

THE BRITISH ASSOCIATION OF UROLOGICAL SURGEONS

SECTION of ONCOLOGY

BAUS Cancer Registry Analyses of Minimum data set for Urological cancers January 1st – 31st December 2008

October 2009

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INTRODUCTION

The registry has now reached its 12th year of data collection. The last year has seen significant changes with the introduction of the new web based database. While the original database has served BAUS and the section well, our hope is that Nuvola will improve access and capture rates as well as simplify data returns demanded for revalidation and licensing.

The format of the annual report has been changed slightly to reflect the maturity and size of the database, which now holds data on over 270 000 new cancers. This year we have attempted to look at trends over the last decade, using reference years due to the large amount of data. In a number of instances this has revealed evidence of significant stage migration. In line with the theme of this year's Section meeting, we have also included some analyses of the whole dataset on bladder cancer over the last decade, as well as data on cystectomy over the last 5 years.

Returns from 2008 are marginally up on last year, but unfortunately the quality of the submissions has declined. The reasons for this appear to be data entered by a variety of people apart from consultants or SpR's, including data managers, CNS's, MDT co-coordinators to mention a few. In addition the increasing use of in-house systems to populate our datasets has led to some large gaps in completion. The old adage of "rubbish in, rubbish out" applies so please impress upon those in your departments who do data entry the importance of accuracy and completeness.

The most notable trends detected in the latest analysis, shows continuing age and stage migration in prostate cancer, with the median age at diagnosis declining further and more localized disease being detected. Of most interest is the marked stage migration in renal cancer, with T1 tumours increasing significantly and steadily over the past decade, while T2 tumours declined and T3/4 cancers remaining steady. As always this results in many more questions than answers. The initial analysis of 70 000 bladder cancers has given us excellent insight into bladder cancer therapy in the UK. While the BCR holds valuable epidemiological data, meaningful outcome date is lacking.

On behalf of the Section of Oncology, I would like to thank Mr Gregor McIntosh for his hard work over the last five years overseeing the registry. As always a huge thank you goes to Sarah Fowler for all her hard work, particularly in relation to the move from the Access based registry to Nuvola, which has created lots of additional work.

Finally, the Executive committee would like to see regular publications and updates appearing in the peer reviewed literature, to raise the profile and awareness of the BCR, as well as utilize the valuable information it holds. Anyone is free to apply with a simple application form and instructions available on the website.

Greg Boustead October 2009

AUDIT RESULTS SUMMARY January 1st – 31st December 2008 Who took part?

391 consultant urologists from 107 hospital centres in England, Wales, Scotland and Northern Ireland provided data for this study submitting data on 25,839 newly presenting urological tumours from 1st January to 31st December 2008. These figures represent approximately 46% of the total UK tumours registered in 2006/2007 (56,096) (the most recent years available). 1.2% (318/25839) are the private patients of 65 consultants.

How were the data analysed?

Information obtained from consultants was entered into the computer database using unique identifying numbers for individual consultants or, if they preferred, a centre number. Twelve centres returned data under a centre number only (29 consultants in total).

Data could be returned either in electronic format using either an Access (Microsoft) database, the new web-based database launched in June 2009 or "in-house" database (23,767 – 92% of returns) designed for the purpose or by completion of a pro forma for each patient (8% of returns). The pro formas were entered directly into an Access database, at which time validation comprising mainly of checks for duplicate entries and on dates and sex of patient could be carried out. 103 tumours were registered twice as a tertiary referral from another centre or another consultant in the same centre. They were only included once in all the analyses using the data from the primary site for all analyses except those relating to staging and treatment when the tertiary site data was used. In addition 28 benign tumours were registered but these have been excluded from all analyses.

The data presented here are a summary of the data received up to 4th September 2009 and relate to diagnoses made during the whole of 2008. The following data was included (this includes the total returns):

- a. Patients for who the date of diagnosis fell within the time period. (01/01/2008 to 31/12/2008). 25,215 registrations (97.1%).
- b. Patients for whom the date of diagnosis was either not included or the patient was a tertiary referral, but the referral date fell within the study period. (01/01/2008 to 31/12/2008) 685 registrations (2.6%).
- c. Patients for whom the diagnosis and referral dates were either not included or the patient was a tertiary referral, but the date of first consultation fell within the study period. (01/01/2008 to 31/12/2008). 58 (0.2%).

For the ranked charts (1, 2 & 4) the individual consultant or centre identification numbers were removed and replaced with rank numbers starting at 1. A unique, confidential "Ranking Sheet" was prepared for each surgeon to enable them to identify their rank in every chart. For those charts where overall figures for the entire database are shown the ranking sheet displays the consultant's individual figures. No one else can identify the results of an individual consultant. The ranked comprise single bars, with in addition the 25, 50, and 75 percentiles and are ranked from left to right in the ascending order of the data item being measured. Where percentages are included figures have been rounded up to one decimal point. Unless otherwise stated all analyses represent the 2008 dataset.

A personal ranking sheet for each consultant registering three or more tumours was issued individually to go with this chartbook.

Sarah Fowler BAUS Cancer Registry (BCR) Manager October 2009

A. Participants and Overall Figures

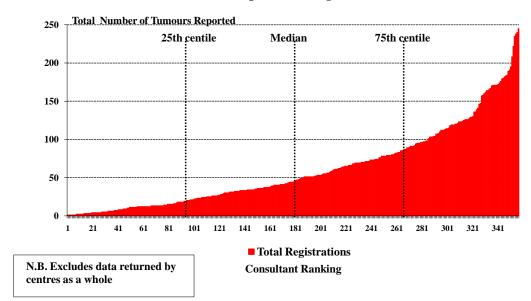
The number of centres using their own in-house systems to return data has increased yet again but unfortunately the completeness of data returned by many of these systems remains less so than when returned using the specially designed Microsoft Access database making validation and analyses more complicated. It is to be hoped that many these problems will be resolved as the switch to the new web-based database becomes mandatory from January 2010.

As in previous years we have incorporated comparison with National Cancer Statistics from 2006/2007 - the latest years available. Comparison with the national data does suggest that our data are representative of the UK as a whole. However when comparing our data with that of the national data we should bear in mind the following:

- Our data are only being collected by urologists. We have no way of estimating the number of urological cancers that are not being seen or diagnosed by urologists. In the case of kidney cancer, it seems that a substantial number are never seen by a urological surgeon.
- These data are being presented within ten months of the completion of the year of data collection and being compared to projected national figures from 2006/2007, which are the latest to be published.
- For the majority of participants, there is no specific funding for data collection and the analysis and presentation is entirely funded by the Section of Oncology.

BAUS - Register of Newly Presenting Urological Tumours January 1st - December 31st 2008 Who took part

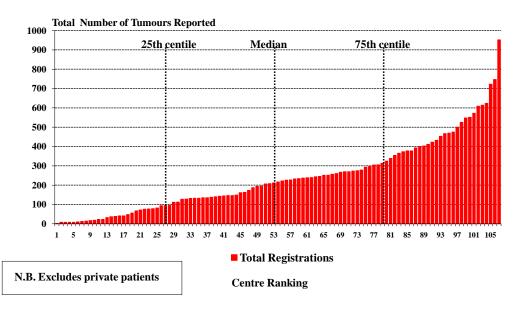
- 390 Consultants from 107 Centres provided data on 25,839 newly presenting urological tumours.
- 1.2% (318/25839) were from the private patients of 65 Consultants
- Range of Consultants per Centre = 1 12, (Median 4)
- Median number of tumours per Consultant = 44, Range 1 239
- Median number of tumours per Centre = 212, Range 3 952
- 92% (23767/25839) of the data were returned electronically



Total Number of Newly Presenting Tumours Reported per Consultant Median: 44 (Interquartile Range 17 - 83)

Chart 2

Total Number of Newly Presenting Tumours Reported per Centre Median: 212 (Interquartile Range 112 - 325)



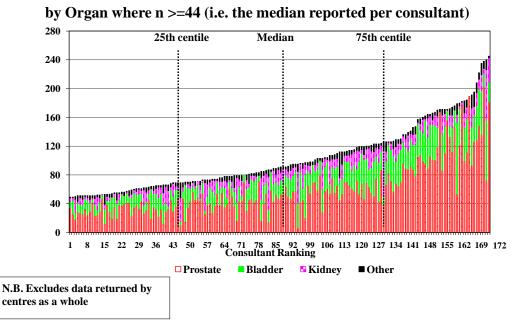
Number of Newly presenting Tumours by Organ per Consultant 391 Consultants reported 25, 839 Tumours Median Total per Consultant = 44

Organ	Total Number Reported	Median per Consultant	Range
Prostate *			
	14625	23	0 - 202
Bladder			
	6736	11	0 - 100
Kidney			
	2900	3	0 - 70
Testis			
	791	1	0 - 14
Pelvis/Ureter			
	440	1	0 - 11
Penis			
	221	0	0 - 33
Urethra			
	19	0	0 - 2
Prostatic			
Urethra	8	0	0 - 2

* Includes 78 registrations with High Grade PIN only

Chart 4

Total Number of Newly Presenting Tumours Reported per Consultant



Overall Data by Organ

Organ	Number Recorded	Percentage of Total (25839)	Mean Age at Diagnosis	Age Range	Males	Females
Prostate *	14625	56.6	71.1	29 - 105	14625	
Bladder	6736	26.1	72.4	17 - 103	5002	1674
Kidney	2900	11.2	66.7	16 - 99	1765	1111
Testis	791	3.1	39.1	16 - 88	791	
Pelvis/Ureter	440	1.7	71.9	31 - 101	278	158
Penis	221	0.9	64.6	29 - 95	221	
Urethra	19	0.1	65.7	34 - 84	13	6
Prostatic Urethra	8	0.0	69.1	54 - 85	8	
Other	41	0.2	66.4	36 - 94	30	10
Not recorded	58	0.2	69.4	33 - 89	43	12

* Includes 78 registrations with High Grade PIN only

Chart 6

Organ	2008		2004 Number		1999	
	Number	% of Total	Recorded	% of Total	Number	% of Total
	Recorded	(25,839)		(24,532)	Recorded	(19,009)
Prostate						
	14625*	56.6	14858#	60.6	9277	48.8
Bladder						
	6736	26.1	6073	24.8	6584	34.6
Kidney						
	2900	11.2	2104	8.6	1661	8.7
Testis						
	791	3.1	750	3.1	838	4.4
Pelvis/Ureter						
	440	1.7	291	1.2	281	1.5
Penis						
	221	0.9	196	0.8	165	0.9
Urethra	19	0.1	29	0.1	-	
Prostatic					-	
Urethra	8	0.0	15	0.1		
Other						
	41	0.2	29	0.1	120	0.6
Not recorded						
	58	0.2	187	0.8	85	0.4

Overall Data by Organ by Year

Including registrations with High Grade PIN only: * 78; # 84

Total Registrations per Country Prostate, Bladder, Kidney, Testis, Pelvis/Ureter & Penile Tumours*

Region	2008		2008	2004	1999
-	Total Registrations*	National	BAUS %	BAUS %	BAUS %
	BAUS	figures**	National	National	National
England					
	21642	46743	46.3	50.8	44.0
Scotland					
	1837	4138	44.4	18.8	17.4
Wales					
	2035	3908	52.1	53.3	35.5
Northern Ireland					
	192	1307	14.7	37.6	24.5
Total UK					
	25706	56096	45.8	48.1	40.7

**England : cancer statistics - registrations of cancer diagnosed in 2006, England. Series MBI no. 37 – 2009 Wales: Welsh Cancer Intelligence & Surveillance Unit - 2007

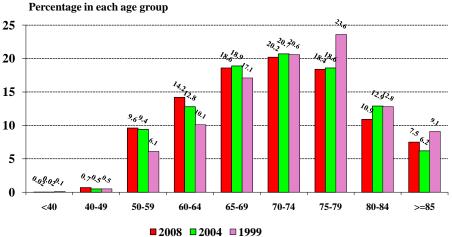
Scotland:Scottish Cancer Registry,Scottish Cancer Intelligence Group, ISD Scotland - 2006

Northern Ireland:Northern Ireland Cancer Registry - 2006 -

Chart 8

Percentage Age Distribution - Prostate Tumours

BAUS 2008 median: 71 Years; Range 29 -105 (n= 14,115*) BAUS 2004 median: 72 Years; Range 21 -103 (n= 14,665*) BAUS 1999 median: 73 Years; Range 21 -100 (n= 8,870*)

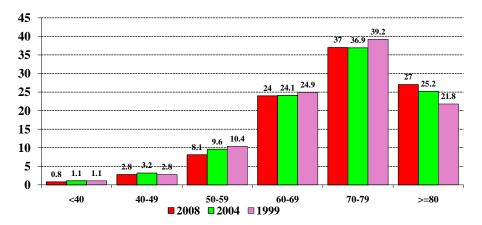


•Age could be calculated when both date of birth and diagnosis date were recorded •The reductions in age at diagnosis over the years are significant at the 95% CI

Percentage Age Distribution - Bladder Tumours - Males BAUS 2008 median: 73 Years; Range 19 -103 (n= 4,814*)

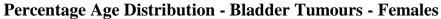
BAUS 2008 median: 73 Years; Range 19 -103 (n= 4,814*) BAUS 2004 median: 73 Years; Range 20 -101 (n= 4,470*) BAUS 1999 median: 72 Years; Range 6 - 99 (n= 4,664*)

Percentage in each age group

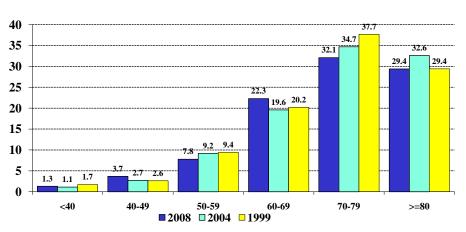


^{*} Age could be calculated when both date of birth and diagnosis date were recorded

Chart 10



BAUS 2008 median: 73 Years; Range 19 -103 (n= 4,814*) BAUS 2004 median: 73 Years; Range 20 -101 (n= 4,470*) BAUS 1999 median: 75 Years; Range 2 - 98 (n= 1,590*)

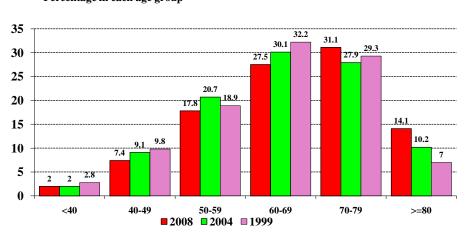


Percentage in each age group

* Age could be calculated when both date of birth and diagnosis date were recorded

Percentage Age Distribution - Kidney Tumours - Males BAUS 2008 median: 68 Years; Range 20- 99 (n= 1,661*)

BAUS 2008 median: 68 Years; Range 20- 99 (n= 1,661*) BAUS 2004 median: 66 Years; Range 21 -102 (n= 1,323*) BAUS 1999 median: 65 Years; Range 24 - 95 (n= 1,000*)



Percentage in each age group

* Age could be calculated when both date of birth and diagnosis date were recorded

Chart 12



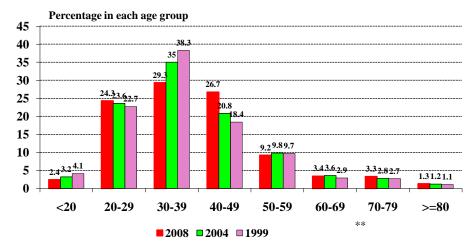
35 31.6 29.6 29.1 30 27.3 27.1 28 25 20 17.5 17.4 15.6 16.4 14.1 15 11.4 10 6.4 49 5 0 <40 40-49 50-59 60-69 70-79 >=80 **2008 2004 1999**

Percentage in each age group

* Age could be calculated when both date of birth and diagnosis date were recorded

Percentage Age Distribution - Testicular Tumours

BAUS 2008 median: 37 Years; Range 16 - 88 (n= 760*) BAUS 2004 median: 36 Years; Range 14 -101 (n= 746*) BAUS 1999 median: 36 Years; Range 3 -99 (n= 781*)

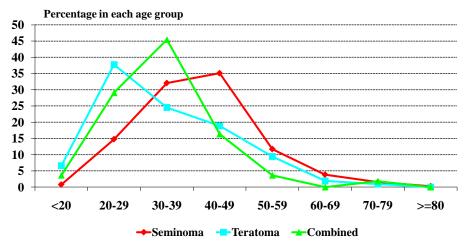


* Age could be calculated when both date of birth and diagnosis date were recorded

Chart 14

Percentage Age Distribution - Testicular Tumours

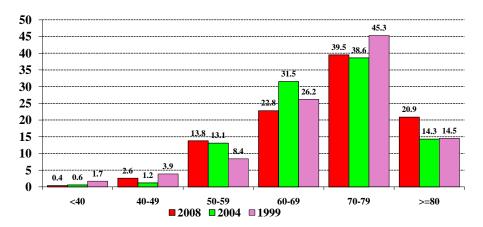
Seminoma median age : 40 years; Range 18 - 88; (n = 393*) Teratoma median age : 31 years; Range 16 - 77; (n = 106*) Combined seminoma/teratoma median age : 31 years; Range 16 - 73; (n = 55*)



* Age could be calculated when both date of birth and diagnosis date were recorded = 760/791 (96%). Histology was reported in 685 of these tumours. (685/760 = 90.1%), 127 of these were histologies other than the above groups

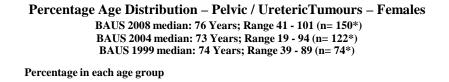
Percentage Age Distribution – Pelvic / UretericTumours – Males BAUS 2008 median: 72 Years; Range 31 - 93 (n= 268*) BAUS 2004 median: 70 Years; Range 19 - 91 (n= 168*) BAUS 1999 median: 71 Years; Range 36 - 89 (n= 179*)

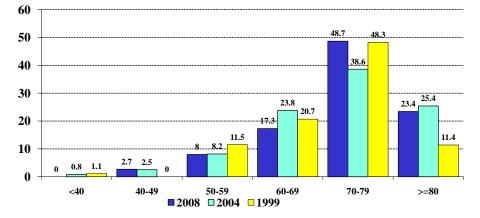
Percentage in each age group



* Age could be calculated when both date of birth and diagnosis date were recorded

Chart 16

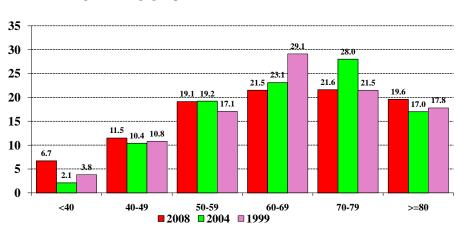




* Age could be calculated when both date of birth and diagnosis date were recorded

Percentage Age Distribution – Penile Tumours

BAUS 2008 median: 64 Years; Range 29- 88 (n= 209*) BAUS 2004 median: 66 Years; Range 28 - 93 (n= 182*) BAUS 1999 median: 66 Years; Range 31 - 95 (n= 158*)



Percentage in each age group

* Age could be calculated when both date of birth and diagnosis date were recorded

B. Times between referral, consultation, diagnosis and treatment

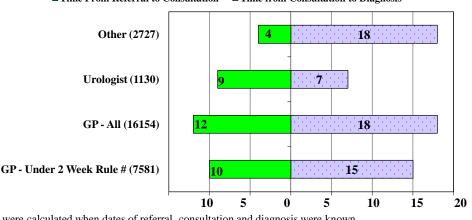
In this section we have included charts from the 2004 dataset to allow for comparisons.

The overall time from referral to diagnosis has fallen significantly from 2004 and is now the shortest since data collection started in 1999.

Recording of date of definitive treatment remains a problem with only 71% of returns including this item and interpretation must still be cautious. In some cases, the date of definitive treatment was recorded as being before the date of diagnosis! Any negative times between diagnosis and definitive treatment date were treated as 0 i.e. definitive treatment date = date of diagnosis.

Chart 18

Median Time to First Consultation and Diagnosis in Days by Referral Source in Days Excluding tumours diagnosed before Referral* - 2008

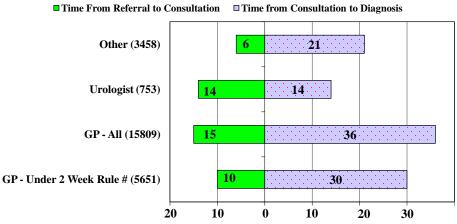


■ Time From Referral to Consultation □ Time from Consultation to Diagnosis

* Times were calculated when dates of referral, consultation and diagnosis were known and diagnosis date was not before referral date (N = 20,125/25,839 = 78% tumours)

Referral Source was recorded in 20,011/20,125 (99%) cases

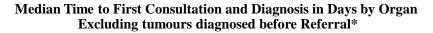
Referral priority was recorded in 91% (12717/13990) GP referrals in England where 2 week rule operates

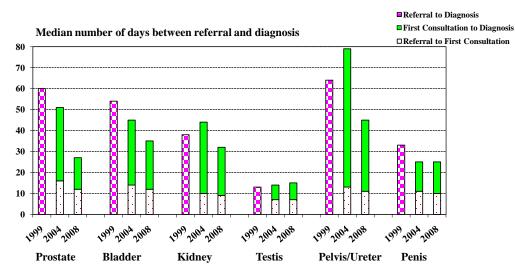


Median Time to First Consultation and Diagnosis in Days by Referral Source in Days Excluding tumours diagnosed before Referral* - 2004

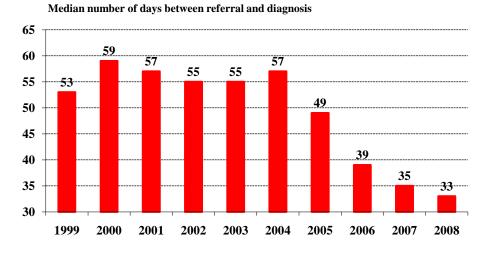
* Times were calculated when dates of referral, consultation and diagnosis were known and diagnosis date was not before referral date (N = 20,189/24,532 = 82% tumours) Referral Source was recorded in 20,020/20,189 (99%) cases
Referral priority was recorded in 96% (14601/15152) GP referrals in England where 2 week rule operates

Chart 20





* Times were calculated when dates of referral, consultation and diagnosis were known and diagnosis date was not before referral date . Date of first consultation not recorded in 1999



Median Total Times to Diagnosis in Days - All Referrals Excluding Patients Diagnosed before Referral

Chart 22

Times to Definitive Treatment in Days by Organ – 2008 and 2004
Excluding tumours diagnosed or treated before referral

Organ	Median Time betw and Definitive Tre days		Median Time between Diagnosis and Definitive Treatment in days		
	2004	2008	2004	2008	
Prostate	112	64	31	26	
Bladder	63	41	0	0	
Kidney	65	55	0	9	
Testis	16	17	0	0	
Pelvis/Ureter	117	75	6	8	
Penis	41	42	15	0	

Definitive treatment date was recorded in 69% tumours (16923/24532) in 2004 and 71% in 2008 (18,429/25,839)

C. Histology and Staging

Histological confirmation was available in 84% of all tumours. This has decreased steadily since 1999 and may be a reflection of the increasing number of returns using in-house data collection systems. Every effort should be made to record data on patients seen in clinics and on the wards, where there is no histological diagnosis.

Participants were asked to return both clinical and, where appropriate, pathological* TNM categories using the 2002 version of the TNM classification for Urological tumours which were included in the data dictionary sent to all participants.

In order to make interpretation of the resultant information easier each patient was staged, wherever possible, using the classifications as shown in the following charts. If the pathological TNM categories were given and appropriate then these were used for the staging, failing this clinical TNM categories were used.

The number of returns having either the full pathological TNM or clinical TNM categories has decreased significantly since 1999. (A substantial proportion of returns do not include any N and M categories or these were recorded as "X" – Cannot be assessed.) A plea for more accurate data recording is given and the suggestion that the BCR data may be more fully recorded if completed during the relevant Multi Disciplinary Team meeting.

The data on the following staging charts should therefore be regarded with caution.

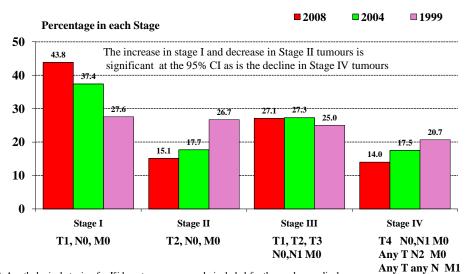
*The pathological assessment of the primary tumour (pT) entails a "resection of the primary tumour or biopsy adequate to evaluate the highest pT category"

Chart 23

Organ	2008		2004		1999	
	Ν	%	N	%	Ν	%
Prostate						
	12774	88.3	13881	95.3	8605	94.4
Bladder	5861	88.3	5689	96.5	6344	97.8
Kidney	1588	57.0	1425	70.1	1436	88.0
Testis	1300	57.0	1423	70.1	1430	00.0
Tesus	656	84.2	685	93.6	815	<i>99.4</i>
Pelvis/Ureter	304	70.5	235	83.0	272	97.8
Dereta	304	70.5	255	03.0	212	97.0
Penis	200	92.6	186	98.9	162	98.8
Urethra	17	89.5	28	100.0		
Prostatic Urethra	1/	07.5	20	100.0		
riostatic Oreuna	8	100.0	15	100.0	-	
Other or						
Not Recorded	57	67.9	80	30.4	185	94.9
Totals						
	21465	84.4	22224	92.6	17819	95.3

Known Histological Confirmation of Diagnosis by Organ

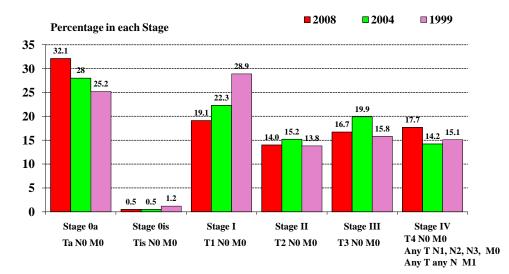
Staging of Kidney Tumours Staging could be estimated in 56.7% in 2008, 75.4% in 2004 and 92% in 1999



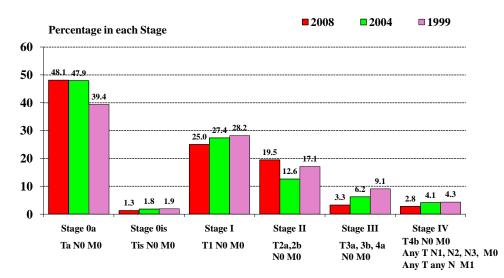
N.B. A pathological staging for Kidney tumours was only included for those where radical or organ conserving surgery was performed

Chart 25

Staging of Pelvis / Ureteric Tumours Staging could be estimated in 46.4% in 2008, 72.5% in 2004 and 87.5% in1999



N.B. A pathological staging for Pelvis / Ureteric tumours was only included for those where radical or organ conserving surgery was performed

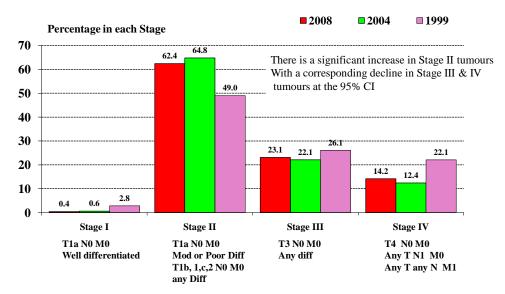


Staging of Bladder Tumours Staging could be estimated in 67% in 2008, 80.5% in 2004 and 94.2% in1999

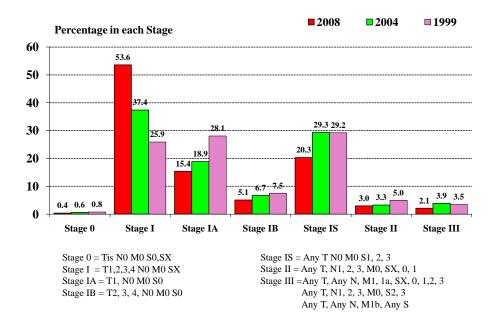
N.B. A pathological staging for Stage II, III or IV Bladder tumours was only included for those where radical surgery was performed

Chart 27

Staging of Prostate Tumours Staging could be estimated in 56.3% in 2008, 67.6% in 2004 and 81.5% in1999



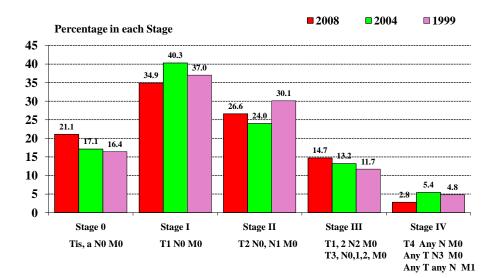
N.B. A pathological staging for Prostate tumours was only included for those where radical surgery was performed



Staging of Testicular Tumours Staging could be estimated in 59.2% in 2008, 69.2% in 2004 and 86.2% in1999

Chart 29

Staging of Penile Tumours Staging could be estimated in 49.3% in 2008, 65.8% in 2004 and 90.1% in1999



D. Treatment Intention & Laparoscopic procedures

Chart 30

Organ	Curative		Palliative		No active anti-cancer		% of Total Tumours
					treatment		Tumburs
(Number Known)	N	%	Ν	%	N	%	Reported
Prostate (9938)							
	4662	46.9	3446	34.7	1830	18.4	67.9
Bladder (4646)							
	4207	90.6	389	8.4	50	1.1	68.9
Kidney (1983)							
	1419	71.6	295	14.9	269	13.6	68.3
Testis (590)							
	577	97.8	11	1.9	2	0.3	74.6
Pelvis/Ureter (303)							
	230	75.9	52	17.2	21	6.9	68.9
Penis (136)							
	120	88.2	9	6.6	7	5.1	61.5
Urethra (17)							
	14	82.4	3	17.6	0	-	89.5
Prostatic Urethra							
(4)	2	50.0	2	50.0	0	-	50.0

Initial Treatment Intention by Organ Percentage & Total of Known Intent - 2008

Chart 31

Initial Treatment Intention by Organ Percentage & Total of Known Intent - 2004

Organ	Curative		Palliative		No active anti-cancer treatment		% of Total Tumours
(Number Known)	Ν	%	Ν	%	N	%	Reported
Prostate (11615)	5131	44.2	4750	40.9	1734	14.9	78.2
Bladder (5132)	4574	89.1	450	8.8	108	2.1	84.5
Kidney (1765)	1273	72.1	332	18.8	160	9.1	83.9
Testis (620)	613	98.9	6	1.0	1	0.2	82.7
Pelvis/Ureter (234)	189	80.8	32	13.7	13	5.6	80.4
Penis (146)	132	90.4	9	6.2	5	3.4	74.5
Urethra (25)	15	60.0	7	28.0	3	12.0	86.2
Prostatic Urethra (11)	7	63.6	2	18.2	2	18.2	73.3

Organ	Curative		Palliative		Surveillance		% of Total Tumours
(Number Known)	Ν	%	N	%	N	%	Reported
Prostate (8291)							
	2465	29.7	4483	54.1	1343	16.2	69.1
Bladder (6105)							
	5096	83.5	820	13.4	189	3.1	73.4
Kidney (1579)							
	1191	75.4	307	19.5	81	5.1	70.6
Testis (789)	=< 4	06.0	0	1.0	15		70.0
	764	96.8	8	1.0	17	2.2	70.9
Pelvis/Ureter (268)	220	07.0	20	11.2		2.0	77.0
	230	85.8	30	11.2	8	3.0	75.8
Penis (153)							
	136	88.9	15	9.8	2	1.3	64.7

Initial Treatment Intention by Organ Percentage & Total of Known Intent - 1999

Chart 33

Laparoscopic Procedures Performed as Percentage of Total Procedures reported*

Organ	2008			2004	2001				
	Open	Lap	Lap as % open	Open	Lap	Lap as % open	Open	Lap	Lap as % open
Prostate	1592	500	23.9	2709	290	9.7	3838	45	1.2
Kidney	1153	446	27.9	1345	169	11.2	1632	31	1.9
Pelvis / Ureter	187	70	27.2	187	34	15.4	295	6	2.0
Bladder	5019	23	0.5	5232	4	0.1	6854	7	0.1

* Laparoscopic procedures not recorded until 2001

Staging	Prost	ate		Bladd	ler		Kidn	ey		Pelvis	s/Urete	ter				
	2008	2004	2001	2008	2004	2001	2008	2004	2001	2008	2004	2001				
Stage 0a	N/A	N/A	N/A	5	1	1	N/A	N/A	N/A	13	9	2				
Stage I		-	-	1	2	-	199	107	22	6	6	3				
Stage II	350	247	40	1	1	3	47	14	3	7	5					
Stage III	58	21	3	4	-	2	74	12	1	6	2	1				
Stage IV	5	-	2	-	-	-	17	4	-	4	-					
Not Recorded	87	22	-	13	-	1	109	32	6	34	12	-				
Totals	500	290	45	24	4	7	446	169	32	70	34	6				

Laparoscopic Surgery by Organ and Stage Total Numbers recorded

E. Clinical Trial Status and discussion at MDT meeting

Chart 35

Trial Status	2008		2004		2002*			
	Ν	%	Ν	%	N	%		
Patient eligible, consented to and entered								
trial	298	1.2	554	2.3	597	2.1		
Patient eligible for trial but declined entry	127	0.5	148	0.6	144	0.5		
Patient ineligible for trial	010				1000	• •		
	810	3.1	1231	5.0	1088	3.8		
Patient not considered for trial	6281	24.3	7839	32.0	8746	30.8		
Clinical trial status unknown	10457	40.5	4452	18.1	4879	17.2		
Not Recorded	7866	30.4	10308	42.0	12897	45.5		

Clinical Trial Status

* First year recorded

Chart 36

Was the Patient discussed at an MDT meeting with formation of a management plan?

Response	2008		2003*				
	N	%	N	%			
Yes	20009	77.4	14967	55.0			
No	4852	18.8	9414	34.6			
Not Known or Not Recorded	978	3.8	2844	10.4			

* First year recorded

F. Completeness of Data

Chart 37

Percentage a	nd num	bers of	Total Ref	turns u	ınknown	
Data Item	2008		2004		1999	
	Number	% of	Number	% of	Number	% of
	Unknown	Total	Unknown	Total	Unknown	Total
		Returns		Returns		Returns
		25839		24532		22309
Centre no or Cons no	6	0.02	0	0	9	0.04
Hospital number	*323	1.3	**760	3.1	***257	1.4
NHS number	739	2.9	2975	12.1	6946	36.5
Postcode	1770	6.9	948	3.9	1319	6.9
Sex	48	0.2	113	0.5	118	0.6
Date of Birth	345	1.3	244	1.0	217	1.1
Organ	28	0.1	181	0.7	83	0.4
Date of Diagnosis	691	2.7	84	0.3	604	3.2
Referral Source	1600	6.6	1592	6.5	1096	5.8
Priority of GP Referrals	1744/18138	9.6	776/17123	4.5	-	-
Date of Referral	3044	11.7	2419	9.9	1820	9.6
Date of First Consultation	2595	10.0	2101	8.6	-	-
Date of Definitive Treatment	7451	28.9	7707	31.4	-	-
Delay to Diagnosis	2348	9.1	2738	11.2	-	-
Histological confirmation	418	1.6	593	2.4	321	1.7
Basis of diagnosis if no	240/3976	6.0	175/1713	10.2	71/875	8.1
Histology						

Completeness of Data -1 Percentage and numbers of Total Returns unknown

includes private patients (pp), * includes 22 pp and 255 from 2 centres not extracting hospital numbers; ** includes 160 pp

+ 220 from 1 centre with data extraction problems ; *** includes 198 pp

Chart 38

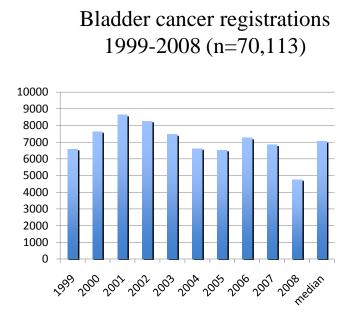
Completeness of Data -2 Percentage and numbers of Total Returns unknown

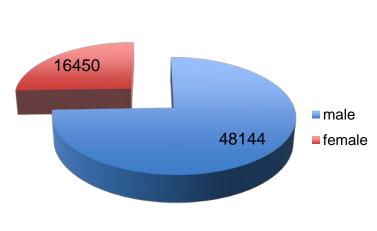
Data Item	2008 Number Unknown	% of Total Returns 25839	2004 Number Unknown	% of Total Returns 24532	1999 Number Unknown	% of Total Returns 19009
Histology	783/21445	3.7	787/22226	3.5	258/17813	1.4
Differentiation	8167/21445	38.1	5230/22226	23.5	2220/17813	12.4
Clinical T Category	7962	30.8	2669	10.9	3357	17.7
Clinical N Category	9914	38.4	4057	16.5	6555	34.5
Clinical M Category	10019	38.8	4453	18.2	6467	34.0
Pathological T Category*	9111/21445	42.5	9158/22226	41.2	6223/17813	34.9
Pathological N Category*	10731/21445	50.0	9920/22226	44.6	9061/17813	50.9
Pathological M Category*	10754/21445	50.1	9930/22226	44.7	9055/17813	50.8
PSA at time of Diagnosis	2533/14625	17.3	2276/14858	15.3	1071/9277	11.5
Gleason Scores	2950/14625	20.2	2102/14858	14.1	-	-
Testicular S Category	580/791	73.4	436/750	58.1	307/838	36.6
Treatment Intention	8024	31.2	4949	20.2	1646	8.7
Treatment Type	1043/15481	6.7	703/17559	4.0	331/15714	2.1
Clinical Trial Status	7866	30.4	10705	43.6	-	-
Discussed at MDT	483	1.9	1907	7.8	-	-
Pathological Ref. No.	11003	42.6	6322	25.8	-	-

G. Bladder Cancers – 1999 to 2008

The BAUS Cancer Registry (BCR) currently has data on over 270,000 new urological cancers diagnosed since 1998. We have undertaken an ad hoc analysis of all bladder cancer entries between 1999 and 2008 inclusive. This is estimated to represent between 40 and 50% of all new bladder cancer registrations during this time period.

Chart 39



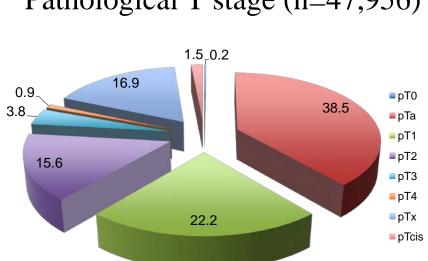


Bladder cancer – sex distribution

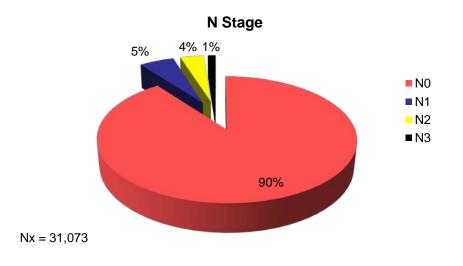
(n=65,783)

Male: Female ratio 3:1

Chart 41

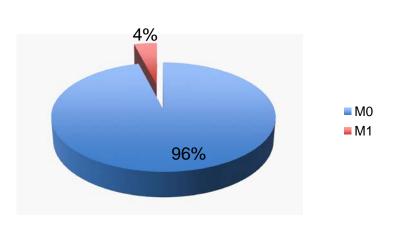


Pathological T stage (n=47,956)



Pathological N stage (n = 40,211)

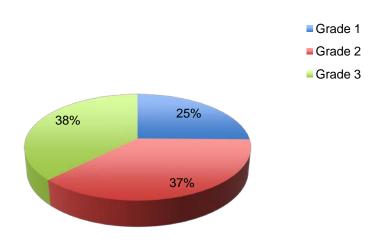
Chart 43



Pathological M stage (n=8,724)

In most cases of superficial TCC, M stage assigned was Mx = 31,179

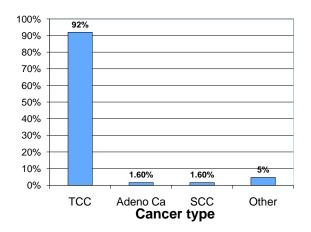
27



Tumour grade (n=49,836)

Chart 45

Histological type (n = 61,971)



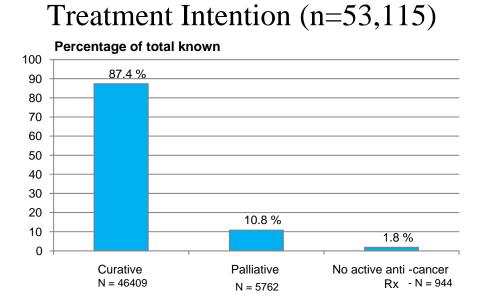
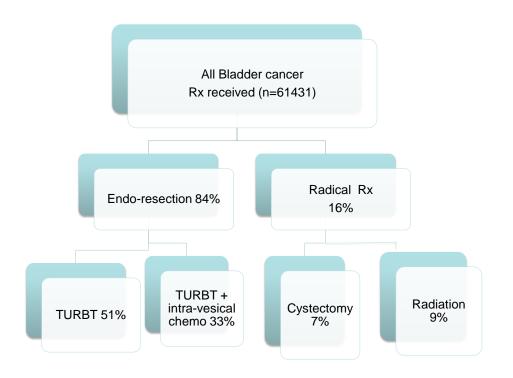


Chart 47



H. Complex operations database – Cystectomy – 2004 - 2008

Data has been collected since January 2004 and we have performed an ad hoc analysis on all data collected between 2004 and 2008 inclusively. HES data indicate that between 1000 and 1200 cystectomies are performed annually. Analysis of our dataset provides valuable information on demographic and peri-operative variables but highlights the lack of useful, robust outcome data

Chart 48

Cystectomy – sex distribution (n=2816)

Sex	Frequency	%
Male	2014	72
Female	721	26

Missing 81

Imaging prior to cystectomy

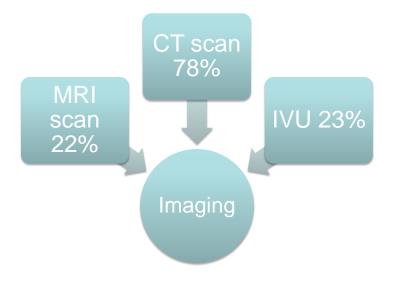
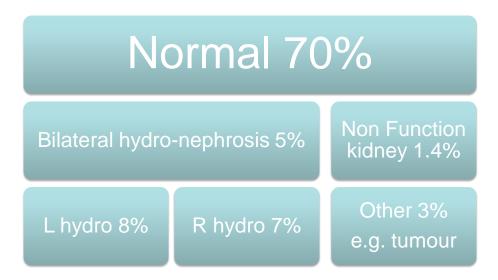


Chart 50

Upper tract status



Peri-operative variables

Variable		
Operative time (median)	279 mins	(95% CI = 275-344)
Blood loss (median)	1200ml	(95% CI = 1466-1587ml)
Transfusion rate (mean)	59%	
Blood transfused	2.9 units	(95% CI = 0.9-5)
Intra-operative complications	9%	
Post-operative complications	23%	
Hospital stay (median)	14 days	(95% CI =18-23)

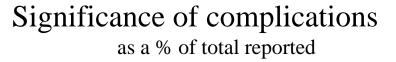
Chart 52

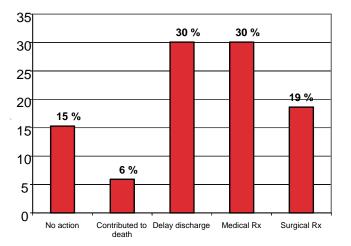
Intra-operative complications

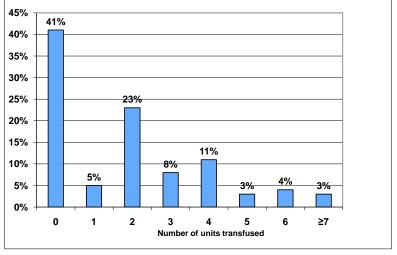
Complication	Incidence %	Frequency (N)
Bleeding	2.3	64
Cystectomy abandoned	0.36	10
Rectal injury	0.4	11
Cardio-pulmonary	0.32	9
Colon/small bowel procedure	0.82	23
Vascular injury	0.18	5
Nerve injury	0.18	5
Death in OR	0.04	1

Post op complication	Incidence %	Frequency (N)
Bowel obstruction	0.5	13
Wound dehiscence	0.9	25
Bowel fistula	0.4	12
C. Difficile	0.3	9
Wound infection	1.5	43
lleus	2.3	66
Urine leak	0.7	20
Sepsis	0.8	22
Cardiac arrythmia	0.4	10
PE	0.3	8
Septicaemia	0.2	7
CVA	0.1	4
Myocardial infarction	0.3	9
Bleeding	0.4	11
Death	0.2	5
GI bleed	0.5	15
Nerve injury	0.1	3

Chart 54





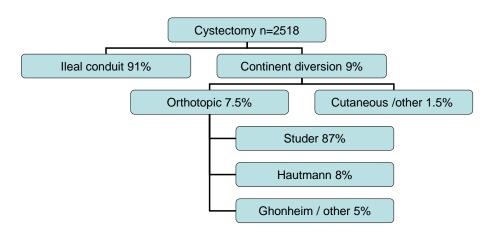


Blood transfused n=2814

Missing 702

Chart 56

Type of urinary diversion



Survival (n=2816)

Follow up (mean)	40.9 months (95% CI = 38.5 – 43)
Deaths	215 (7.6%)
Time to death	5.4 months (95% CI= 4.3-6.5)

Appendix – Participants over the Years

The following table displays a list of all Hospitals contributing data to the BCR during the pilot period 1st April to 30th September 1998 and the ten consecutive 12 month periods from January 1999 to December 2008. The final 5 columns show those contributing data for the complex operations dataset for the calendar years 2004 - 2008.

N.B. Not all consultants from each participating hospital have contributed data

			BAUS (CANCE	R REGI	STRY –	MININ	IUM DA	ATASET			COMPLEX OPERATIONS				
HOSPITAL	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2004	2005	2006	2007	2008
Aberdeen Royal Infirmary	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark					\checkmark
Addenbrooke's Hospital	\checkmark	\checkmark				\checkmark	\checkmark			\checkmark						
Airedale General Hospital Alexandra/	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark					\checkmark	\checkmark		
Kidderminster/Worcester Hospitals	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark			\checkmark	\checkmark
Altnagelvin Area Hospital		\checkmark					\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	
Antrim Hospital			\checkmark	\checkmark	\checkmark	\checkmark										
Arrowe Park Hospital		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark			\checkmark	\checkmark	\checkmark
Ayr Hospital		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark
Balfour Hospital				\checkmark												
Barnet & Chase Farm Hospital	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Barnsley DGH		\checkmark	\checkmark	\checkmark							\checkmark					
Basildon Hospital		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark			
Bastle Hospital	\checkmark	√	✓	√	\checkmark	√	√	√	√	√	\checkmark					
Bedford Hospital	√	√	√	√	\checkmark	\checkmark	√			√	\checkmark			\checkmark	\checkmark	\checkmark
Belfast City Hospital	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark					
Belford Hospital				\checkmark	\checkmark											
Birmingham Heartlands Hospital	\checkmark	\checkmark		√	\checkmark	\checkmark										
Bolton Royal Infirmary	\checkmark	√	\checkmark	√	\checkmark	✓	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark					
Borders General Hospital				\checkmark	\checkmark	\checkmark										
Bradford Royal Infirmary		\checkmark	\checkmark	√	√	√	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Bromley Hospital		√	✓	√	\checkmark	√	√	√	√	•	·		√	√		
Bronglais Hospital	\checkmark	√	√	√	\checkmark	\checkmark	\checkmark	√	·							
Broomfield Hospital	√		\checkmark	√			✓	√	\checkmark						\checkmark	\checkmark
Castle Hill Hospital, Hull	·	\checkmark	√	√	\checkmark	\checkmark	√	√	√	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	√	√
Central Middlesex		√	·	·	·	·	·	·	·	•	·	,	·		•	•
Cheltenham General Hospital	\checkmark	√	\checkmark	\checkmark		\checkmark										
Chesterfield & North Derbyshire	✓	√	√	✓	\checkmark	·	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark		\checkmark	
Christie Hospital	·	√	√	√	√	\checkmark	√	√	√	√	✓		√	\checkmark	✓	\checkmark
Churchill Hospital	\checkmark	√	√	√	√	√	√	√	√	√	√	\checkmark	√	√	√	√
City Hospital NHS Trust	√	√	√	√	√	·	√	·	·	•	·	,	·		•	•
Colchester General Hospital	·	√	√	√	√	\checkmark	√	\checkmark		\checkmark	\checkmark	\checkmark				
Cookridge Hospital		√	√	√	·	·	·	·		•	·	,				
Darent Valley Hospital		√	√	√	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark							
Dept of Urology		·	·	√	· ~	√	√	√	·			\checkmark	\checkmark			
	\checkmark	\checkmark	\checkmark	• √	• •	• •	• √	• √	\checkmark	\checkmark	\checkmark	• •	• •	\checkmark	\checkmark	\checkmark
Derby City General Hospital	v √	•	•	•	•	•	v √	•	•	•	v √	v √	•	•	, √	, √
Derriford Hospital	•	•	•	•	v √	•	•	•	•	•	•	ľ	•	•	•	•
Diana, Princess of Wales Hospital Doncaster & Bassetlaw Hospitals NHS Trust	\checkmark	v √	v √	·	·	·	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark		\checkmark	\checkmark

			DAI			FOIGHT				0ET			COMPLEX OPERATIONS			
HOCDITAL	1000	1000						NIMUM			2000					
HOSPITAL	1998	1999 ✓	2000 ✓	2001 ✓	2002 ✓	2003 ✓	2004 ✓	2005 ✓	2006 ✓	2007 ✓	2008 ✓	2004 ✓	2005 ✓	2006	2007	2008 ✓
Dorset County Hospital		v	v	v	v √	v √	v	v	v	v	v	v	v	v	v	v
Dr Gray's Hospital				•	v √	v √										
Dumfries & Galloway Royal Infirm		/	/	√			/		/							
East Lancashire Hospitals NHS Tr		\checkmark	\checkmark	√	\checkmark	\checkmark	\checkmark		v	/	/					/
East Lancashire Hospitals NHS Tr	ust	/	v	√	√	√	/	/	V	v	\checkmark	/	/	/	/	V
East Sussex Hospitals NHS Trust	/	~	√	√	√	\checkmark	√	v	V	V	V	V	V	V	V	\checkmark
Edith Cavell Hospital	√	√	v	~	√	,	V	\checkmark		,	,					
Epsom General Hospital	√	✓	√	√	✓	\checkmark	√			√	√					
Freeman Hospital	√	✓	\checkmark	\checkmark	✓	\checkmark	\checkmark	√	\checkmark	\checkmark	\checkmark	√	√		\checkmark	\checkmark
Furness General Hospital	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark				\checkmark	\checkmark			
Gartnavel General Hospital	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark			\checkmark	\checkmark	\checkmark
George Eliot Hospital	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark					
Glan Clwyd Hospital	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark					
Glasgow Royal Infirmary		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark			\checkmark	\checkmark	\checkmark			\checkmark	\checkmark	\checkmark
Gloucestershire Royal Hospital	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark				\checkmark
Good Hope Hospital NHS Trust		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark					
Guy's Hospital		\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark			\checkmark	\checkmark		\checkmark	\checkmark	\checkmark
Hairmyres Hospital											\checkmark					\checkmark
Halton General Hospital								\checkmark								
Hammersmith Hospital	\checkmark	\checkmark														
Harold Wood Hospital		\checkmark	\checkmark	\checkmark												
Harrogate District Hospital	\checkmark	\checkmark	1	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Hereford Hospitals NHS Trust	√	√	√	√	√	√	√		√	✓	· ✓	✓	√	√	√	
	•	•	•	•	• √	• •	•	•	•	• •	• •	• •	•	•	•	•
Hillingdon Hospital		v	v	v	v	v √	v √	•	v √	v	• √	v	v	v	v	
Homerton Hospital	/	/	/	/	/	v √	v √	v	•	/	v √	/				
Huddersfield Royal Infirmary	\checkmark	√	•	√	√			v	v	√	v	v				/
Inverclyde Royal Hospital	/	~	√	√	√	√	\checkmark	\checkmark	~	V		/				√
James Cook University Hospital	√	√	√	√	√	√	√	√	\checkmark			V	,			\checkmark
James Paget Hospital	\checkmark	~	√	√	\checkmark	√	✓	\checkmark		,		√	√			
Kent and Sussex Hospital		\checkmark	\checkmark	\checkmark	✓	\checkmark	\checkmark	\checkmark	\checkmark	√		\checkmark	\checkmark			
Kettering General Hospital		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark				\checkmark	\checkmark
King George Hospital	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark				\checkmark	\checkmark		\checkmark	
King's College Hospital	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark								
King's Mill Hospital	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark				\checkmark					\checkmark
Kingston Hospital		\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark								
Leicester General Hospital	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark			\checkmark	\checkmark	\checkmark
Leighton Hospital	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark					\checkmark
Lincoln & Louth NHS Trust		\checkmark	\checkmark	\checkmark		\checkmark	\checkmark				\checkmark	\checkmark				
Lister Hospital	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Lorn & Islands District General Ho	ospital			\checkmark	\checkmark	\checkmark			\checkmark	\checkmark						
Luton & Dunstable Hospital	· · · P · · · · ·	\checkmark			\checkmark	\checkmark										
Maidstone Hospital					\checkmark	\checkmark	\checkmark	\checkmark								
Manchester Royal Infirmary				\checkmark	√	✓	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark					
Mayday University Hospital	\checkmark	\checkmark	\checkmark		• •	• √	•	•		•	•		\checkmark			
		•			v √	v √	1	1	1	1	1		·			
Medway Maritime Hospital	v	v	v	v	v	v √	v	v	v	v	v					
Mid Ulster Hospital			/	/	/	*	/	/			\checkmark					/
Milton Keynes General Hospital	. 1		v	v	v	v /	v	v	/	/	v	/	/	/	/	v /
Monklands District General Hospi	tal			v	v	v	v	v	v	v	v	v	v	v	v	v

	BAUS CANCER REGISTRY – MINIMUM DATASET											COMPLEX OPERATIONS					
HOSPITAL	1000										2009						
	1998 ✓	1999 √	2000 ✓	2001	2002 ✓	2003	2004 ✓	2005 ✓	2006	2007	2008	2004	2005	2006	2007	2008	
Morriston Hospital Mount Vernon & Watford	v v	v	v	v	v	\checkmark	v	v	1	1	\checkmark	1	1		1		
Hospitals	v	v	• ./	• √	v √	• √	∨	• ./	v √	• √	∨	v √	•		v	v	
Nevill Hall Hospital			v	v √	v √	v √	v √	v	v	v √	v √	v √	v	./	./	./	
New Cross Hospital			•	•	v √	v √	v	v	v	v	v	v	v	v	•	v	
Ninewells Hospital		/	•	v		v √	/	/	/	/	/	/	/	/	•	/	
Noble's Isle of Man Hospital		v	v	v	√		\checkmark	v	v	v	√	v	v	v	v	v	
Norfolk & Norwich Hospital		V	V	V	\checkmark	\checkmark	,	,	,	v	\checkmark	,	,	,		/	
North Devon District Hospital	,	,	,	,	,	√	√	v	V	\checkmark	\checkmark	√	v	V		√	
North Hampshire Hospital	√	V	V	√	√	√	V	V	,	,	√	\checkmark	\checkmark			\checkmark	
North Middlesex Hospital	\checkmark	√	\checkmark	√	\checkmark	✓	√	√	√	\checkmark	\checkmark						
Northampton General Hospital	,	√		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark				
Northwick Park Hospital	\checkmark	\checkmark										\checkmark					
Nottingham City Hospital Ormskirk District General	✓ ✓	√ ∕	√ ∕	√ ∕	√ ∕	√ ∕	/	/	√ ∕	√ ∕	✓ ✓	√ √	√ ∕	√ ∕	√	√ ∕	
Hospital	V	V	v	V	v	v	V	V	V	V	\checkmark	\checkmark	V	V	V	\checkmark	
Perth Royal Infirmary	,	V	V	V	√	√	,	,	,	,		,	,				
Pilgrim Hospital	√	V	V	V	√	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark				
Pinderfields Hospital	\checkmark	\checkmark	\checkmark	√ ,	√		,	,	,	,	,						
Prince Philip Hospital	,	,	,	√ ,	√		√ ,	√ ,	√ ,	\checkmark	\checkmark		,				
Princess Alexandra Hospital	✓	√	\checkmark	√	√		√	√	✓				\checkmark				
Princess Margaret Hospital	\checkmark	√	\checkmark	\checkmark	\checkmark	\checkmark	√	\checkmark	\checkmark			\checkmark					
Princess Of Wales Hospital		\checkmark				\checkmark	\checkmark										
Queen Elizabeth Hospital, B'ham	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark			\checkmark	
Queen Elizabeth Hospital, King's L	ynn	\checkmark	\checkmark	\checkmark	\checkmark						\checkmark						
Queen Elizabeth Hospital, Woolwig	ch	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark							
Queen Margaret Hospital		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark					\checkmark					
Queen's Hospital, Burton	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark			\checkmark	\checkmark	\checkmark	
Raigmore Hospital Rotherham District General	,	,	,	√	✓ ✓	√	,	\checkmark					\checkmark				
Hospital	\checkmark	√	√	√	√	√	√			,		\checkmark					
Royal Alexandra Hospital (Paisley)		√	\checkmark	√	√	✓	√	√	√	√						\checkmark	
Royal Bournemouth Hospital	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	
Royal Cornwall Hospital	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark					\checkmark	
Royal Devon and Exeter Hospital	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark						\checkmark	\checkmark	\checkmark	
Royal Free Hospital	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark										
Royal Glamorgan Hospital	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark					\checkmark	
Royal Gwent Hospital	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	
Royal Hallamshire Hospital Royal Hampshire County	√	√ ,	√ ,	√ ,	√	√	√ ,	√ ,	√	√	✓ ✓		,	√ ,	,	√ ,	
Hospital	√	√ ,	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	
Royal Lancaster Infirmary Royal Liverpool University	√ ∕	√ ∕	/	/	/	/	/	/	/	/	/				/	/	
Hospital	\checkmark	√ ∕	√ ∕	v	\checkmark	\checkmark	\checkmark	√ ∕	√ ∕	√ ∕	✓ ✓				v	v	
Royal Orthopaedic Hospital	/	√ ∕	v	/	/	v	/	v	v	√ ∕	✓ ✓	/	/	/	/	/	
Royal Preston Hospital	√ ∕	√	√	\checkmark	√	V	\checkmark	v	v	\checkmark	\checkmark	\checkmark	v	v	v	v	
Royal Shrewsbury Hospital Royal Surrey County / Frimley Parl Hospital	√ <	√ √	✓ ✓	✓ ✓	√ √	√ √	v		\checkmark	\checkmark	\checkmark			\checkmark	\checkmark	\checkmark	
Royal Sussex County Hospital	\checkmark	• √	• •	-			\checkmark	\checkmark			✓			-		-	
Royal United Hospital, Bath	• •	√	√	\checkmark	\checkmark	√	√			•	•						
Koyai Omtee Hospital, Batti	•		•		•	•	•										

												COMPLEY OPED ATIONS							
HOCDITAL					AUS CANCER REGISTRY – MINIMUM DATASET									COMPLEX OPERATIONS					
HOSPITAL Royal West Sussex NHS Trust,	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2004	2005	2006	2007	2008			
St Richard's Hospital	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark			
Salford Royal Hospital	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark			
Salisbury District Hospital	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark			
Sandwell District General	\checkmark	./	./	./	./		\checkmark	./	./	\checkmark	\checkmark								
Hospital	v	•	•	•	• √	\checkmark	• ./	•	•	v √	∨	\checkmark							
Scarborough Hospital		v	v	v	v	v √	v √	v	•	• √	• √	v √	./	./	./				
Southampton General Hospital	\checkmark	./	./	./	\checkmark	v √	v	\checkmark	v	v √	v √	v √	v	v	v				
Southend Hospital	v	v	v	• √	v √	v √	v	v	•	v √	v √	v	v	•	•	•			
Southern General Hospital	/	/	\checkmark	v /	v √	v √	\checkmark	/	v /	v √	v	\checkmark	/	v	√	v			
Southmead Health Services Trust	\checkmark	v	,	v			v	v	v	v	/	v	v	v	v	v			
St Bartholomew's Hospital	/	V	√	\checkmark	\checkmark	\checkmark		v	V		√	/	/						
St George's Hospital	\checkmark	v	~		√	√	,	,		,	~	\checkmark	V			/			
St Helier Hospital	,	,	√	\checkmark	√	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark					\checkmark			
St James' Hospital, Dublin	√ ,	√ ,	V	V	√	,	,		,	,						,			
St James's University Hospital	\checkmark	\checkmark	\checkmark	√	√	√	\checkmark		√	\checkmark						\checkmark			
St John's Hospital				\checkmark	\checkmark	\checkmark			✓										
St Mary's Hospital, IOW	\checkmark	√	√	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	✓	✓	\checkmark		\checkmark	√	√	\checkmark			
St Mary's Hospital, IOW		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark			\checkmark	\checkmark	\checkmark			
St Mary's Hospital, London		\checkmark	\checkmark																
St Peter's Hospital		\checkmark		\checkmark	\checkmark														
St Vincents Hospital		\checkmark		\checkmark															
Stafford District General	\checkmark	1	1	1															
Hospital	•	•	•	•		./	./	./											
Stepping Hill Hospital	\checkmark	•	•	• √	\checkmark	•	• ./	•	./	./	./	\checkmark	./	./	./				
Stirling Royal Infirmary	v	v	•	• √	• √	•	•	v	•	•	•	v	v	v	•	•			
Stobhill Hospital			v	v	v √	v	v		v	v	v				v	v			
Stoke Mandeville Hospital		/	/	/	•	\checkmark													
Stracathro Hospital	/	v	v	v	v		/	/	/	/	/	/	/	/	/	/			
Sunderland Royal Hospital	\checkmark	V	v	v	\checkmark	\checkmark	V	V	v	v	~	v	V	V	v	V			
Taunton And Somerset Hospital		V	V	V	V	\checkmark	v	v	v	v	\checkmark					\checkmark			
The Countess of Chester Hospital	,	,	,	,	,	/	v	\checkmark	\checkmark	\checkmark	\checkmark	,		/	,				
The Ipswich Hospital	\checkmark	V	V	V	√	V	√ ,	,			,	\checkmark		\checkmark	\checkmark				
The Royal Oldham Hospital		√ ,	√	√	√	V	\checkmark	√ ,	,	,	√ ,		,	,	,	,			
Torbay Hospital		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	√		\checkmark	\checkmark	\checkmark	\checkmark			
Trafford General Hospital											\checkmark								
Ulster Hospital Dundonald		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark						
United Bristol Health Care Trust	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark			\checkmark						
University Hospital of North Durha	ım	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark					\checkmark			
University Hospital of North Stafford	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark			
University Hospital Of Wales	√	• √	• •	• •	• •	• •	\checkmark	• •	• •	• •	• •	√		•	•	•			
	•	•	•	•	• •	•	•	•	•	•	•	•		•	•	•			
Vale of Leven Hospital Walsall Manor Hospital N H S				•	•														
Trust	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark				\checkmark							
Walsgrave Hospital	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark				
Wansbeck General Hospital		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark						
Warrington District General	/	/	/	/	/														
Hospital	√	√	v	v	√ ∕	/	/	/	/	/	/		/	/					
Warwick Hospital	√	v	v	\checkmark	\checkmark	\checkmark	v	v	v	\checkmark	\checkmark	\checkmark	V	\checkmark					
West Cumberland Hospital	v	V	V	V															

		BAUS CANCER REGISTRY – MINIMUM DATASET											COMPLEX OPERATIONS					
HOSPITAL	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2004	2005	2006	2007	2008		
West Suffolk Hospital	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark										
West Wales General Hospital		\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark					
Western General Hospital, Edinbur	rgh	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark			\checkmark			\checkmark	\checkmark			\checkmark		
Western Isles Hospital				\checkmark	\checkmark													
Weston - Super - Mare General Hospital	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark				\checkmark	\checkmark			
Wexham Park Hospital				\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark							
Whipps Cross Hospital	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark		
Whiston Hospital		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		
Wigan Infirmary					\checkmark	\checkmark												
Wishaw General Hospital					\checkmark	\checkmark					\checkmark							
Withington Hospital											\checkmark							
Worthing Hospital	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark								
Wrexham Maelor Hospital	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		
Wycombe General Hospital	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark			\checkmark	\checkmark				
Yeovil District Hospital		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark							
York District Hospital	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark			\checkmark	\checkmark					
Ysbyty Gwynedd Hospital	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark				