes of practice.

This includes:

Age (at time of surgery)	DeMeester Score
BMI	Radiological Investigation
ASA	Procedure type
Care Type NHS/Private	Method Open/Lap/Robotic/Converted
Centre of Practice	Day Case/ Inpatient
Symptom Presentation	Hiatal Defect Size
Pre-Procedure QoL Score	Fundoplication type/LINX Size
Use of Anti Acid Medication	Gastroplasty Required
Oesophagitis/Barretts Present	Morbidity
pH/Manometry	Mortality
Length of Stay	90-day Readmission

The Registry has patient reporting outcome measures (PROMs) integral within it. The Registry will automatically contact patients (with their consent-see GDPR policy) with regard to their symptoms at 6 months, 1 year, 2 years, 3 years, 4 years and 5 years after their surgery.

For Anti-Reflux and Hybrid Anti-Reflux/Hiatus Hernia Surgery procedures the Registry will use GORD-QoL scores (see downloads page-Downloads – National Hiatal Surgery Registry (nhsr.org) and need for continued anti-acid medication use as outcome measures.

For Cardiomyotomy Surgery, comparison of pre-operative and post-operative Eckhardt scores (see downloads page Downloads – National Hiatal Surgery Registry (nhsr.org)) are used.

For Hiatus Hernia Repair pre-operative and post-operative Hiatus Hernia-QoL score (see downloads page Downloads – National Hiatal Surgery Registry (nhsr.org)).

5. Data Collection, Storage, and Security and Confidentiality

Data Governance is an important part of this national level project. It is vitally important that data is safe and compliant with all data protection laws and governing bodies. The data safety of patients and NHSR Users is critical and deliberately kept to a minimum but still allow functionality for its purpose.

No User (including Committee Member) can access another User's data, all activity and access events within the databased is logged and audited.

The Registry's service is under the control of AUGIS Executive Council/BBUGSS and governed by the NHSR Committee. The NHSR and its webpages are operated on behalf of AUGIS/BBUGSS by Riviera Surgery LLP, a IT Healthcare Company registered in England and Wales. Riviera Surgery LLP registered office is: Westbury Hill, Bristol, Avon, BS9 3QA. The company registration number is OC429838. Riviera Surgery LLP is a registered Data Controller with the Information Commissioner's Office (ICO) under registration number ZA645133. This means that Riviera Surgery LLP is responsible for, and control the processing of any potentially identifiable information we collect about patients and users.

Any data loss/hack/corrupted/unauthorised access is reportable to ICO/CQC for which the NHSR management company is responsible.

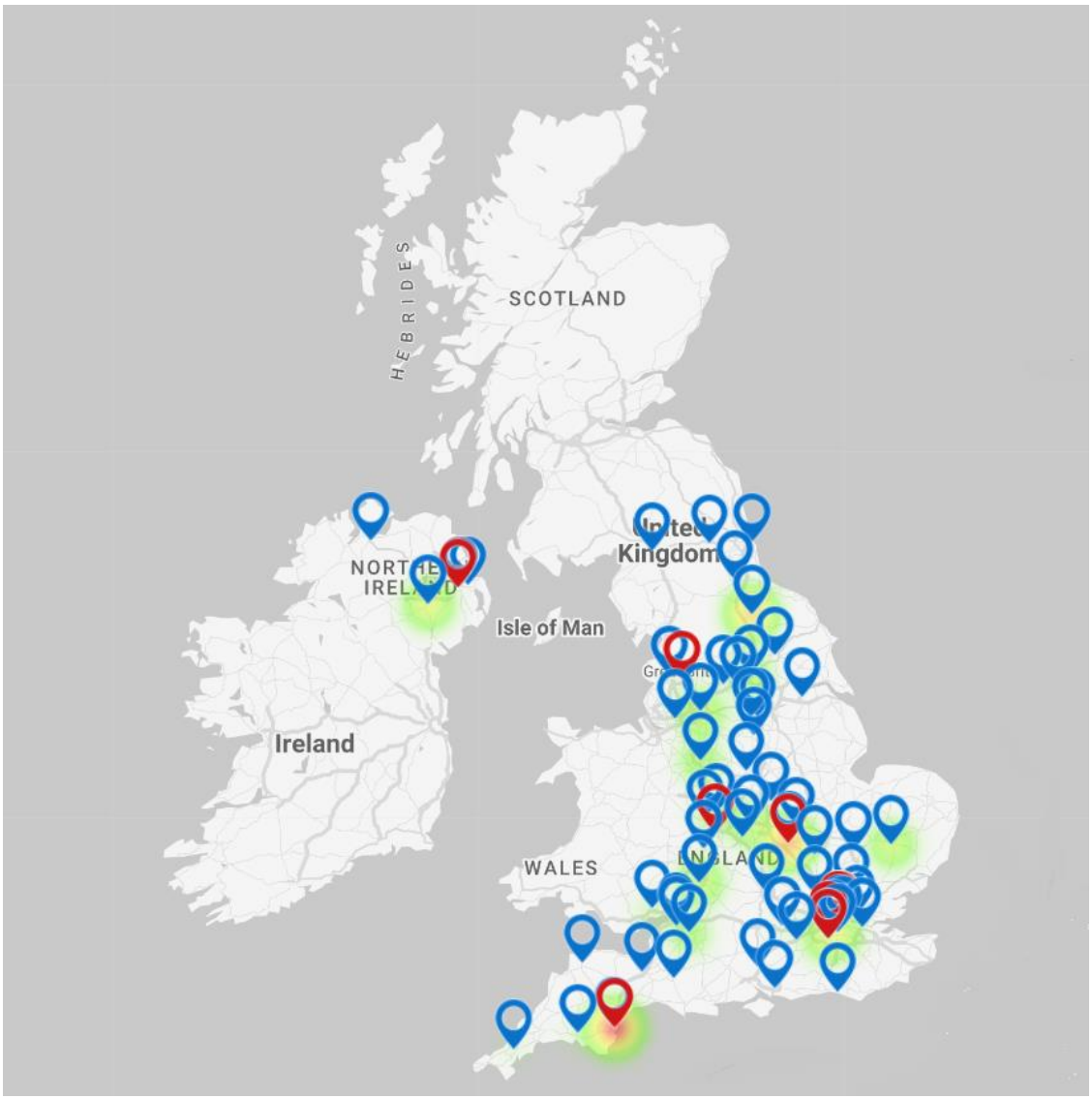
Details of Riviera Surgery LLP notification to the regulator for data protection, may be found in the ICO's Public Register of Data Controllers at www.ico.org.uk. Riviera Surgery LLP is registered and data safety regulated by Care Quality Commission (CQC), (CQC CRT-9418357166), Riviera Surgery LLP is registered with NHS Digital and compliant with Data Security and Protection (NHS Digital- C9G2R).

Data entered into the NHSR is identified legally as a limited healthcare record, users of the NHSR are required to comply with the Terms and Conditions Policy Terms & Conditions – National Hiatal Surgery Registry (nhsr.org).

The data entered is completely confidential at the individual surgeon level, no other person/organisation has access now or in the future to the data you enter without User permission unless required to by law. Outcome data will be available in the public domain at the Hospital Trust/Private Healthcare Organisation level.

6. Current Engagement with NHSR

Registration with NHSR is currently with 70 NHS trusts or Private Organisations within the UK



NHS Trusts and Private Healthcare Organization's Registered with NHSR

NHS Centres of Practice Registered with NHSR

Private Centres of Practice Registered with NHSR

All NHS/Private Healthcare Organisations Currently Registered with NHSR- (centres that have entered at least one patient are in bold)

Trust/Organisation Name	Consultants		Patients		
	Total	Active	Active	Complete	Total
All Trusts/Organisations	**92**	**27**	**141**	**66**	**207**
Aneurin Bevan University Health Board	1	0	0	0	0
Aspen Healthcare	4	0	0	0	0
BMI Healthcare	12	2	1	6	7
Barking, Havering and Redbridge University Hospitals NHS Trust	1	0	0	0	0
Bedfordshire Hospitals NHS Foundation Trust	1	0	0	0	0
Belfast Health and Social Care Trust	1	0	0	0	0
Burcot Hall Bromsgrove	1	0	0	0	0
Calderdale and Huddersfield NHS Foundation Trust	1	0	0	0	0
Cambridge University Hospitals NHS Foundation Trust	2	0	0	0	0
Chesterfield Royal Hospital NHS Foundation Trust	3	0	0	0	0
County Durham and Darlington NHS Foundation Trust	1	0	0	0	0
Croydon Health Services NHS Trust	1	1	13	0	13
Dartford and Gravesham NHS Trust	1	0	0	0	0
Epsom and St. Helier University Hospitals NHS Trust	1	1	9	0	9
Frimley Health NHS Foundation Trust	1	0	0	0	0
Gloucestershire Hospitals NHS Foundation Trust	3	1	3	8	11
Guy's and St. Thomas' NHS Foundation Trust	1	0	0	0	0
Hampshire Hospitals NHS Foundation Trust	2	0	0	0	0
Kettering General Hospital NHS Foundation Trust	1	0	0	0	0
King's College Hospital NHS Foundation Trust	1	0	0	0	0
Kingsbridge Private Hospital Belfast	3	0	0	0	0
Lancashire Teaching Hospitals NHS Foundation Trust	2	0	0	0	0
Leeds Teaching Hospitals NHS Trust	2	2	3	4	7
Lewisham and Greenwich NHS Trust	2	0	0	0	0
London Bridge Hospital	2	0	0	0	0
Manchester University NHS Foundation Trust	2	1	4	7	11
Mid Yorkshire Hospitals NHS Trust	1	0	0	0	0
New Victoria Hospital	1	0	0	0	0
North Bristol NHS Trust	1	0	0	0	0
North Cumbria Integrated University Hospitals NHS Trust	1	0	0	0	0
Northamptonshire Healthcare NHS Foundation Trust	3	2	14	4	18
Northern Devon Healthcare NHS Trust	1	0	0	0	0
Northern Lincolnshire and Goole NHS Foundation Trust	1	0	0	0	0
Northumbria Healthcare NHS Foundation Trust	1	0	0	0	0
Nottingham University Hospitals NHS Trust	1	0	0	0	0
Nuffield Health	12	1	1	0	1
Oxford University Hospitals NHS Foundation Trust	1	0	0	0	0
Portsmouth Hospitals NHS Trust	2	0	0	0	0
Ramsay Health Care UK	10	1	1	0	1
Royal Berkshire NHS Foundation Trust	1	1	1	0	1
Royal Cornwall Hospitals NHS Trust	1	1	1	0	1
Royal United Hospitals Bath NHS Foundation Trust	1	1	4	1	5
Sandwell and West Birmingham Hospitals NHS Trust	2	2	4	1	5
Sheffield Teaching Hospitals NHS Foundation Trust	1	1	1	0	1
South Eastern Health and Social Care Trust	2	0	0	0	0
South Tees Hospitals NHS Foundation Trust	1	1	31	2	33
South Tyneside and Sunderland NHS Foundation Trust	1	0	0	0	0
South Warwickshire NHS Foundation Trust	1	0	0	0	0
Southern Health and Social Care Trust	1	1	15	3	18
Spire Healthcare Group	14	0	0	0	0
St. George's University Hospitals NHS Foundation Trust	2	0	0	0	0
Taunton and Somerset NHS Foundation Trust	1	0	0	0	0
The Dudley Group NHS Foundation Trust	1	1	3	0	3
The Princess Alexandra Hospital NHS Trust	1	0	0	0	0
The Rotherham NHS Foundation Trust	1	0	0	0	0
Torbay and South Devon NHS Foundation Trust	6	6	18	19	37
Ulster Independent Clinic	3	0	0	0	0
University Hospital of Derby and Burton NHS Foundation Trust	1	0	0	0	0
University Hospitals Bristol and Weston NHS Foundation Trust	1	0	0	0	0
University Hospitals Coventry and Warwickshire NHS Trust	3	1	1	5	6
University Hospitals Plymouth NHS Trust	1	0	0	0	0
University Hospitals Sussex NHS Foundation Trust	1	0	0	0	0
University Hospitals of Leicester NHS Trust	1	0	0	0	0
University Hospitals of North Midlands NHS Trust	2	1	3	3	6
Warrington and Halton Hospitals NHS Foundation Trust	1	0	0	0	0
West Hertfordshire Hospitals NHS Trust	1	0	0	0	0
West Suffolk NHS Foundation Trust	2	2	10	3	13
Western Health and Social Care Trust	1	0	0	0	0
Worcestershire Acute Hospitals NHS Trust	1	0	0	0	0
Yeovil District Hospital NHS Foundation Trust	1	0	0	0	0
York Teaching Hospital NHS Foundation Trust	6	0	0	0	0

7. Outcome Report from last 12 months

Overall Procedure Outcome Data Analysis Methodology

Descriptive Statistics

Assumption: QoLs follow normal distribution of data

The normal distribution: 68% of data is within ± 1 standard deviations from the mean. **95% of data is within ± 2 standard deviations from the mean**. 99.7% of data is within ± 3 standard deviations from the mean.

QoL Scores are mean average.

The reference for NHSR QoL pre-operative outcomes is calculated as a mean average of all pre-operative QoL scores for that particular procedure type across all data entered from all Users in all Centres in the NHSR.

This data value then has 2 standard deviations range calculated. This is the master reference value of QoLs.

This algorithm is repeated for post procedure PROMs scores to produce a post procedure PROMs profile for each procedure type.

The NHSR calculates individual Users and Centres comparison data in a similar method, only that User's data (for individual Users reports) or Centre's data (for Centre report) is excluded from the master reference data in the calculation for comparison.

A greater than 2 standard deviations difference from mean value between master QoL value compared to the referenced QoL value for either individual User or Centre is defined as significant difference.

Percentage QoL change between pre-operative and post-operative scores is for information only, it represents an average percentage change and has no statistical value.

Primary Anti-Reflux Surgery (Fundoplication) - All UK Trusts/Private Health Care Organisations

75 registered patients, 52 active, 23 complete

Individual Trusts and Organisations compared to Overall Trusts/Organisations Data — Inside 2 -/+ Standard Deviations — Outside 2 -/+ Standard Deviations

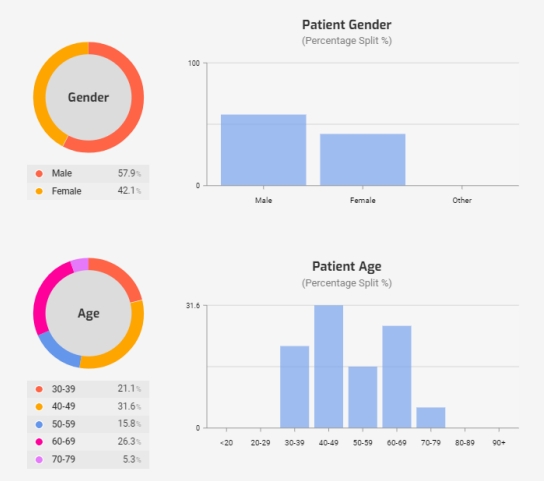
Trust/Organisation Name	Complete Cases	Morbidity	Mortality	Pre-Op QoL (Mean Ave.)	6 month QoL Improvement Score	6 month QoL Improvement -/+	1 year QoL Improvement Score	1 year QoL Improvement -/+	2 year QoL Improvement Score	2 year QoL Improvement -/+	3 year QoL Improvement Score	3 year QoL Improvement -/+	4 year QoL Improvement Score	4 year QoL Improvement -/+	5 year QoL Improvement Score	5 year QoL Improvement -/+
Overall Trusts/Organisations	23	0%	0%	28.1	6.7	76.2%	3.0	89.3%	-	-	-	-	-	-	-	-
Aneurin Bevan University Health Board [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aspen Healthcare [4]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barking, Havering and Redbridge University Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bedfordshire Hospitals NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Belfast Health and Social Care Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BMI Healthcare [12]	4	0%	0%	24.0	7.0	70.8%	-	-	-	-	-	-	-	-	-	-
Burcot Hall Bromsgrove [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Calderdale and Huddersfield NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cambridge University Hospitals NHS Foundation Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chesterfield Royal Hospital NHS Foundation Trust [3]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
County Durham and Darlington NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Croydon Health Services NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dartford and Gravesham NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Epsom and St. Helier University Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Frimley Health NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gloucestershire Hospitals NHS Foundation Trust [3]	3	0%	0%	28.0	2.3	91.8%	-	-	-	-	-	-	-	-	-	-
Guy's and St. Thomas' NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hampshire Hospitals NHS Foundation Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kettering General Hospital NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
King's College Hospital NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kingsbridge Private Hospital Belfast [3]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lancashire Teaching Hospitals NHS Foundation Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Leeds Teaching Hospitals NHS Trust [2]	2	0%	0%	33.0	10.0	69.7%	-	-	-	-	-	-	-	-	-	-
Lewisham and Greenwich NHS Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
London Bridge Hospital [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Manchester University NHS Foundation Trust [2]	4	0%	0%	41.3	5.8	86.0%	-	-	-	-	-	-	-	-	-	-
Mid Yorkshire Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Victoria Hospital [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
North Bristol NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
North Cumbria Integrated University Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Northamptonshire Healthcare NHS Foundation Trust [3]	1	0%	0%	8.0	1.0	87.5%	-	-	-	-	-	-	-	-	-	-
Northern Devon Healthcare NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Northern Lincolnshire and Goole NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Northumbria Healthcare NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nottingham University Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nuffield Health [12]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oxford University Hospitals NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Portsmouth Hospitals NHS Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ramsay Health Care UK [10]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Royal Berkshire NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Royal Cornwall Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

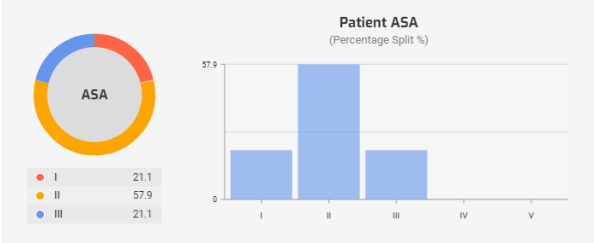
Royal United Hospitals Bath NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sandwell and West Birmingham Hospitals NHS Trust [2]	1	0%	0%	19.0	1.0	94.7%	-	-	-	-	-	-	-	-	-	-
Sheffield Teaching Hospitals NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
South Eastern Health and Social Care Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
South Tees Hospitals NHS Foundation Trust [1]	1	0%	0%	24.0	1.0	95.8%	-	-	-	-	-	-	-	-	-	-
South Tyneside and Sunderland NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
South Warwickshire NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern Health and Social Care Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spire Healthcare Group [14]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
St. George's University Hospitals NHS Foundation Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Taunton and Somerset NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
The Dudley Group NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
The Princess Alexandra Hospital NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
The Rotherham NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Torbay and South Devon NHS Foundation Trust [6]	2	0%	0%	27.0	2.0	92.6%	3.0	88.9%	-	-	-	-	-	-	-	-
Ulster Independent Clinic [3]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
University Hospital of Derby and Burton NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
University Hospitals Bristol and Weston NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
University Hospitals Coventry and Warwickshire NHS Trust [3]	2	0%	0%	31.5	20.5	34.9%	-	-	-	-	-	-	-	-	-	-
University Hospitals of Leicester NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
University Hospitals of North Midlands NHS Trust [2]	1	0%	0%	15.0	9.0	40.0%	-	-	-	-	-	-	-	-	-	-
University Hospitals Plymouth NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
University Hospitals Sussex NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Warrington and Halton Hospitals NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
West Hertfordshire Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
West Suffolk NHS Foundation Trust [2]	2	0%	0%	26.5	9.0	66.0%	-	-	-	-	-	-	-	-	-	-
Western Health and Social Care Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Worcestershire Acute Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yeovil District Hospital NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
York Teaching Hospital NHS Foundation Trust [6]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

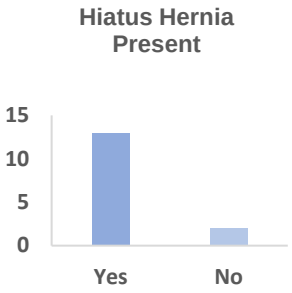
173 trusts found for **Primary Anti-Reflux Surgery (Fundoplication)** sorted by name (alphabetically ascending).

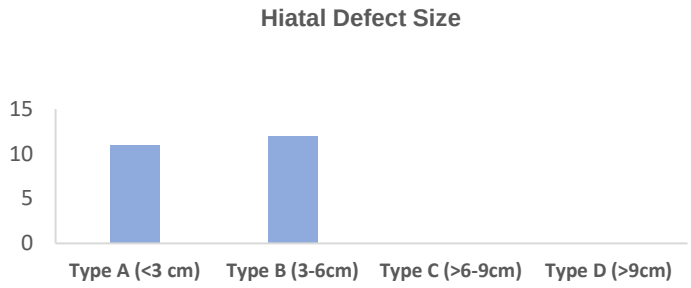
* Outcome data may or may not be representative of all activity in a specific Trust/Organisation.

Primary Anti-Reflux Surgery (Fundoplication)- All Centres Data

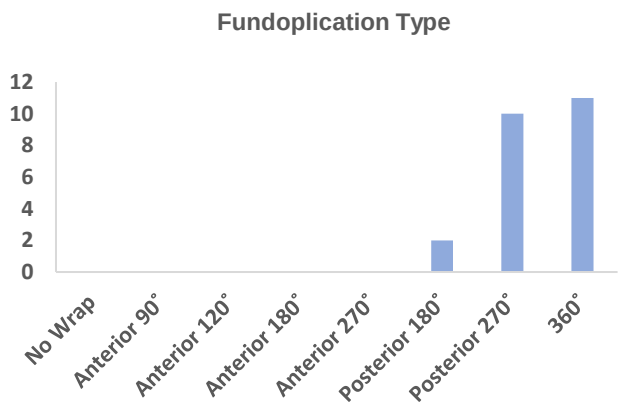


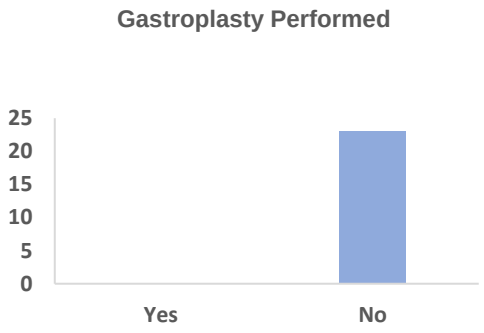



Hiatus Hernia Present
15
10
5
0
Yes
No

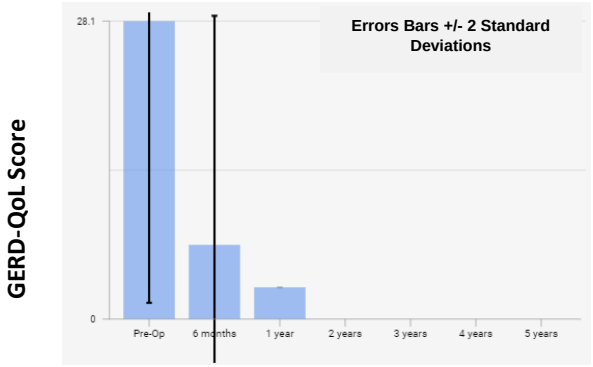

Hiatal Defect Size
15
10
5
0
Type A (<3 cm)
Type B (3-6cm)
Type C (>6-9cm)
Type D (>9cm)


Type of Hiatal Repair
25
20
15
10
5
0
Primary Repair (Suture Only)
Pledget/Strip On-Lay Mesh
Bridging Mesh
Crural Relaxation


Fundoplication Type
12
10
8
6
4
2
0
No Wrap
Anterior 90˚
Anterior 120˚
Anterior 180˚
Anterior 270˚
Posterior 180˚
Posterior 270˚
360˚


Gastroplasty Performed
25
20
15
10
5
0
Yes
No

UK GERD-QoL Score PROMs- Primary Anti-Reflux Surgery (Fundoplication)



Primary Anti-Reflux Surgery (Fundoplication)						
Total	**23**					
Sex						
Male/Female/Other	**12**	**11**	-			
Age						
Median	**52**					
Range	**33-77**					
Episodes						
Day Case	**4 (17.4%)**					
Inpatient	**19(82.6%)**					
Time on Waiting List (Days)						
Median	**89**					
Range	**27-810**					
Method						
Open	**-**					
Laparoscopic	**23 (100%)**					
Robotic	**-**					
Converted	**-**					
Hiatus Hernia Present	Yes	No				
	20	**3**				
Hiatal Defect	Type A (<3 cm)	Type B (3-6cm)	Type C (>6-9cm)	Type D (>9cm)		
	11	**12**	**-**	**-**		
Hiatal Repair	Primary Suture	Pledget/Strip Mesh	On-Lay Mesh	Bridging Mesh	Crural Relaxation	
	23	**-**	**-**	**-**	**-**	
Fundoplication Type	Anterior Partial 90˚	Anterior Partial 120˚	Anterior Partial 180˚	Posterior Partial 180˚	Posterior Partial 270˚	360˚ Complete
	-	**-**	**-**	**2**	**10**	**11**
Gastroplasty	Yes	No				
	0	**23**				
Length of Stay (Days)						
Median	**1**					
Range	**0-4**					
Complications						
Morbidity (Overall)	**1 (5.3%)**					
Return to Theatre	**1**					
Readmission (90 Days)	**3 (13.0%)**					
Mortality	**-**					
QoL Outcomes						
	Mean	**Range**	**SD**			
Pre-Procedure QoL	28.1	8-48	11.3			
6 Month QoL	7.0	1-32	9.2			
1 Year QoL	3.0	3-3	-			
2 Year QoL	-	-	-			
3 Year QoL	-	-	-			
4 Year QoL	-	-	-			
5 Year QoL	-	-	-			

Primary Anti-Reflux Surgery (Magnetic Sphincter Augmentation LINX™) - All UK Trusts/Private Health Care Organisations

16 registered patients, 14 active, 2 complete

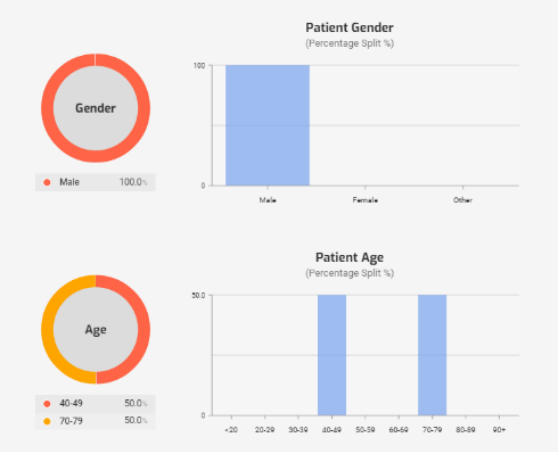
Individual Trusts and Organisations compared to Overall Trusts/Organisations Data — Inside 2 -/+ Standard Deviations — Outside 2 -/+ Standard Deviations

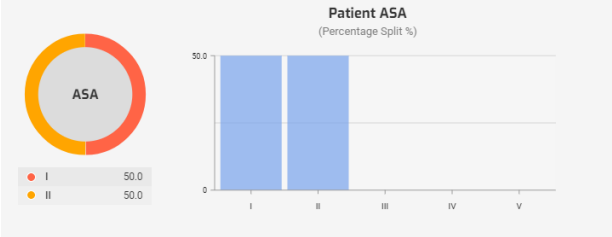
Trust/Organisation Name	Complete Cases	Morbidity	Mortality	Pre-Op QoL (Mean Ave.)	6 month QoL Improvement Score	6 month QoL Improvement -/+	1 year QoL Improvement Score	1 year QoL Improvement -/+	2 year QoL Improvement Score	2 year QoL Improvement -/+	3 year QoL Improvement Score	3 year QoL Improvement -/+	4 year QoL Improvement Score	4 year QoL Improvement -/+	5 year QoL Improvement Score	5 year QoL Improvement -/+
Overall Trusts/Organisations	**2**	**0%**	**0%**	**20.5**	**3.5**	**82.9%**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Aneurin Bevan University Health Board [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aspen Healthcare [4]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barking, Havering and Redbridge University Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bedfordshire Hospitals NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Belfast Health and Social Care Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BMI Healthcare [12]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Burcot Hall Bromsgrove [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Calderdale and Huddersfield NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cambridge University Hospitals NHS Foundation Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chesterfield Royal Hospital NHS Foundation Trust [3]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
County Durham and Darlington NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Croydon Health Services NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dartford and Gravesham NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Epsom and St. Helier University Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Frimley Health NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gloucestershire Hospitals NHS Foundation Trust [3]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Guy's and St. Thomas' NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hampshire Hospitals NHS Foundation Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kettering General Hospital NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
King's College Hospital NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kingsbridge Private Hospital Belfast [3]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lancashire Teaching Hospitals NHS Foundation Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Leeds Teaching Hospitals NHS Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lewisham and Greenwich NHS Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
London Bridge Hospital [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Manchester University NHS Foundation Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mid Yorkshire Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Victoria Hospital [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
North Bristol NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
North Cumbria Integrated University Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Northamptonshire Healthcare NHS Foundation Trust [3]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Northern Devon Healthcare NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Northern Lincolnshire and Goole NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Northumbria Healthcare NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nottingham University Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nuffield Health [12]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oxford University Hospitals NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Portsmouth Hospitals NHS Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ramsay Health Care UK [10]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Royal Berkshire NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Royal Cornwall Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Royal United Hospitals Bath NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sandwell and West Birmingham Hospitals NHS Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sheffield Teaching Hospitals NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
South Eastern Health and Social Care Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
South Tees Hospitals NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
South Tyneside and Sunderland NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

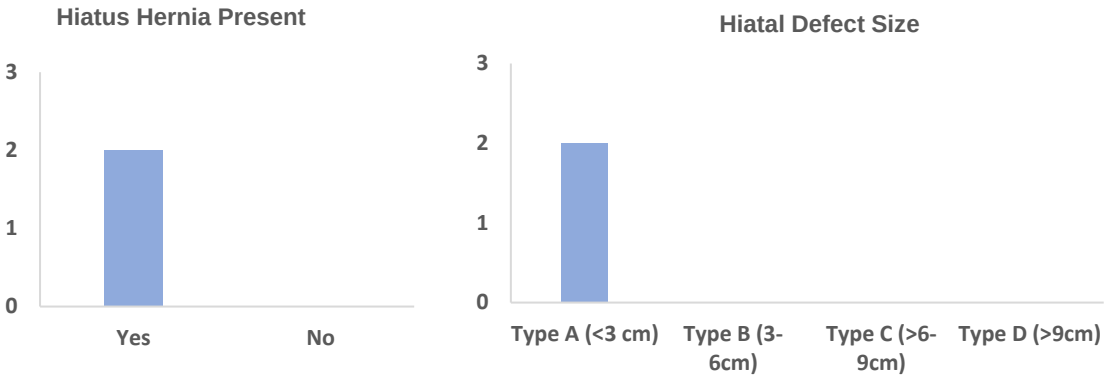
South Warwickshire NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern Health and Social Care Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spire Healthcare Group [14]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
St. George's University Hospitals NHS Foundation Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Taunton and Somerset NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
The Dudley Group NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
The Princess Alexandra Hospital NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
The Rotherham NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Torbay and South Devon NHS Foundation Trust [6]	2	0%	0%	20.5	3.5	82.9%	-	-	-	-	-	-	-	-	-	-
Ulster Independent Clinic [3]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
University Hospital of Derby and Burton NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
University Hospitals Bristol and Weston NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
University Hospitals Coventry and Warwickshire NHS Trust [3]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
University Hospitals of Leicester NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
University Hospitals of North Midlands NHS Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
University Hospitals Plymouth NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
University Hospitals Sussex NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Warrington and Halton Hospitals NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
West Hertfordshire Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
West Suffolk NHS Foundation Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Western Health and Social Care Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Worcestershire Acute Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yeovil District Hospital NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
York Teaching Hospital NHS Foundation Trust [6]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

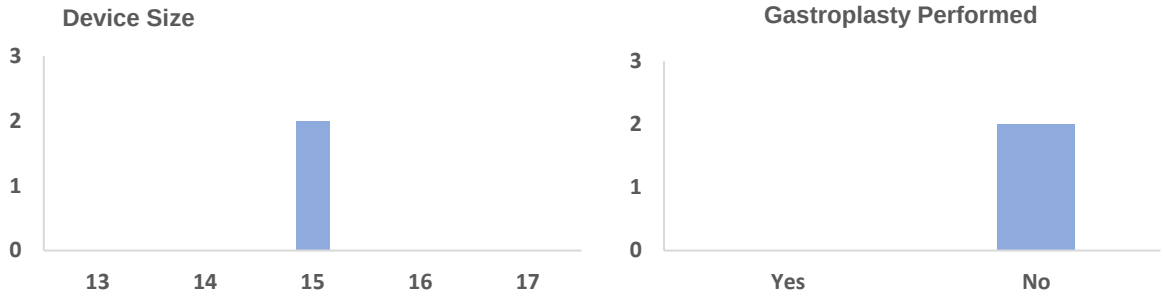
173 trusts found for **Primary Anti-Reflux Surgery (Magnetic Sphincter Augmentation LINX™)** sorted by name (alphabetically ascending).

* Outcome data may or may not be representative of all activity in a specific Trust/Organisation.

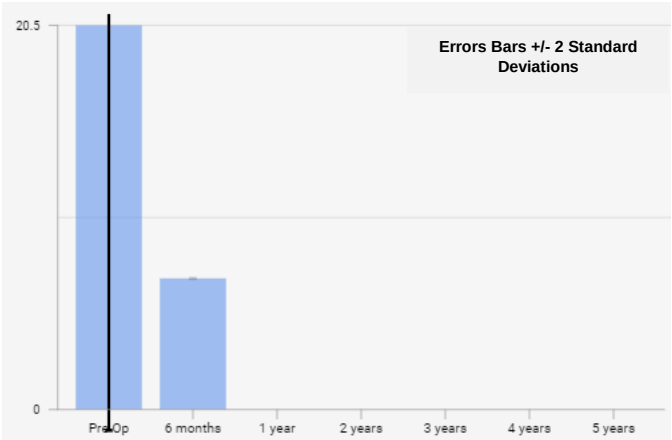








UK GERD-QoL Score PROMs- Primary Anti-Reflux Surgery (Magnetic Sphincter Augmentation LINX™)



Primary Anti-Reflux Surgery (Magnetic Sphincter Augmentation LINX™)					
Total	**2**				
Sex					
Male/Female/Other	**2**	**-**	**-**		
Age					
Median	**58.5**				
Range	**45-72**				
Episodes					
Day Case	**1 (50%)**				
Inpatient	**1 50%)**				
Time on Waiting List					
Median (Days)	**68**				
Range (Days)	**36-100**				
Method					
Open	-				
Laparoscopic	**2 (100%)**				
Robotic	-				
Converted	-				
Hiatus Hernia Present	Yes		No		
	2		**-**		
Hiatal Defect	Type A (<3 cm)	Type B(3-6cm)	Type C (>6-9cm)	Type D (>9cm)	
	2	**-**	**-**	**-**	
Hiatal Repair	Primary Suture	Pledget/Strip Mesh	On-Lay Mesh	Bridging Mesh	Crural Relaxation
	2	**-**	**-**	**-**	**-**
LINX™ Size	13	14	15	16	17
	-	**-**	**2**	**-**	**-**
Gastroplasty	Yes	No			
	-	**2**			
Length of Stay					
Median (Days)	0.5				
Range (Days)	0-1				
Complications					
Morbidity	-				
Return to Theatre	-				
Readmission	-				
Mortality	-				
QoL Outcomes					
	Mean	**Range**	**SD**		
Pre-Procedure QoL	20.5	14-27	9.2		
6 Month QoL	7.0	7-7	-		
1 Year QoL	-	-	-		
2 Year QoL	-	-	-		
3 Year QoL	-	-	-		
4 Year QoL	-	-	-		
5 Year QoL	-	-	-		

Primary Hiatus Hernia Repair- All UK Trusts/Private Health Care Organisations

74 registered patients, 52 active, 22 complete

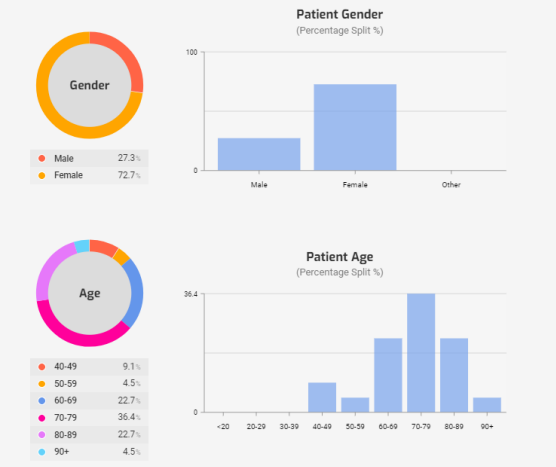
Individual Trusts and Organisations compared to Overall Trusts/Organisations Data — Inside 2 -/+ Standard Deviations — Outside 2 -/+ Standard Deviations

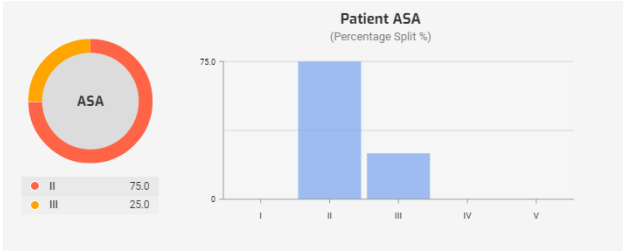
Trust/Organisation Name	Complete Cases	Morbidity	Mortality	Pre-Op QoL (Mean Ave.)	6 month QoL Improvement Score	6 month QoL Improvement -/+	1 year QoL Improvement Score	1 year QoL Improvement -/+	2 year QoL Improvement Score	2 year QoL Improvement -/+	3 year QoL Improvement Score	3 year QoL Improvement -/+	4 year QoL Improvement Score	4 year QoL Improvement -/+	5 year QoL Improvement Score	5 year QoL Improvement -/+
Overall Trusts/Organisations	22	0%	0%	27.7	6.6	76.2%	6.0	78.3%	-	-	-	-	-	-	-	-
Aneurin Bevan University Health Board [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aspen Healthcare [4]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barking, Havering and Redbridge University Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bedfordshire Hospitals NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Belfast Health and Social Care Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BMI Healthcare [12]	2	0%	0%	17.5	6.0	65.7%	-	-	-	-	-	-	-	-	-	-
Burcot Hall Bromsgrove [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Calderdale and Huddersfield NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cambridge University Hospitals NHS Foundation Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chesterfield Royal Hospital NHS Foundation Trust [3]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
County Durham and Darlington NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Croydon Health Services NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dartford and Gravesham NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Epsom and St. Helier University Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Frimley Health NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gloucestershire Hospitals NHS Foundation Trust [3]	3	0%	0%	20.7	19.0	8.2%	-	-	-	-	-	-	-	-	-	-
Guy's and St. Thomas' NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hampshire Hospitals NHS Foundation Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kettering General Hospital NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
King's College Hospital NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kingsbridge Private Hospital Belfast [3]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lancashire Teaching Hospitals NHS Foundation Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Leeds Teaching Hospitals NHS Trust [2]	2	0%	0%	42.0	3.0	92.9%	-	-	-	-	-	-	-	-	-	-
Lewisham and Greenwich NHS Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
London Bridge Hospital [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Manchester University NHS Foundation Trust [2]	1	0%	0%	34.0	1.0	97.1%	-	-	-	-	-	-	-	-	-	-
Mid Yorkshire Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Victoria Hospital [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
North Bristol NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
North Cumbria Integrated University Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Northamptonshire Healthcare NHS Foundation Trust [3]	2	0%	0%	33.5	2.5	92.5%	-	-	-	-	-	-	-	-	-	-
Northern Devon Healthcare NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Northern Lincolnshire and Goole NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Northumbria Healthcare NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nottingham University Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nuffield Health [12]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oxford University Hospitals NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Portsmouth Hospitals NHS Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ramsay Health Care UK [10]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Royal Berkshire NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Royal Cornwall Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Royal United Hospitals Bath NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sandwell and West Birmingham Hospitals NHS Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sheffield Teaching Hospitals NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
South Eastern Health and Social Care Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
South Tees Hospitals NHS Foundation Trust [1]	1	0%	0%	26.0	4.0	84.6%	-	-	-	-	-	-	-	-	-	-
South Tyneside and Sunderland NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

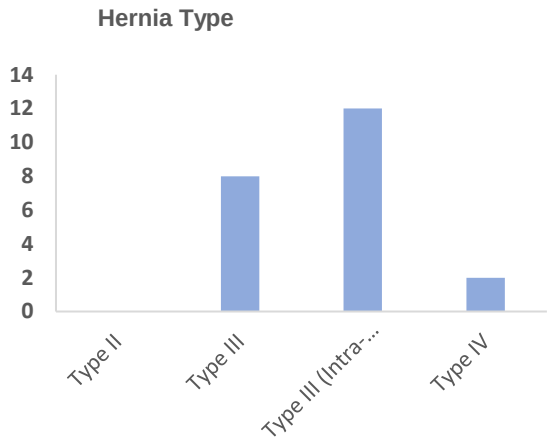
South Warwickshire NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern Health and Social Care Trust [1]	1	0%	0%	26.0	3.0	88.5%	-	-	-	-	-	-	-	-	-	-
Spire Healthcare Group [14]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
St. George's University Hospitals NHS Foundation Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Taunton and Somerset NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
The Dudley Group NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
The Princess Alexandra Hospital NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
The Rotherham NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Torbay and South Devon NHS Foundation Trust [6]	7	0%	0%	32.4	4.4	86.4%	6.0	81.5%	-	-	-	-	-	-	-	-
Ulster Independent Clinic [3]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
University Hospital of Derby and Burton NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
University Hospitals Bristol and Weston NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
University Hospitals Coventry and Warwickshire NHS Trust [3]	3	0%	0%	16.0	9.0	43.8%	-	-	-	-	-	-	-	-	-	-
University Hospitals of Leicester NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
University Hospitals of North Midlands NHS Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
University Hospitals Plymouth NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
University Hospitals Sussex NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Warrington and Halton Hospitals NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
West Hertfordshire Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
West Suffolk NHS Foundation Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Western Health and Social Care Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Worcestershire Acute Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yeovil District Hospital NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
York Teaching Hospital NHS Foundation Trust [6]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

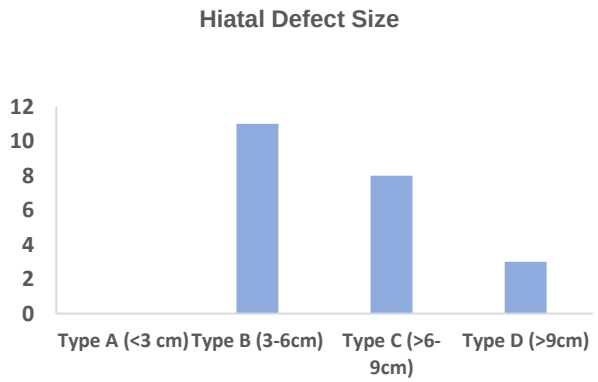
173 trusts found for **Primary Hiatus Hernia Repair Surgery** sorted by name (alphabetically ascending).

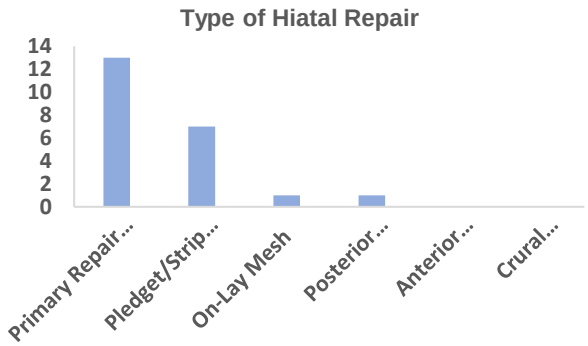
* Outcome data may or may not be representative of all activity in a specific Trust/Organisation.

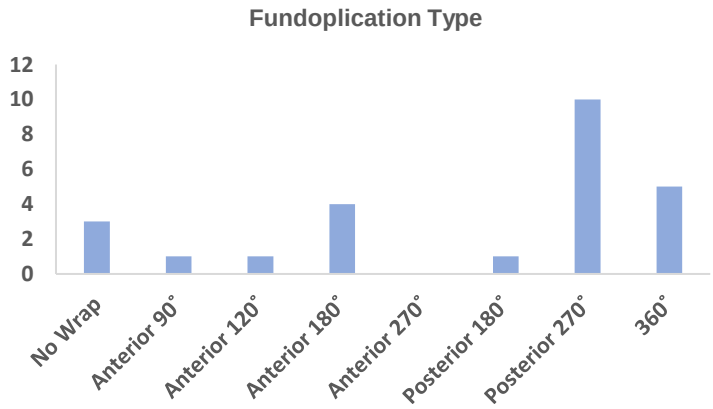

Patient Gender
(Percentage Split %)
Gender
Male 27.3%
Female 72.7%
Male
Female
Other
Patient Age
(Percentage Split %)
Age
40-49 9.1%
50-59 4.5%
60-69 22.7%
70-79 36.4%
80-89 22.7%
90+ 4.5%
<20
20-29
30-39
40-49
50-59
60-69
70-79
80-89
90+

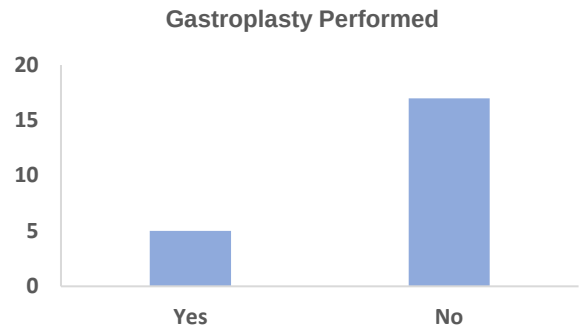

Patient ASA
(Percentage Split %)
ASA
II 75.0
III 25.0
I
II
III
IV
V


Hernia Type
Type II
Type III
Type III (Intra-...
Type IV

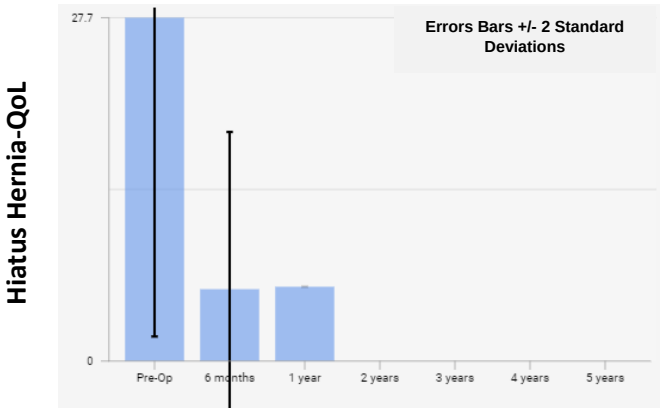

Hiatal Defect Size
Type A (<3 cm)
Type B (3-6cm)
Type C (>6-9cm)
Type D (>9cm)


Type of Hiatal Repair
Primary Repair...
Pledget/Strip...
On-Lay Mesh
Posterior...
Anterior...
Crural...


Fundoplication Type
No Wrap
Anterior 90°
Anterior 120°
Anterior 180°
Anterior 270°
Posterior 180°
Posterior 270°
360°



UK Hiatus Hernia-QoL Score PROMs- Primary Hiatus Hernia Repair



Primary Hiatus Hernia Repair

Total	**22**						
Sex							
Male/Female/Other	**6**	**16**	**-**				
Age							
Median	**72.5**						
Range	**46-90**						
Episodes							
Day Case	**0**						
Inpatient	**22**						
Time on Waiting List							
Median (Days)	**128**						
Range (Days)	**1-594**						
Method							
Open	**1 (4.5%)**						
Laparoscopic	**21 (95.5%)**						
Robotic	**-**						
Converted	**-**						
Hiatus Hernia Type	Type III	Type III (Intra-Thoracic-Stomach)	Type IV				
	8	**12**	**2**				
Hiatal Defect	Type A (<3 cm)	Type B(3-6cm)	Type C (>6-9cm)	Type D (>9cm)			
	-	**11**	**8**	**3**			
Hiatal Repair	Primary Suture	Pledget/Strip Mesh	On-Lay Mesh	Bridging Mesh	Crural Relaxation		
	13	**7**	**1**	**1**	**-**		
Fundoplication Type	None	Anterior Partial 90˚	Anterior Partial 120˚	Anterior Partial 180˚	Posterior Partial 180˚	Posterior Partial 270˚	360˚ Complete
	3	**1**	**1**	**4**	**1**	**7**	**5**
Gastroplasty	Yes	No					
	5	**17**					
Length of Stay							
Median (Days)	**2**						
Range (Days)	**0-22**						
Complications							
Morbidity (Overall)	**1**						
Return to Theatre	**-**						
Readmission	**-**						
Mortality	**-**						
QoL Outcomes							
	Mean	**Range**	**SD**				
Pre-Procedure QoL	27.7	6-45	10.9				
6 Month	5.8	1-19	5.4				
1 Year QoL	6.0	6-6	-				
2 Year QoL							
3 Year QoL							
4 Year QoL							
5 Year QoL							

Hybrid Anti-Reflux/Hiatus Hernia Surgery- All UK Trusts/Private Health Care Organisations

26 registered patients, 21 active, 5 complete

Individual Trusts and Organisations compared to Overall Trusts/Organisations Data — Inside 2 -/+ Standard Deviations — Outside 2 -/+ Standard Deviations

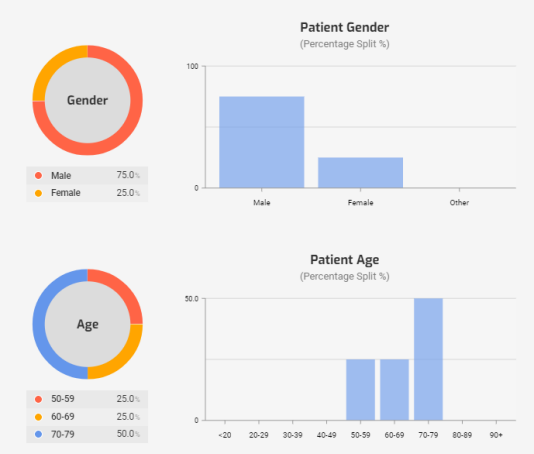
Trust/Organisation Name	Complete Cases	Morbidity	Mortality	Pre-Op QoL (Mean Ave.)	6 month QoL Improvement Score	6 month QoL Improvement -/+	1 year QoL Improvement Score	1 year QoL Improvement -/+	2 year QoL Improvement Score	2 year QoL Improvement -/+	3 year QoL Improvement Score	3 year QoL Improvement -/+	4 year QoL Improvement Score	4 year QoL Improvement -/+	5 year QoL Improvement Score	5 year QoL Improvement -/+
Overall Trusts/Organisations	5	0%	0%	26.2	2.6	90.1%	3.0	88.5%	-	-	-	-	-	-	-	-
Aneurin Bevan University Health Board [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aspen Healthcare [4]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barking, Havering and Redbridge University Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bedfordshire Hospitals NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Belfast Health and Social Care Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BMI Healthcare [12]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Burcot Hall Bromsgrove [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Calderdale and Huddersfield NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cambridge University Hospitals NHS Foundation Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chesterfield Royal Hospital NHS Foundation Trust [3]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
County Durham and Darlington NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Croydon Health Services NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dartford and Gravesham NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Epsom and St. Helier University Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Frimley Health NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gloucestershire Hospitals NHS Foundation Trust [3]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Guy's and St. Thomas' NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hampshire Hospitals NHS Foundation Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kettering General Hospital NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
King's College Hospital NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kingsbridge Private Hospital Belfast [3]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lancashire Teaching Hospitals NHS Foundation Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Leeds Teaching Hospitals NHS Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lewisham and Greenwich NHS Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
London Bridge Hospital [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Manchester University NHS Foundation Trust [2]	2	0%	0%	37.0	2.5	93.2%	-	-	-	-	-	-	-	-	-	-
Mid Yorkshire Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Victoria Hospital [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
North Bristol NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
North Cumbria Integrated University Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Northamptonshire Healthcare NHS Foundation Trust [3]	1	0%	0%	16.0	-	-	-	-	-	-	-	-	-	-	-	-
Northern Devon Healthcare NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Northern Lincolnshire and Goole NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Northumbria Healthcare NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nottingham University Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nuffield Health [12]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oxford University Hospitals NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Portsmouth Hospitals NHS Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ramsay Health Care UK [10]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Royal Berkshire NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Royal Cornwall Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Royal United Hospitals Bath NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sandwell and West Birmingham Hospitals NHS Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sheffield Teaching Hospitals NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
South Eastern Health and Social Care Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
South Tees Hospitals NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
South Tyneside and Sunderland NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

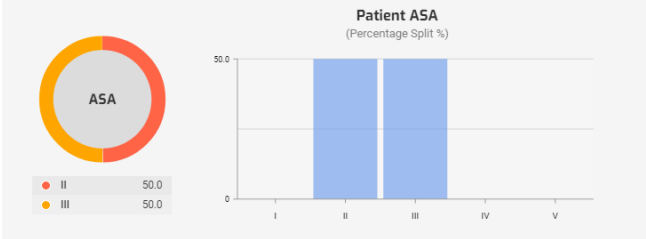
South Warwickshire NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern Health and Social Care Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spire Healthcare Group [14]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
St. George's University Hospitals NHS Foundation Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Taunton and Somerset NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
The Dudley Group NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
The Princess Alexandra Hospital NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
The Rotherham NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Torbay and South Devon NHS Foundation Trust [6]	1	0%	0%	17.0	4.0	76.5%	3.0	82.4%	-	-	-	-	-	-	-	-
Ulster Independent Clinic [3]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
University Hospital of Derby and Burton NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
University Hospitals Bristol and Weston NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
University Hospitals Coventry and Warwickshire NHS Trust [3]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
University Hospitals of Leicester NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
University Hospitals of North Midlands NHS Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
University Hospitals Plymouth NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
University Hospitals Sussex NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Warrington and Halton Hospitals NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
West Hertfordshire Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
West Suffolk NHS Foundation Trust [2]	1	0%	0%	24.0	4.0	83.3%	3.0	87.5%	-	-	-	-	-	-	-	-
Western Health and Social Care Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Worcestershire Acute Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yeovil District Hospital NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
York Teaching Hospital NHS Foundation Trust [6]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

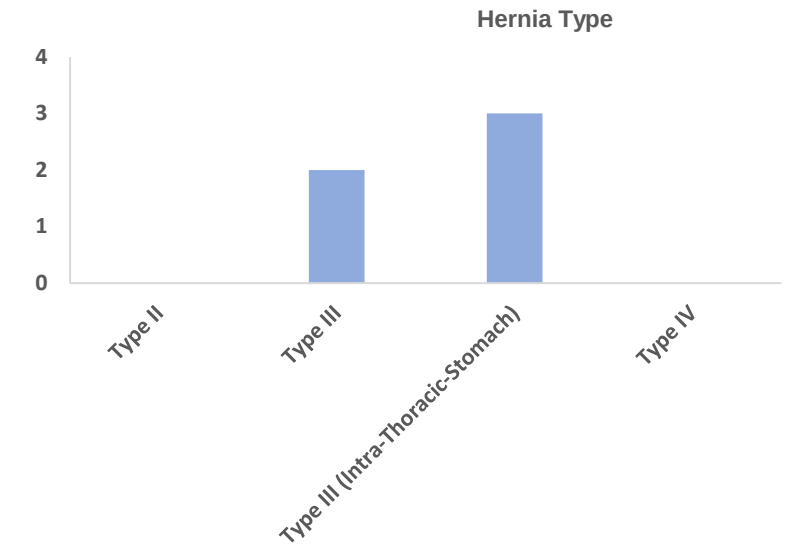
173 trusts found for **Hybrid Anti-Reflux / Hiatus Hernia Surgery** sorted by name (alphabetically ascending).

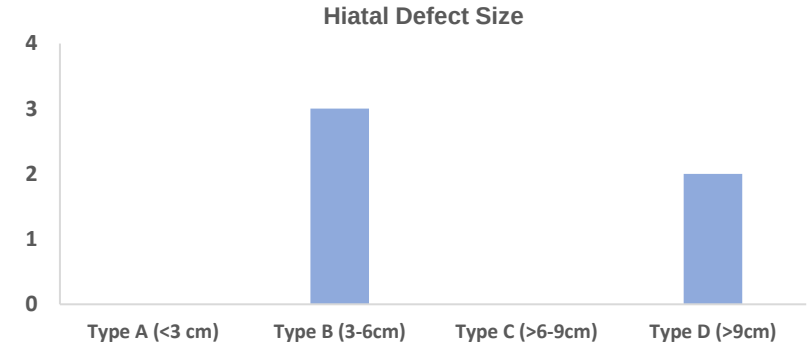
* Outcome data may or may not be representative of all activity in a specific Trust/Organisation.

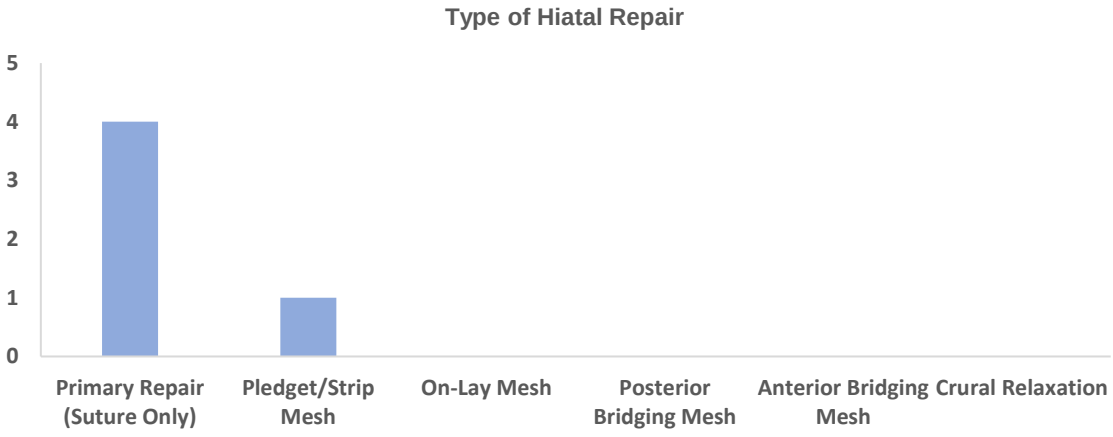
Hybrid Anti-Reflux/Hiatus Hernia Repair- All Centres Data

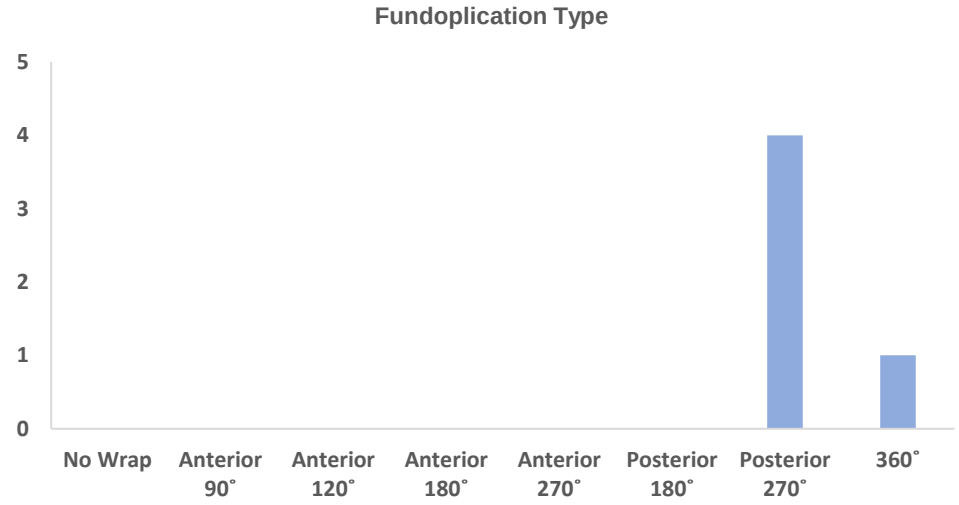


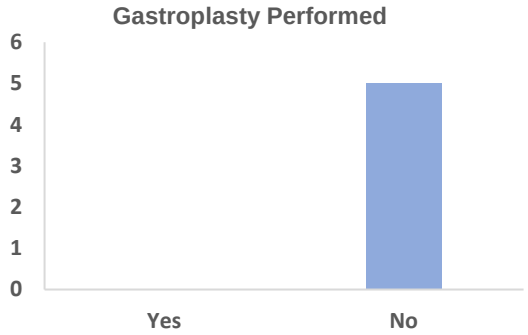



Hernia Type
4
3
2
1
0
Type II
Type III
Type III (Intra-Thoracic-Stomach)
Type IV

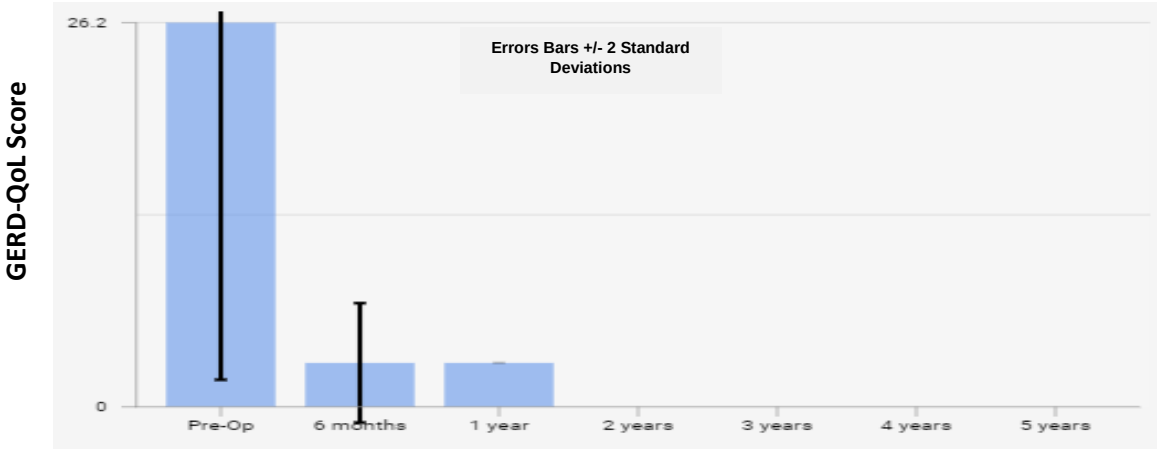

Hiatal Defect Size
4
3
2
1
0
Type A (<3 cm)
Type B (3-6cm)
Type C (>6-9cm)
Type D (>9cm)


Type of Hiatal Repair
5
4
3
2
1
0
Primary Repair (Suture Only)
Pledget/Strip Mesh
On-Lay Mesh
Posterior Bridging Mesh
Anterior Bridging Crural Relaxation Mesh





UK GERD-QoL Score PROMs- Hybrid Anti-Reflux/Hiatus Hernia Surgery



Hybrid Anti-Reflux/Hiatus Hernia Surgery						
Total	**5**					
Sex						
Male/Female/Other	**3**	**2**	**-**			
Age						
Median	**65**					
Range	**53-79**					
Episodes						
Day Case	**-**					
Inpatient	**5 (100%)**					
Time on Waiting List						
Median	**77.5**					
Range	**41-439**					
Method						
Open	**-**					
Laparoscopic	**5 (100%)**					
Robotic	**-**					
Converted	**-**					
Hiatus Hernia Type	Type III	Type III (Intra-Thoracic-Stomach)	Type IV			
	2	**3**	**-**			
Hiatal Defect	Type A (<3 cm)	Type B (3-6cm)	Type C (>6-9cm)	Type D (>9cm)		
	-	**3**	**-**	**2**		
Hiatal Repair	Primary Suture	Pledget/Strip Mesh	On-Lay Mesh	Bridging Mesh	Crural Relaxation	
	4	**1**	**-**	**-**	**-**	
Fundoplication Type	Anterior Partial 90˚	Anterior Partial 120˚	Anterior Partial 180˚	Posterior Partial 180˚	Posterior Partial 270˚	360˚ Complete
	-	-	-	-	4	1
Gastroplasty	Yes		No			
	-		**5**			
Length of Stay (Days)						
Median	1					
Range	1-12					
Complications						
Morbidity (Overall)	1 (20%)					
Return to Theatre	-					
Readmission	-					
Mortality	-					
QoL Outcomes						
	Mean	**Range**	**SD**			
Pre-Procedure QoL	26.2	16-38	10.4			
6 Month QoL	3.0	1-4	1.7			
1 Year QoL	3.0	3-3				
2 Year QoL						
3 Year QoL						
4 Year QoL						
5 Year QoL						

Cardiomyotomy- All UK Trusts/Private Health Care Organisations

21 registered patients, 11 active, 10 complete

Individual Trusts and Organisations compared to Overall Trusts/Organisations Data — Inside 2 -/+ Standard Deviations — Outside 2 -/+ Standard Deviations

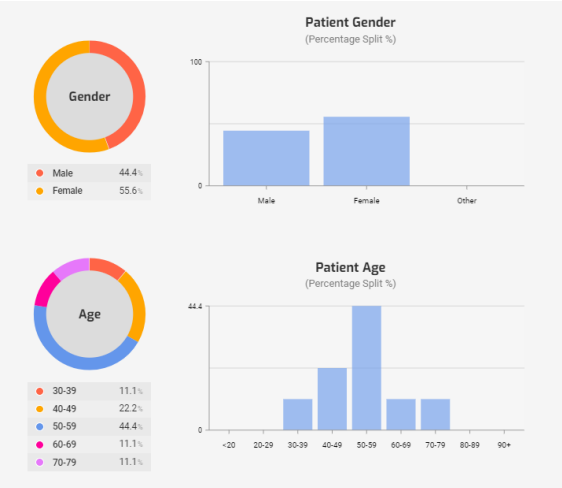
Trust/Organisation Name	Complete Cases	Morbidity	Mortality	Pre-Op QoL (Mean Ave.)	6 month QoL Improvement Score	6 month QoL Improvement -/+	1 year QoL Improvement Score	1 year QoL Improvement -/+	2 year QoL Improvement Score	2 year QoL Improvement -/+	3 year QoL Improvement Score	3 year QoL Improvement -/+	4 year QoL Improvement Score	4 year QoL Improvement -/+	5 year QoL Improvement Score	5 year QoL Improvement -/+
Overall Trusts/Organisations	10	0%	0%	7.3	1.6	78.1%	3.0	58.9%	5.0	31.5%	-	-	-	-	-	-
Aneurin Bevan University Health Board [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aspen Healthcare [4]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barking, Havering and Redbridge University Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bedfordshire Hospitals NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Belfast Health and Social Care Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BMI Healthcare [12]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Burcot Hall Bromsgrove [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Calderdale and Huddersfield NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cambridge University Hospitals NHS Foundation Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chesterfield Royal Hospital NHS Foundation Trust [3]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
County Durham and Darlington NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Croydon Health Services NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dartford and Gravesham NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Epsom and St. Helier University Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Frimley Health NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gloucestershire Hospitals NHS Foundation Trust [3]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Guy's and St. Thomas' NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hampshire Hospitals NHS Foundation Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kettering General Hospital NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
King's College Hospital NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kingsbridge Private Hospital Belfast [3]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lancashire Teaching Hospitals NHS Foundation Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Leeds Teaching Hospitals NHS Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lewisham and Greenwich NHS Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
London Bridge Hospital [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Manchester University NHS Foundation Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mid Yorkshire Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Victoria Hospital [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
North Bristol NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
North Cumbria Integrated University Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Northamptonshire Healthcare NHS Foundation Trust [3]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Northern Devon Healthcare NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Northern Lincolnshire and Goole NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Northumbria Healthcare NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nottingham University Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nuffield Health [12]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oxford University Hospitals NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Portsmouth Hospitals NHS Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ramsay Health Care UK [10]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Royal Berkshire NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Royal Cornwall Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Royal United Hospitals Bath NHS Foundation Trust [1]	1	0%	0%	4.0	4.0	0.0%	-	-	-	-	-	-	-	-	-	-
Sandwell and West Birmingham Hospitals NHS Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sheffield Teaching Hospitals NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
South Eastern Health and Social Care Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
South Tees Hospitals NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
South Tyneside and Sunderland NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

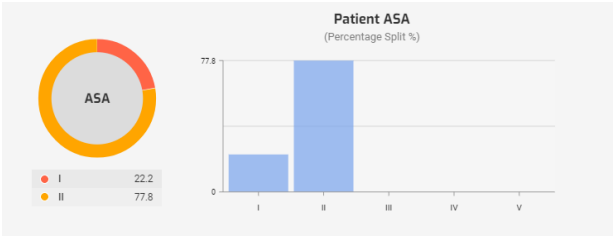
South Warwickshire NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern Health and Social Care Trust [1]	1	0%	0%	6.0	4.0	33.3%	-	-	-	-	-	-	-	-	-	-
Spire Healthcare Group [14]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
St. George's University Hospitals NHS Foundation Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Taunton and Somerset NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
The Dudley Group NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
The Princess Alexandra Hospital NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
The Rotherham NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Torbay and South Devon NHS Foundation Trust [6]	6	0%	0%	8.5	1.0	88.2%	3.0	64.7%	-	-	-	-	-	-	-	-
Ulster Independent Clinic [3]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
University Hospital of Derby and Burton NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
University Hospitals Bristol and Weston NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
University Hospitals Coventry and Warwickshire NHS Trust [3]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
University Hospitals of Leicester NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
University Hospitals of North Midlands NHS Trust [2]	2	0%	0%	6.0	-	-	-	-	5.0	16.7%	-	-	-	-	-	-
University Hospitals Plymouth NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
University Hospitals Sussex NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Warrington and Halton Hospitals NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
West Hertfordshire Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
West Suffolk NHS Foundation Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Western Health and Social Care Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Worcestershire Acute Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yeovil District Hospital NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
York Teaching Hospital NHS Foundation Trust [6]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

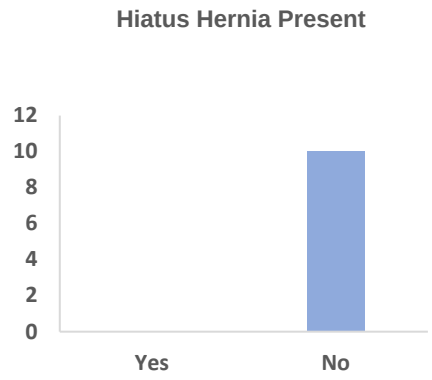
173 trusts found for **Cardiomyotomy Surgery (Achalasia)** sorted by name (alphabetically ascending).

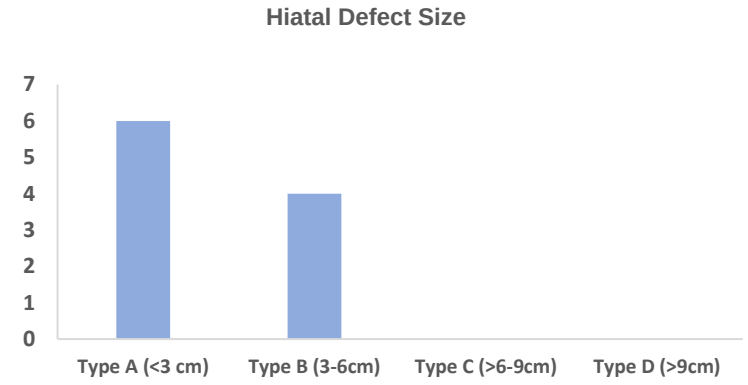
* Outcome data may or may not be representative of all activity in a specific Trust/Organisation.

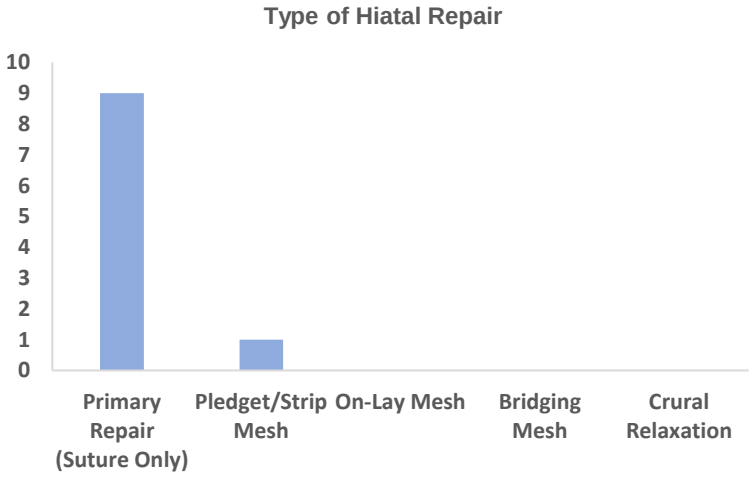
Cardiomyotomy- All Centres Data

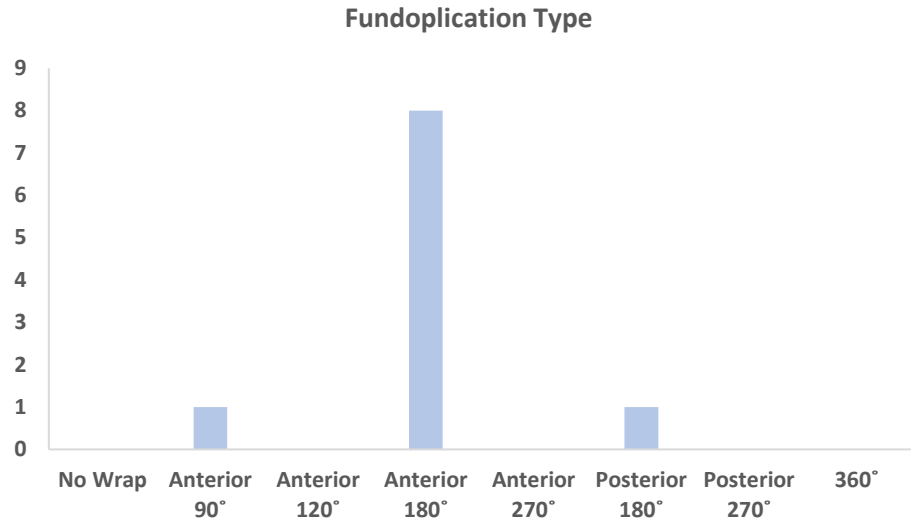


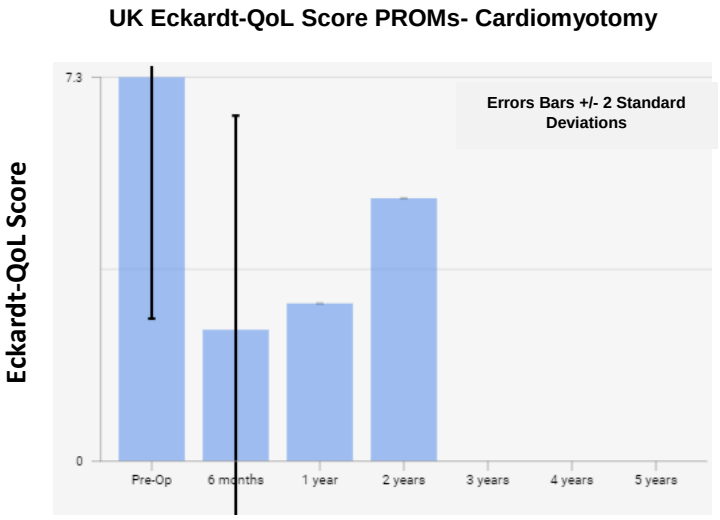



Hiatus Hernia Present
12
10
8
6
4
2
0
Yes
No


Hiatal Defect Size
7
6
5
4
3
2
1
0
Type A (<3 cm)
Type B (3-6cm)
Type C (>6-9cm)
Type D (>9cm)


Type of Hiatal Repair
10
9
8
7
6
5
4
3
2
1
0
Primary Repair (Suture Only)
Pledget/Strip Mesh
On-Lay Mesh
Bridging Mesh
Crural Relaxation


Fundoplication Type
9
8
7
6
5
4
3
2
1
0
No Wrap
Anterior 90˚
Anterior 120˚
Anterior 180˚
Anterior 270˚
Posterior 180˚
Posterior 270˚
360˚


UK Eckardt-QoL Score PROMs- Cardiomyotomy
Eckardt-QoL Score
7.3
0
Errors Bars +/- 2 Standard Deviations
Pre-Op
6 months
1 year
2 years
3 years
4 years
5 years

Cardiomyotomy Surgery							
Total	**10**						
Sex							
Male/Female/Other	**4**	**6**	**-**				
Age							
Median	**56.5**						
Range	**31-70**						
Episodes							
Day Case	**0**						
Inpatient	**10**						
Time on Waiting List							
Median (Days)	**42**						
Range (Days)	**11-252**						
Method							
Open	**-**						
Laparoscopic	**10 (100%)**						
Robotic	**-**						
Converted	**-**						
Hiatus Hernia Present	Yes		No				
	0		**10**				
Hiatal Defect	Type A (<3 cm)	Type B (3-6cm)	Type C (>6-9cm)	Type D (>9cm)			
	6	**4**	**-**	**-**			
Hiatal Repair	Primary Suture	Pledget/Strip Mesh	On-Lay Mesh	Bridging Mesh	Crural Relaxation		
	9	**1**	**-**	**-**	**-**		
Fundoplication Type	None	Anterior Partial 90˚	Anterior Partial 120˚	Anterior Partial 180˚	Posterior Partial 180˚	Posterior Partial 270˚	360˚ Complete
	-	**1**	**-**	**8**	**1**	**-**	**-**
Gastroplasty	Yes	No					
Length of Stay (Days)							
Median	**1.5**						
Range	**1-33**						
Complications							
Morbidity (Overall)	**1 (10%)**						
Return to Theatre	**1**						
Readmission	**-**						
Mortality	**-**						
QoL Outcomes							
	Mean	**Range**	**SD**				
Pre-Procedure QoL	7.3	4-11	1.9				
6 Month QoL	2.5	1-4	1.7				
1 Year QoL	3.0	3-3	-				
2 Year QoL	5.0	5-5	-				
3 Year QoL	-	-	-				
4 Year QoL	-	-	-				
5 Year QoL	-	-	-				

Revisional Anti-Reflux Surgery- All UK Trusts/Private Health Care Organisations

7 registered patients, 5 active, 2 complete

Individual Trusts and Organisations compared to Overall Trusts/Organisations Data — Inside 2 -/+ Standard Deviations — Outside 2 -/+ Standard Deviations

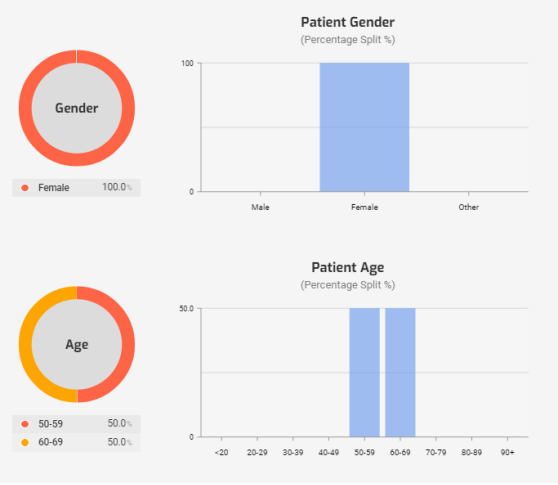
Trust/Organisation Name	Complete Cases	Morbidity	Mortality	Pre-Op QoL (Mean Ave.)	6 month QoL Improvement Score	6 month QoL Improvement -/+	1 year QoL Improvement Score	1 year QoL Improvement -/+	2 year QoL Improvement Score	2 year QoL Improvement -/+	3 year QoL Improvement Score	3 year QoL Improvement -/+	4 year QoL Improvement Score	4 year QoL Improvement -/+	5 year QoL Improvement Score	5 year QoL Improvement -/+
Overall Trusts/Organisations	2	0%	0%	43.5	-	-	3.0	93.1%	-	-	-	-	-	-	-	-
Aneurin Bevan University Health Board [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aspen Healthcare [4]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barking, Havering and Redbridge University Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bedfordshire Hospitals NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Belfast Health and Social Care Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BMI Healthcare [12]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Burcot Hall Bromsgrove [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Calderdale and Huddersfield NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cambridge University Hospitals NHS Foundation Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chesterfield Royal Hospital NHS Foundation Trust [3]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
County Durham and Darlington NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Croydon Health Services NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dartford and Gravesham NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Epsom and St. Helier University Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Frimley Health NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gloucestershire Hospitals NHS Foundation Trust [3]	1	0%	0%	37.0	-	-	-	-	-	-	-	-	-	-	-	-
Guy's and St. Thomas' NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hampshire Hospitals NHS Foundation Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kettering General Hospital NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
King's College Hospital NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kingsbridge Private Hospital Belfast [3]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lancashire Teaching Hospitals NHS Foundation Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Leeds Teaching Hospitals NHS Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lewisham and Greenwich NHS Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
London Bridge Hospital [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Manchester University NHS Foundation Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mid Yorkshire Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Victoria Hospital [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
North Bristol NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
North Cumbria Integrated University Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Northamptonshire Healthcare NHS Foundation Trust [3]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Northern Devon Healthcare NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Northern Lincolnshire and Goole NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Northumbria Healthcare NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nottingham University Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nuffield Health [12]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oxford University Hospitals NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Portsmouth Hospitals NHS Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ramsay Health Care UK [10]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Royal Berkshire NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Royal Cornwall Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Royal United Hospitals Bath NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sandwell and West Birmingham Hospitals NHS Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sheffield Teaching Hospitals NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
South Eastern Health and Social Care Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
South Tees Hospitals NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
South Tyneside and Sunderland NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

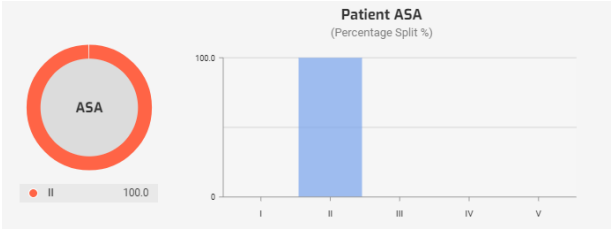
South Warwickshire NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern Health and Social Care Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spire Healthcare Group [14]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
St. George's University Hospitals NHS Foundation Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Taunton and Somerset NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
The Dudley Group NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
The Princess Alexandra Hospital NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
The Rotherham NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Torbay and South Devon NHS Foundation Trust [6]	1	0%	0%	50.0	-	-	3.0	94.0%	-	-	-	-	-	-	-	-
Ulster Independent Clinic [3]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
University Hospital of Derby and Burton NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
University Hospitals Bristol and Weston NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
University Hospitals Coventry and Warwickshire NHS Trust [3]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
University Hospitals of Leicester NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
University Hospitals of North Midlands NHS Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
University Hospitals Plymouth NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
University Hospitals Sussex NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Warrington and Halton Hospitals NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
West Hertfordshire Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
West Suffolk NHS Foundation Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Western Health and Social Care Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Worcestershire Acute Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yeovil District Hospital NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
York Teaching Hospital NHS Foundation Trust [6]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

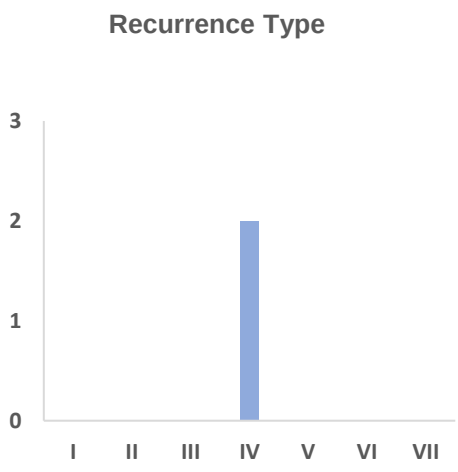
173 trusts found for **Revisional Anti-Reflux Surgery** sorted by name (alphabetically ascending).

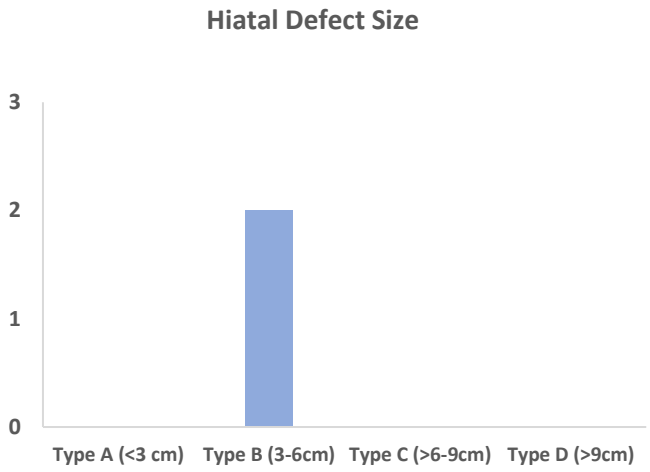
* Outcome data may or may not be representative of all activity in a specific Trust/Organisation.

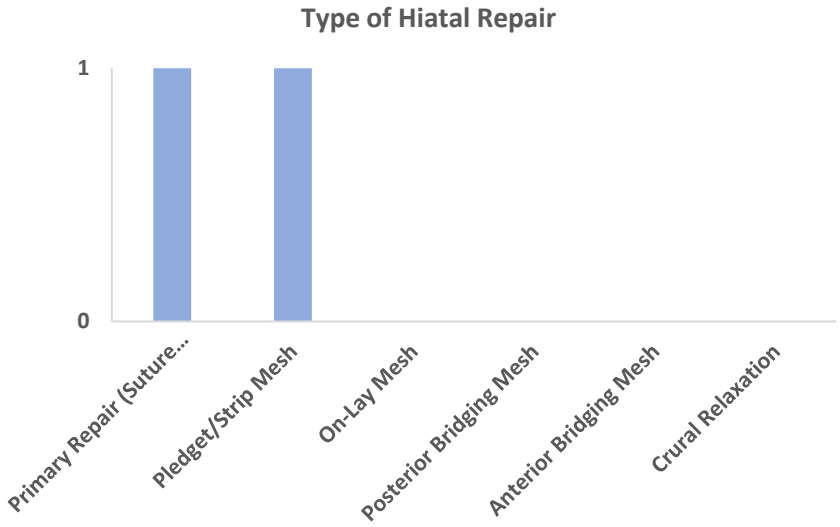
Revisional Anti-Reflux Surgery- All Centres Data

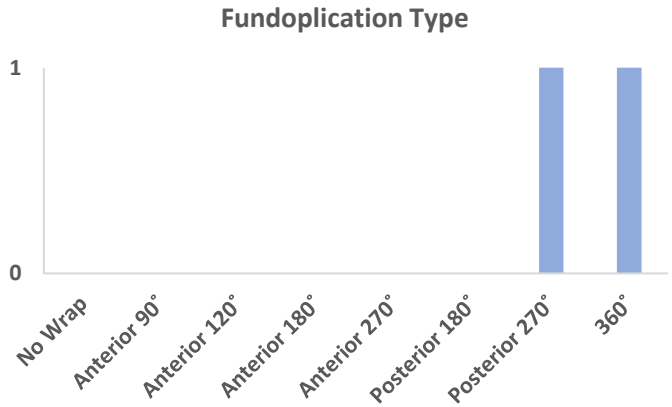


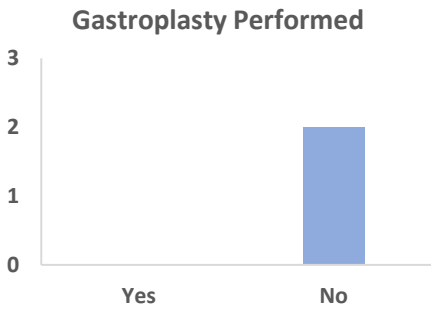



Recurrence Type
3
2
1
0
I
II
III
IV
V
VI
VII

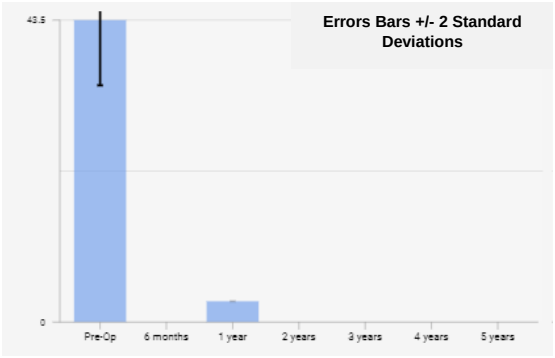

Hiatal Defect Size
3
2
1
0
Type A (<3 cm)
Type B (3-6cm)
Type C (>6-9cm)
Type D (>9cm)


Type of Hiatal Repair
1
0
Primary Repair (Suture...
Pledget/Strip Mesh
On-Lay Mesh
Posterior Bridging Mesh
Anterior Bridging Mesh
Crural Relaxation


Fundoplication Type
1
0
No Wrap
Anterior 90°
Anterior 120°
Anterior 180°
Anterior 270°
Posterior 180°
Posterior 270°
360°


Gastroplasty Performed
3
2
1
0
Yes
No

UK GERD-QoL Score PROMs- Revisional Anti-Reflux Surgery



Revisional Anti-Reflux Surgery						
Total	2					
Sex						
Male/Female/Other	-	2	--			
Age						
Median	58.5					
Range	55-62					
Episodes						
Day Case	-					
Inpatient	2 (100%)					
Time on Waiting List						
Median	280.5					
Range	210-351					
Method						
Open	-					
Laparoscopic	2 (100%)					
Robotic	-					
Converted	-					
Recurrence Type	I	II	III	IV	V	VI
	-	-	-	**2**	-	-
Hiatal Defect	Type A (<3 cm)	Type B (3-6cm)	Type C (>6-9cm)	Type D (>9cm)		
	-	**2**	-	-		
Hiatal Repair	Primary Suture	Pledget/Strip Mesh	On-Lay Mesh	Bridging Mesh	Crural Relaxation	
	2	**1**	-	-	-	
Fundoplication Type	Anterior Partial 90˚	Anterior Partial 120˚	Anterior Partial 180˚	Posterior Partial 180˚	Posterior Partial 270˚	360˚ Complete
	-	-	-	-	**1**	**6**
Gastroplasty	Yes			No		
	-			2		
Length of Stay (Days)						
Median	2					
Range	1-3					
Complications						
Morbidity (Overall)	-					
Return to Theatre	-					
Readmission	-					
Mortality	-					
QoL Outcomes						
	Mean	**Range**	**SD**			
Pre-Procedure QoL	43.5	37-50	9.2			
6 Month QoL	-	-	-			
1 Year QoL	3	3-3	-			
2 Year QoL	-	-	-			
3 Year QoL	-	-	-			
4 Year QoL	-	-	-			
5 Year QoL	-	-	-			

Revisional Hiatus Hernia Surgery- All UK Trusts/Private Health Care Organisations

10 registered patients, 8 active, 2 complete

Individual Trusts and Organisations compared to Overall Trusts/Organisations Data — Inside 2 -/+ Standard Deviations — Outside 2 -/+ Standard Deviations

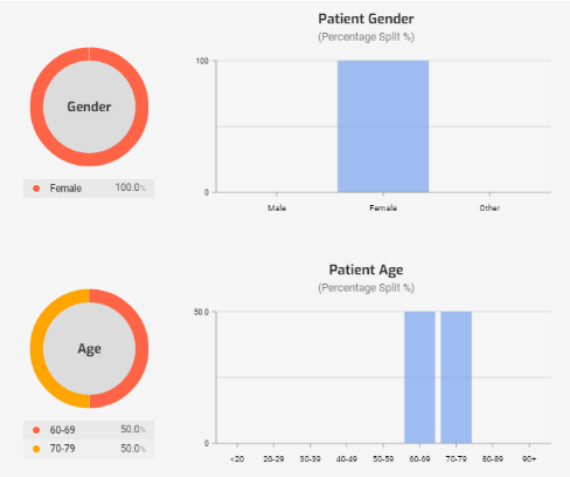
Trust/Organisation Name	Complete Cases	Morbidity	Mortality	Pre-Op QoL (Mean Ave.)	6 month QoL Improvement Score	6 month QoL Improvement -/+	1 year QoL Improvement Score	1 year QoL Improvement -/+	2 year QoL Improvement Score	2 year QoL Improvement -/+	3 year QoL Improvement Score	3 year QoL Improvement -/+	4 year QoL Improvement Score	4 year QoL Improvement -/+	5 year QoL Improvement Score	5 year QoL Improvement -/+
Overall Trusts/Organisations	2	0%	0%	31.5	7.0	77.8%	-	-	-	-	-	-	-	-	-	-
Aneurin Bevan University Health Board [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aspen Healthcare [4]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barking, Havering and Redbridge University Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bedfordshire Hospitals NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Belfast Health and Social Care Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BMI Healthcare [12]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Burcot Hall Bromsgrove [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Calderdale and Huddersfield NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cambridge University Hospitals NHS Foundation Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chesterfield Royal Hospital NHS Foundation Trust [3]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
County Durham and Darlington NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Croydon Health Services NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dartford and Gravesham NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Epsom and St. Helier University Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Frimley Health NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gloucestershire Hospitals NHS Foundation Trust [3]	1	0%	0%	28.0	7.0	75.0%	-	-	-	-	-	-	-	-	-	-
Guy's and St. Thomas' NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hampshire Hospitals NHS Foundation Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kettering General Hospital NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
King's College Hospital NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kingsbridge Private Hospital Belfast [3]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lancashire Teaching Hospitals NHS Foundation Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Leeds Teaching Hospitals NHS Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lewisham and Greenwich NHS Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
London Bridge Hospital [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Manchester University NHS Foundation Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mid Yorkshire Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Victoria Hospital [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
North Bristol NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
North Cumbria Integrated University Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Northamptonshire Healthcare NHS Foundation Trust [3]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Northern Devon Healthcare NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Northern Lincolnshire and Goole NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Northumbria Healthcare NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nottingham University Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nuffield Health [12]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oxford University Hospitals NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Portsmouth Hospitals NHS Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ramsay Health Care UK [10]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Royal Berkshire NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Royal Cornwall Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Royal United Hospitals Bath NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sandwell and West Birmingham Hospitals NHS Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sheffield Teaching Hospitals NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
South Eastern Health and Social Care Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
South Tees Hospitals NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
South Tyneside and Sunderland NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

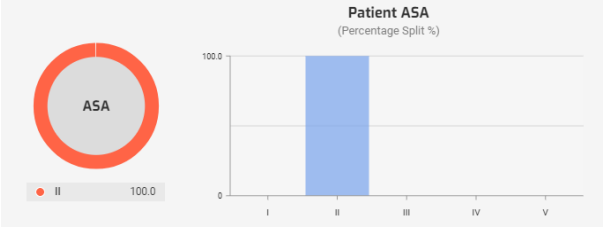
South Warwickshire NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Southern Health and Social Care Trust [1]	1	0%	0%	35.0	7.0	80.0%	-	-	-	-	-	-	-	-	-	-
Spire Healthcare Group [14]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
St. George's University Hospitals NHS Foundation Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Taunton and Somerset NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
The Dudley Group NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
The Princess Alexandra Hospital NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
The Rotherham NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Torbay and South Devon NHS Foundation Trust [6]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ulster Independent Clinic [3]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
University Hospital of Derby and Burton NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
University Hospitals Bristol and Weston NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
University Hospitals Coventry and Warwickshire NHS Trust [3]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
University Hospitals of Leicester NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
University Hospitals of North Midlands NHS Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
University Hospitals Plymouth NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
University Hospitals Sussex NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Warrington and Halton Hospitals NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
West Hertfordshire Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
West Suffolk NHS Foundation Trust [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Western Health and Social Care Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Worcestershire Acute Hospitals NHS Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yeovil District Hospital NHS Foundation Trust [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
York Teaching Hospital NHS Foundation Trust [6]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

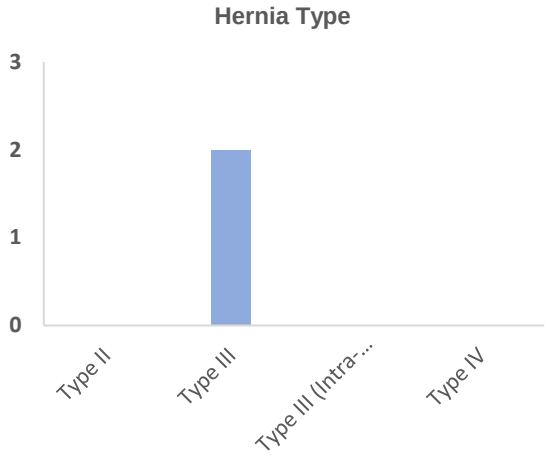
173 trusts found for **Revisional Hiatus Hernia Surgery** sorted by name (alphabetically ascending).

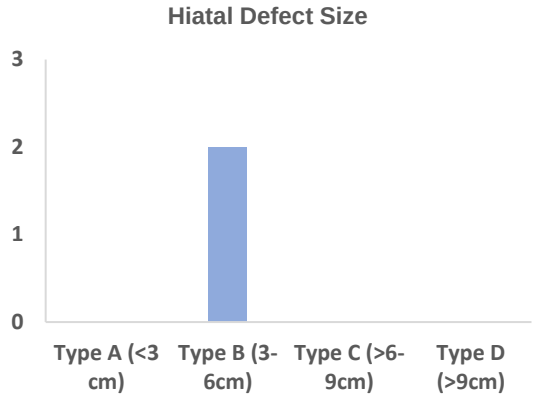
* Outcome data may or may not be representative of all activity in a specific Trust/Organisation.

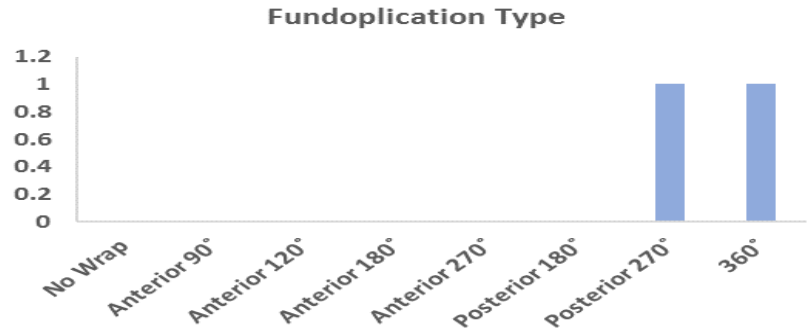
Revisional Hiatus Hernia Surgery- All Centres Data

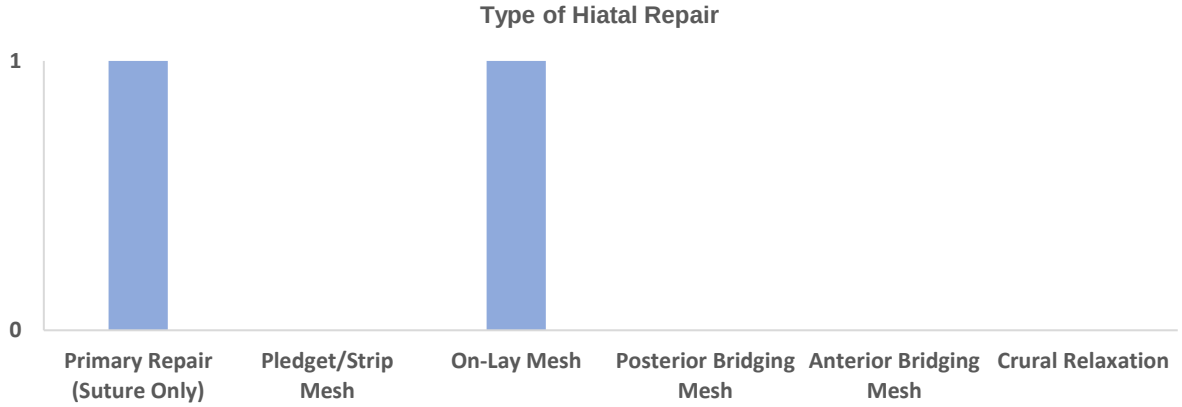




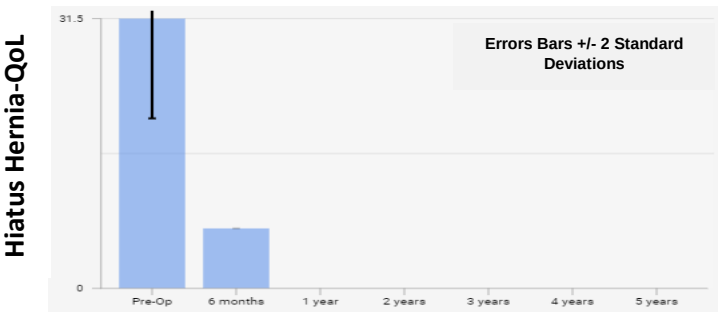








UK Hiatus Hernia-QoL Score PROMs- Revisional Hiatus Hernia Repair



Revision Primary Hiatus Hernia Repair							
Total	**2**						
Sex							
Male/Female/Other	-	**2**	-				
Age							
Median	**72.5**						
Range	**69-76**						
Episodes							
Day Case	**0**						
Inpatient	**2 (100%)**						
Time on Waiting List							
Median (Days)	**524**						
Range (Days)	**89-966**						
Method							
Open	-						
Laparoscopic	**2 (100%)**						
Robotic	-						
Converted	-						
Hiatus Hernia Type	Type III	Type III (Intra-Thoracic-Stomach)	Type IV				
Hiatal Defect	Type A (<3 cm)	Type B(3-6cm)	Type C (>6-9cm)	Type D (>9cm)			
	-	**2**	-	-			
Hiatal Repair	Primary Suture	Pledget/Strip Mesh	On-Lay Mesh	Bridging Mesh	Crural Relaxation		
	1	-	**1**	-	-		
Fundoplication Type	None	Anterior Partial 90˚	Anterior Partial 120˚	Anterior Partial 180˚	Posterior Partial 180˚	Posterior Partial 270˚	360˚ Complete
	-	-	-	-	-	**1**	**1**
Gastroplasty	Yes	No					
	-	**2**					
Length of Stay							
Median (Days)	**3.5**						
Range (Days)	**3-4**						
Complications							
Morbidity (Overall)	**1 (50%)**						
Return to Theatre	-						
Readmission	**1**						
Mortality	-						
QoL Outcomes							
	Mean	**Range**	**SD**				
Pre-Procedure QoL	31.5	28-35	5.0				
6 Month	7.0	7-7	-				
1 Year QoL	-	-	-				
2 Year QoL	-	-	-				
3 Year QoL	-	-	-				
4 Year QoL	-	-	-				
5 Year QoL	-	-	-				

8. Conclusion and Summary

Currently, the NHSR Registry voluntarily submits data, and the level of engagement is variable. There are several potential causes of bias in this report; the data submitted may or may not be representative of an entire individual, centre/unit, dependent on the level of engagement. Early adopters of this Registry are potential higher performers in hiatal surgery; it perhaps couples with interest and performance in this area.

Parts of the data collection are self-reporting and thus vulnerable to bias, these include entering all cases and complications. However, one of the most exciting elements of this Registry, QoL improvement data, is populated independently of the surgeon by the intrinsic mechanism of the NHSR and thus is independent, high-quality feedback data.

Currently, the centres that have engaged the NHSR report remarkable improvement in patient-reported QoL outcomes post-operatively for all aspects of benign hiatal surgery. Significant improvement in QoL score will likely be shown with time from the pre-procedure baseline when more data comes in.

Data is currently limited as the Registry is in the infancy of its growth, and only those patients with complete status or in PROMs can be included for statistical analysis. The vast majority of patients are still in the 'active' stage, but these will filter through with time.

We anticipate next year's report to be heavily populated with data, based on the first year of the registries launch, with over 1000 patients predicted for the 2023 report.

In terms of ambitions for the future, as more data populates, we hope to report more detailed outcomes in terms of techniques used for hiatal surgery, fundoplication type, mesh technique, robotic hiatal surgery etc, at a national level.

We are currently working with GIRFT (Getting It Right First Time – GIRFT) and NHS Digital about integrations with HES data to cross reference activity in hiatal surgery to address the vulnerability of self-reporting volume of activity and complication rates.

We are also working with providers of Electronic Patient Record Systems (EPRs) to integrate and allow use of NHSR in a paperless hospital.

Finally, the NHSR hopes to publish a public-facing page detailing the outcome of hiatal surgery for different centres in both NHS and Private healthcare organisations in the UK.