

**THE BRITISH ASSOCIATION OF
UROLOGICAL SURGEONS
Section of Female, Neurological & Urodynamic Urology**

Analyses of procedures performed for Female Stress Urinary Incontinence between

January 1st 2015 and December 31st 2017

Copyright

It is important to remind you that, under the Copyright Designs and Patents Act 1988 (CDPA) copyright of this Report, including the charts produced in it, is owned by The British Association of Urological Surgeons Limited (BAUS). Copying or reproducing any part of this material in any other publication without seeking the prior permission of BAUS is a breach of copyright.

Please contact Mrs Sarah Fowler (E-mail: sarahfowler99@gmail.com)

AUDIT RESULTS SUMMARY – Stress Urinary Incontinence dataset

All the data presented here are a summary of the data extracted from the web-based database on 26th March 2018 and relate to operations performed between 1st January 2015 and 31st December 2017. Once extracted the data was transferred to an Access™ database for validation before being imported into Tableau™ for generation of the analyses. The validation mainly comprised checks for duplicate and / or empty entries and invalid / inappropriate dates plus removal of a few procedures (eg bladder neck closure) not deemed appropriate for inclusion in these analyses.

The data collection period was from 1 January 2015 to 31 December 2017.

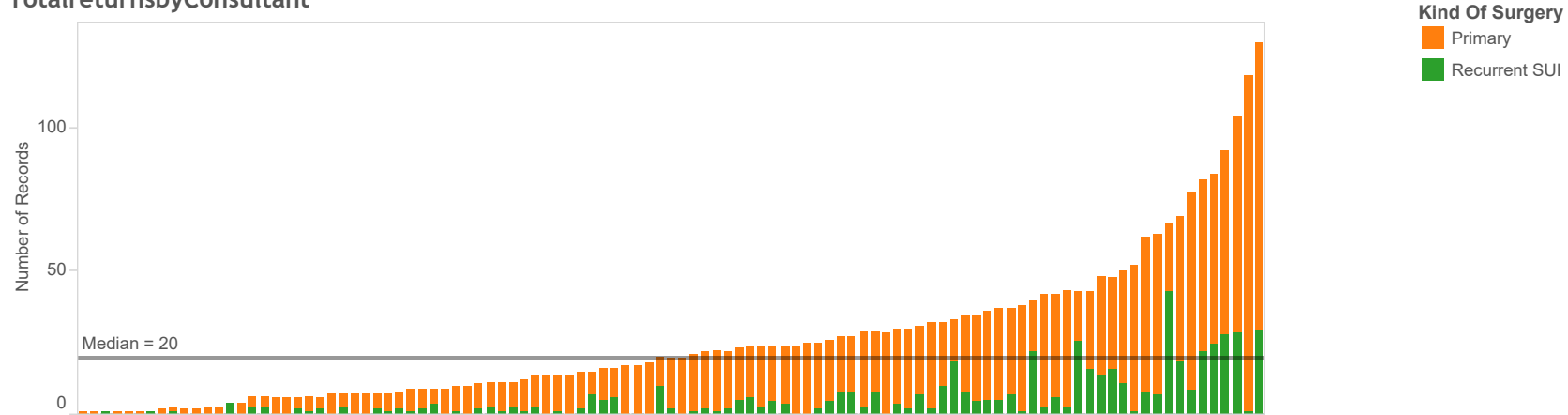
- 2716 procedures were recorded from 106 consultants at 95 centres in the United Kingdom including 191 private patients from 38 consultants. One of the consultants that returned data is not a BAUS member.
- 96% of the operations (2,498) proceeded with no reported complications. There were 101 cases (4%) in which a peri-operative complication was recorded. There were no deaths.
- Of the 1,733 (64%) patients who have follow-up recorded, 1,709 (99%) had a record of whether or not there was a post operative complication. For 1,543 (90%) no post-operative complications occurred.
- **Hospital Episode Statistics (HES)** for 2015, 2016 and 2017 indicate that urologists undertook 3,524 stress urinary incontinence (SUI) procedures in England of which the BAUS audit has captured data on 72%. Gynaecologists performed 17,409 SUI procedures in England during the same period.
- Median number of cases per consultant: 20 (range 1 - 130)
- Median number of cases per centre: 21 (range 1 - 126)

- 80% (2159) of the procedures were performed for primary SUI and 20% (557) were for recurrent SUI. All data were entered by hand and there was no bulk uploading of data from other systems.

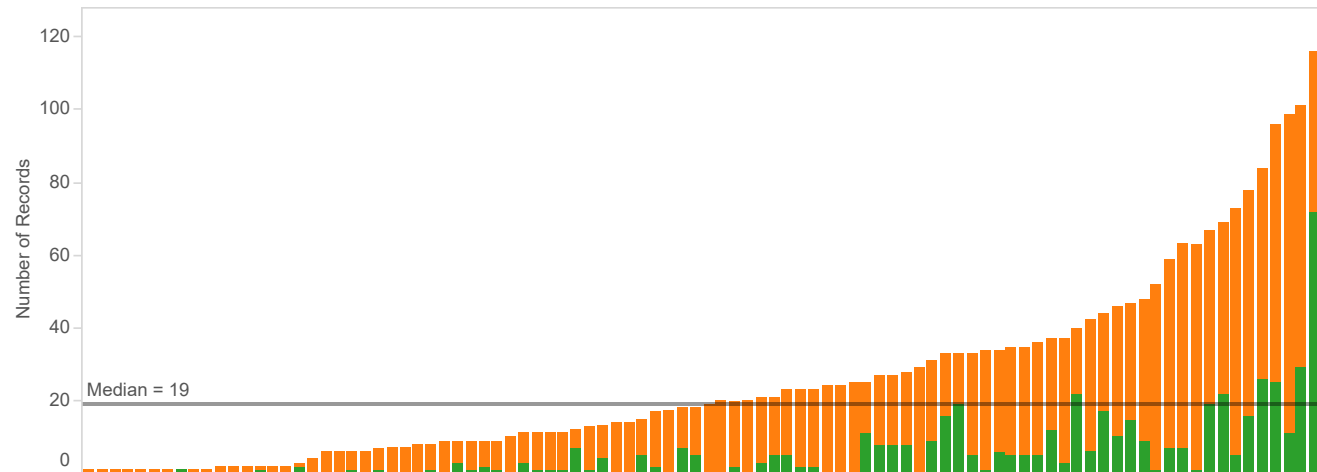
Surgery for Female Stress Urinary Incontinence performed between 01/01/2015 and 31/12/2017

2,716 procedures performed by 106 consultants at 95 sites including 191 private cases from 38 consultants

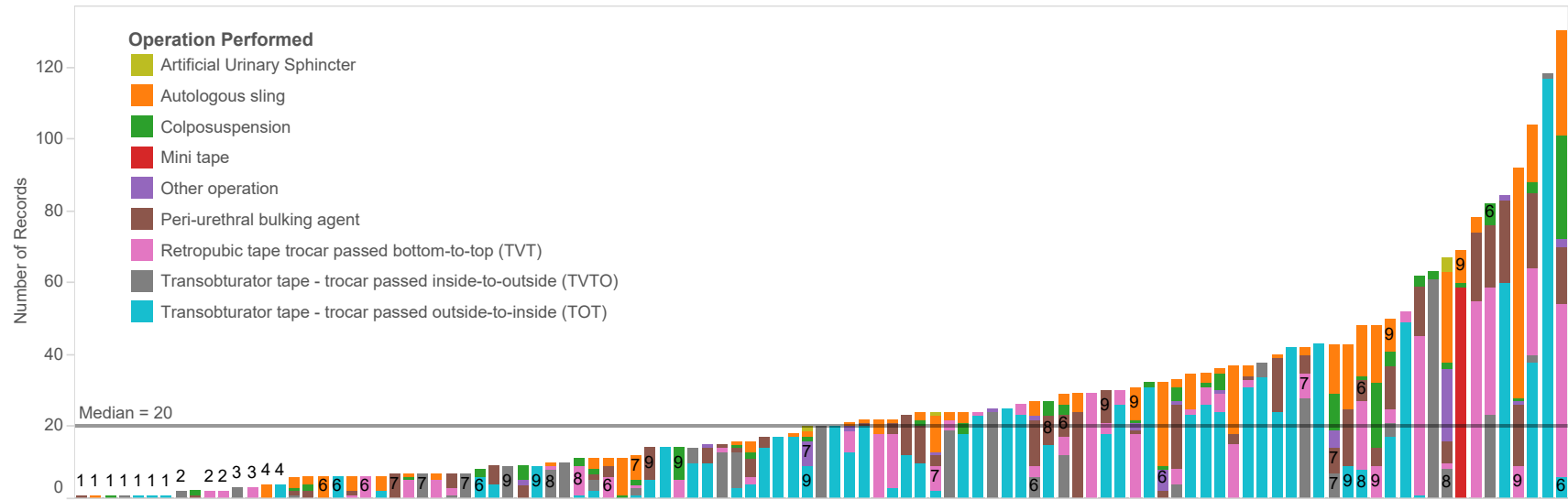
Total returns by Consultant



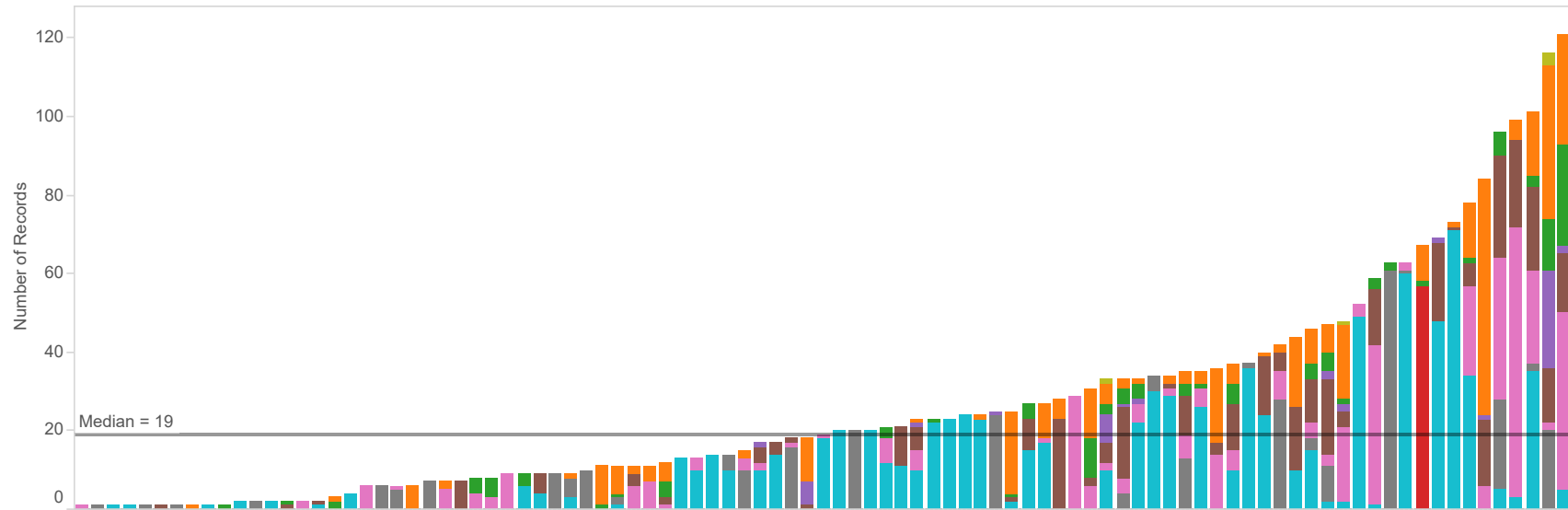
Total returns per Centre



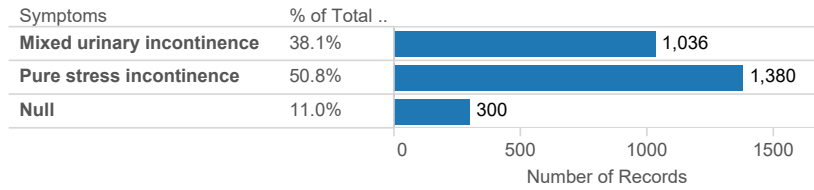
Total returns by Consultant by Procedure



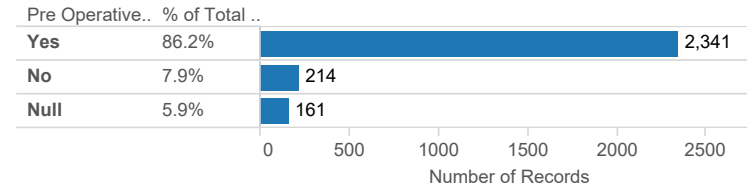
Returns by Centre by Procedure



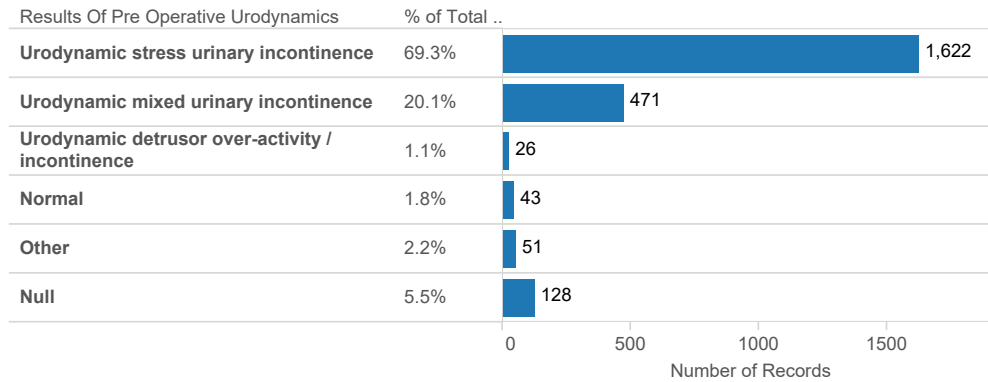
Symptoms



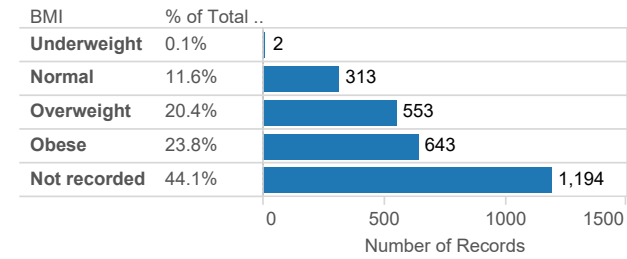
Pre-operative Urodynamics



Pre-operative Urodynamics Results



BMI



Age at Operation

Kind Of Surgery	Number of Records	Median Age	Min. Age	Max. Age
Primary	2,151	51	14	91
Recurrent SUI	554	56	19	94
Grand Total	2,705	52	14	94

SurgeryType

Kind Of Surgery	Dateofoperation							
	2015		2016		2017		Grand Total	
	Number of Records	% of Total Number of Records ..	Number of Records	% of Total Number of Records ..	Number of Records	% of Total Number of Records ..	Number of Records	% of Total Number of Records ..
Primary	883	80.2%	687	79.1%	589	78.8%	2,159	79.5%
Recurrent SUI	218	19.8%	181	20.9%	158	21.2%	557	20.5%
Grand Total	1,101	100.0%	868	100.0%	747	100.0%	2,716	100.0%

PreviousSurgery

What Kind Of Operation Was Performed Previously	% of Total Number of..	Number of Records
Tape	44.9%	250
Autologous sling	3.8%	21
Colposuspension	12.4%	69
Other	12.7%	71
Peri-urethral bulking agent	22.4%	125
Null	3.8%	21

Operation

Kind Of Surgery

- Recurrent SUI
- Primary

Operation Performed	% of Total Number of Records	Number of Records
Transobturator tape - trocar passed outside-to-inside (TOT)	40.8%	880
Retropubic tape trocar passed bottom-to-top (TVT)	19.3%	416
Transobturator tape - trocar passed inside-to-outside (TVTO)	12.6%	272
Autologous sling	10.1%	219
Peri-urethral bulking agent	24.4%	136
Colposuspension	9.2%	51
Mini tape	2.3%	49
Other operation	0.4%	9
Artificial Urinary Sphincter	1.1%	6

OtherOperation

Other Operation	Number ..	% of Tot..
Autologous transobturator sling	1	1.9%
TVT excision	3	5.8%
AUS	3	5.8%
Bladder neck AUS	1	1.9%
Bladder neck AUS (whole device singl..	1	1.9%
Bladder neck AUS cuff	2	3.8%
Bladder neck closure	2	3.8%
Bladder neck closure and martius fat p..	1	1.9%
Bladder neck closure and patch to neo..	1	1.9%
Bladder neck closure monti-mitrofanof..	1	1.9%
Colposuspension	1	1.9%
Durasphere injection to Mitrofanoff	1	1.9%
Excision TVT mesh, colposuspension ..	1	1.9%
Female AUS	1	1.9%
female sphincter cuff and cystoplasty	1	1.9%
Insertion bladder neck AUS cuff	1	1.9%
Insertion of artificial urinary sphincter	1	1.9%
Insertion of AUS parts	1	1.9%
Not recorded / Other	24	46.2%
Replacement of AUS	1	1.9%
Revision artificial urinary sphincter	1	1.9%
urethral closure and martius flap	1	1.9%
Vaginal closure of Urethra/Formation o..	1	1.9%
Grand Total	52	100.0%

Peri-operative complications by surgery

Peri Operative Complications	Kind Of Surgery					
	Primary		Recurrent SUI		Grand Total	
	Number of Records	% of Total Number of Records ..	Number of Records	% of Total Number of Records ..	Number of Records	% of Total Number of Records ..
None	2,011	93.1%	487	87.4%	2,498	92.0%
Bladder perforation	21	1.0%	17	3.1%	38	1.4%
Procedure abandoned	3	0.1%	3	0.5%	6	0.2%
Urethral perforation	2	0.1%	5	0.9%	7	0.3%
Other	38	1.8%	11	2.0%	49	1.8%
Null	83	3.8%	34	6.1%	117	4.3%
Urethral perforation,Procedu..	1	0.0%			1	0.0%
Grand Total	2,159	100.0%	557	100.0%	2,716	100.0%

Unintended CISC started

Did The Patient Start Unintended Cisc	Kind Of Surgery					
	Primary		Recurrent SUI		Grand Total	
	Number of Records	% of Total Number ..	Number of Records	% of Total Number ..	Number of Records	% of Total Number ..
Yes	22	1.0%	10	1.8%	32	1.2%
No	461	21.4%	117	21.0%	578	21.3%
Null	1,676	77.6%	430	77.2%	2,106	77.5%
Grand Total	2,159	100.0%	557	100.0%	2,716	100.0%

Length of Stay

Kind Of Surgery	Number of Records	Median LengthofStay	Min. LengthofStay	Max. LengthofStay
Primary	1,921	0	0	60
Recurrent SUI	481	1	0	63
Grand Total	2,402	0	0	63

Patients with Follow up

Fuid (group) 2	Number of Records	% of Total Number of Recor..
FU	1,733	63.8%
No FU	983	36.2%
Grand Total	2,716	100.0%

Clavien Dindo Grade of Complications

Clavien Dindo Grade Of Complication	Kind Of Surgery					
	Primary		Recurrent SUI		Grand Total	
	Number of Records	% of Total Number of Records ..	Number of Records	% of Total Number of Records ..	Number of Records	% of Total Number of Records ..
No complications	836	90.9%	174	74.4%	1,010	87.5%
Grade I	42	4.6%	36	15.4%	78	6.8%
Grade II	18	2.0%	14	6.0%	32	2.8%
Grade IIIa	3	0.3%			3	0.3%
Grade IIIb	7	0.8%	3	1.3%	10	0.9%
Null	14	1.5%	7	3.0%	21	1.8%
Grand Total	920	100.0%	234	100.0%	1,154	100.0%

Patient reported Urinary tract infection

Patient Reported Complications ..	Number of Records	% of Total Number of Recor..
Yes	84	7.3%
No	1,033	89.5%
Null	37	3.2%
Grand Total	1,154	100.0%

Persistent Pain after Surgery

Persistent Pain After Surgery	Number of Records	% of Total Number of Recor..
Yes	21	2.5%
No	803	94.9%
Null	22	2.6%
Grand Total	846	100.0%

Patient catheter dependent since surgery

Is The Patient Catheter Dependent	Kind Of Surgery					
	Primary		Recurrent SUI		Grand Total	
	Number of Recor..	% of Total Number ..	Number of Recor..	% of Total Nu..	Number of Recor..	% of Total Number ..
Yes	41	4.5%	23	9.8%	64	5.5%
No	623	67.7%	135	57.7%	758	65.7%
Null	256	27.8%	76	32.5%	332	28.8%
Grand Total	920	100.0%	234	100.0%	1,154	100.0%

Bladder Urgency -new symptoms

Over Active Bladder Symptoms New De Novo Urgency	Number of Records	% of Total Number of Recor..
Yes	157	13.6%
No	957	82.9%
Null	40	3.5%
Grand Total	1,154	100.0%

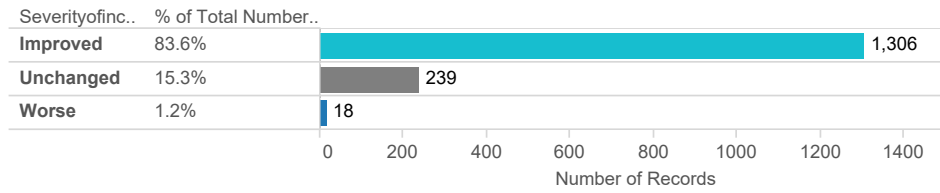
Bladder Urgency - existing symptoms

Over Active Bladder Symptoms Pre Existing Urgency Change	Number of Records	% of Total Number of Recor..
Better	249	21.6%
No change	409	35.4%
Worse	46	4.0%
Null	450	39.0%
Grand Total	1,154	100.0%

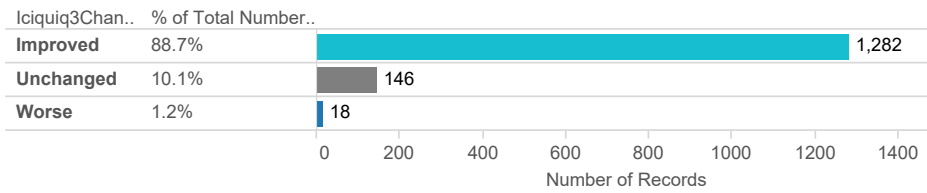
Tape extrusion

Tape Extrusion	Location Of Extrusion	Number of Records	% of Total Number of Recor..
Yes	Vaginal	5	0.6%
	Total	5	0.6%
No	Null	823	99.4%
	Total	823	99.4%
Grand Total		828	100.0%

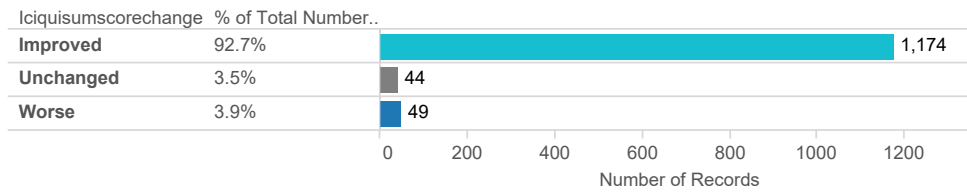
Severity of Incontinence change



ICIQ-UIQ3 change



ICIQ-UI Sum score change



Participating Hospital Centres 2015, 2016 and 2017

We are grateful to consultants from the following Centres / trusts who returned data for these analyses:

Addenbrooke's Hospital, Cambridge
Airedale Hospital
Alexandra Hospital, Redditch
Barking, Havering & Redbridge University Hospital
Bedford Hospital
BMI Goring Hall Hospital
Borders General Hospital, Melrose
Bradford Royal Infirmary
Burnley General Hospital
Castle Hill Hospital, Hull
Charing Cross Hospital, London
Chase Farm Hospital
Chorley & South Ribble Hospital
City Hospital Birmingham
Darlington Memorial Hospital
Diana, Princess of Wales Hospital, Grimsby
Doncaster Royal Infirmary
Eastbourne District General Hospital
Epsom General Hospital, Surrey
Fairfield Independent Hospital, St Helens
Forth Valley Royal Hospital, Larbert
Freeman Hospital, Newcastle
Frimley Park Hospital
Gartnavel General Hospital, Glasgow
George Eliot Hospital, Nuneaton

Goole & District Hospital
Guy's & Thomas's Hospital
Harrogate District Hospital
Huddersfield Royal Infirmary
Ipswich Hospital, Suffolk
James Cook University Hospital, Middlesbrough
James Paget University Hospital, Great Yarmouth
King's Mill Hospital, Nottinghamshire
Kingston Hospital, London
Leicester General Hospital
Leighton Hospital, Cheshire
Lister Hospital, Stevenage
Luton & Dunstable University Hospital
Manchester Royal Infirmary
Medway Maritime Hospital, Gillingham
Musgrove Park Hospital, Taunton
Norfolk & Norwich University Hospital
North Manchester General Hospital
Northern General Hospital, Sheffield
Northwick Park Hospital
Nottingham City Hospital
Peterborough City Hospital
Pilgrim Hospital, Boston
Pinderfields General Hospital, Wakefield
Princess Alexandra Hospital, Harlow

Queen Alexandra Hospital, Portsmouth
Queen Elizabeth Hospital, Birmingham
Queen Elizabeth University Hospital
Queen's Hospital, Burton-on-Trent
Rotherham Hospital
Royal Blackburn Hospital
Royal Albert Edward Infirmary, Wigan
Royal Berkshire Hospital, Reading
Royal Bolton Hospital
Royal Derby Hospital
Royal Free Hospital, London
Royal Hallamshire Hospital, Sheffield
Royal National Orthopaedic Hospital, Stanmore
Royal Sussex County Hospital, Brighton
Salford Royal Hospital
Salisbury District Hospital
Southend Hospital
Southmead Hospital, Bristol
Southport & Ormskirk Hospitals
St James's University Hospital, Leeds
St Richard's Hospital, Chichester
Stepping Hill Hospital, Stockport
Sunderland Royal Hospital
The New Victoria Hospital
The Queen Elizabeth Hospital, King's Lynn
The Royal Oldham Hospital
University College Hospital, London
University Hospital of Wales, Cardiff
University Hospital, Ayr
Walsgrave Hospital, Coventry

Watford General Hospital
Western General Hospital, Edinburgh
Weston General Hospital, Weston-super-Mare
Wexham Park Hospital, Slough
Whipps Cross University Hospital, London
Worthing Hospital
Wrexham Maelor Hospital
Wycombe Hospital, High Wycombe
York Hospital