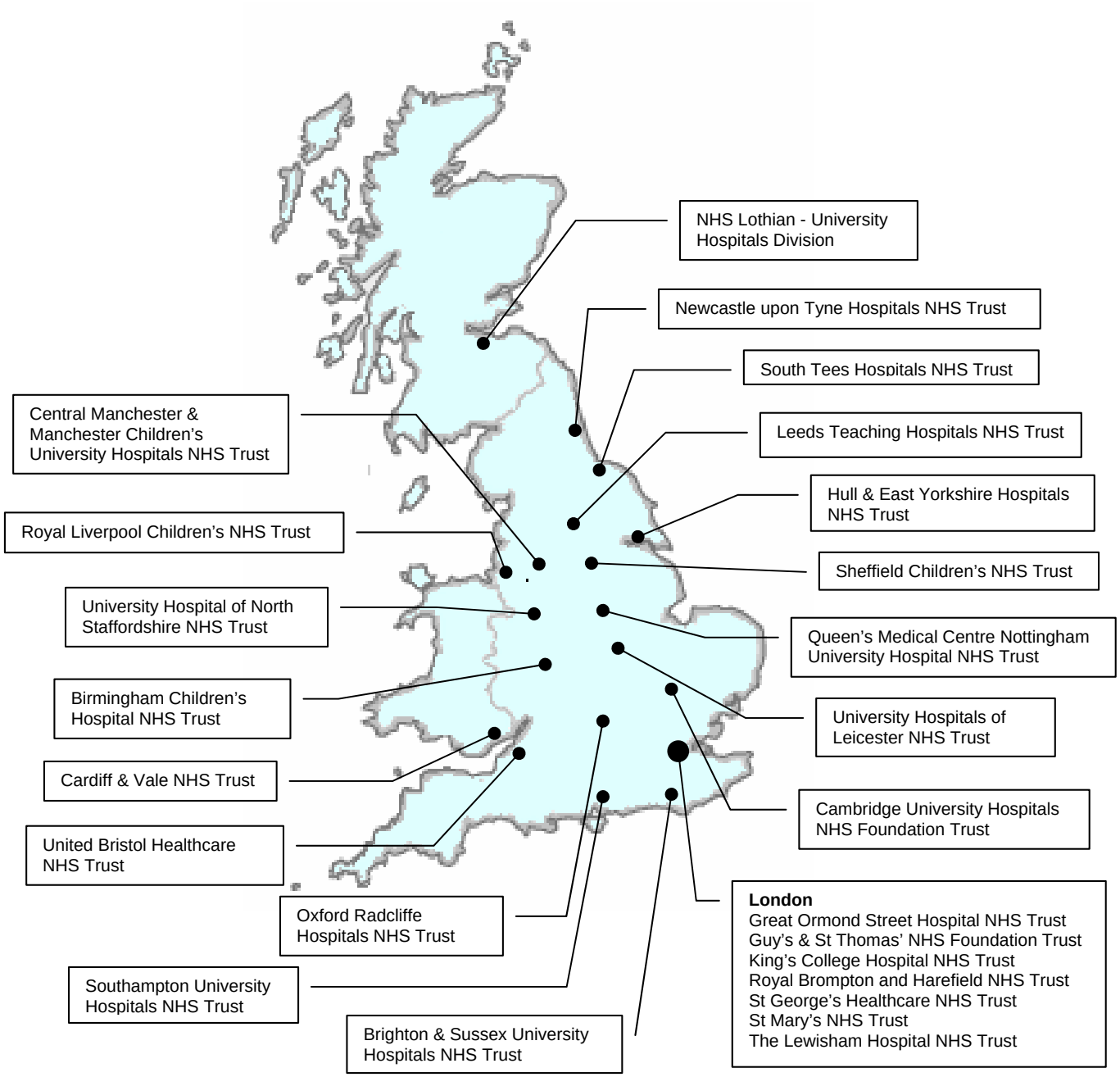
National Report of the

Paediatric Intensive Care Audit Network

January 2004 – December 2005



Tim Chater, Nicky Davey, Elizabeth Draper, Sam Jones,
Patricia McKinney, Gareth Parry, Roger Parslow, Krishnan Thiru
(from the Universities of Leeds, Leicester and Sheffield)

Key

A	Cambridge University Hospitals NHS Foundation Trust
B	Brighton & Sussex University Hospitals NHS Trust
C	Cardiff & Vale NHS Trust
D	Central Manchester & Manchester Children's University Hospitals NHS Trust
E	Great Ormond Street Hospital NHS Trust
F	Guy's & St. Thomas' NHS Foundation Trust
G	Hull & East Yorkshire Hospitals NHS Trust
H	King's College Hospital NHS Trust
I	Leeds Teaching Hospitals NHS Trust
J	The Lewisham Hospital NHS Trust
K	Newcastle upon Tyne Hospitals NHS Trust
L	University Hospital of North Staffordshire NHS Trust
M	Queen's Medical Centre Nottingham University Hospital NHS Trust
N	Oxford Radcliffe Hospitals NHS Trust
O	Royal Brompton & Harefield NHS Trust
P	Royal Liverpool Children's NHS Trust
Q	Sheffield Children's NHS Trust
R	Southampton University Hospitals NHS Trust
S	South Tees Hospitals NHS Trust
T	St. George's Healthcare NHS Trust
U	St. Mary's NHS Trust
V	Birmingham Children's Hospital NHS Trust
W	United Bristol Healthcare NHS Trust
X	University Hospitals of Leicester NHS Trust
Y	NHS Lothian – University Hospitals Division

PICANet
Paediatric Epidemiology Group
Centre for Epidemiology and Biostatistics
The Leeds Institute of Genetics, Health and Therapeutics
University of Leeds
30 Hyde Terrace
Leeds
LS2 9LN

0113 343 4842

picanet@sheffield.ac.uk / picanet@leeds.ac.uk

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CONTENTS

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We are acutely aware that the success of this national clinical audit is highly dependent on the hard work and commitment of a large number of individuals working within the paediatric intensive care community. We are very grateful to all the audit clerks, secretaries, nurses and doctors who support and contribute to the Paediatric Intensive Care Audit Network (PICANet) from their own paediatric intensive care units (PICUs).

PICANet was established in collaboration with the Paediatric Intensive Care Society (PICS) and their active support continues to be a key component of our successful progress. The PICANet Steering Group (SG) has patient, academic, clinical, government and NHS members all of whom are thanked for their continuing assistance and advice. Members of our Clinical Advisory Group (CAG) are PICANet's formal interface with clinical care teams and their valuable support and contribution is gratefully acknowledged.

PICANet is funded by the Department of Health (DOH), Health Commission Wales Specialised Services, Royal Hospital for Sick Children, Edinburgh and the Pan Thames PICU Commissioning Consortium.

The organisation and functioning of PICANet is dependent on administrative support from Gill Ryder (University of Sheffield) and IT programming and development from Martin Perkins (University of Leicester), both of whom we thank for their essential contributions. We are also grateful to Daniel Bentley (University of Leeds) for producing the maps in sections 6, 8, 10 and 12.

FOREWORD

On behalf of the Paediatric Intensive Care Society (PICS) and PICS Study Group (PICS SG) we have great pleasure in submitting the third report of the Paediatric Intensive Care Audit Network (PICANet).

We congratulate all those involved in the production of this audit. The continued commitment of a large number of dedicated colleagues in paediatric intensive care units (PICUs) throughout the United Kingdom (UK) who have gathered and submitted data on such a large number of patients is again commended. The lucid manner in which this data has been analysed and presented by our colleagues from the universities of Sheffield, Leicester and Leeds is excellent.

There are some changes in this year's audit; in particular that data from PICUs is no longer anonymous. This will undoubtedly increase the audit's value to both researchers and other healthcare professionals.

PICS SG - a multidisciplinary collaboration between a variety of interest groups - has clearly benefited from the growth and expertise of PICANet over the last three years. For example, the traumatic brain injury section has produced three scientific, peer-reviewed, audit publications over the last year. We hope that the relationship between PICANet and practising clinicians will continue to flourish and that there will be more of such clinically-relevant, hypothesis-driven audit.

The funding provided is greatly appreciated but is as yet not secured for future years. As PICANet provides the only detailed assessment and analysis of paediatric intensive care provision and performance in the UK, PICS believes ongoing funding is essential.

Stephen Kerr *Chair, Paediatric Intensive Care Society*

Robert Tasker *Chair, Paediatric Intensive Care Society Study Group*

EXECUTIVE SUMMARY

1 PICANet is an audit of paediatric intensive care activity in England, Wales and Scotland providing information on delivery of care to critically ill children and an evidence base for clinical governance. Since 2002, PICANet has moved forward in close collaboration with the paediatric intensive care clinical community.

2 The specific objectives of PICANet are to identify best practice, monitor supply and demand, monitor and review outcomes of treatment episodes, facilitate strategic health care planning, quantify resource requirements and study the epidemiology of critical illness in children.

3 A new version of the bespoke PICANet software was distributed in May 2005 to collect demographic and clinical information. Data are transmitted to a secure central PICANet server via NHSnet or emailing highly encrypted files. The majority of units (67%) now submit data via NHSnet.

4 For each intensive care episode the PICANet data set records details of admission, discharge, diagnoses (coded using Clinical Terms 3 (The Read Codes)), medical history, physiology, interventions and outcome. The Paediatric Index of Mortality (PIM), with recalibrated coefficients for improved sensitivity, was used as the mortality risk adjustment tool. For each unit, bed activity and staffing levels are collected.

5 The PICANet data set is of extremely high quality with respect to accuracy and completeness as a result of implementing rigorous data quality procedures.

6 Data are presented on 28,425 paediatric intensive care admissions to 25 NHS trusts in England and Wales over the two year period 1 January 2004 to 31 December 2005. The Royal Hospital for Sick Children, Edinburgh joined PICANet in December 2004.

7 For the first time, the PICANet national report identifies individual NHS trusts.

8 Children under one year comprise 48% of admissions with an excess of boys (60%) compared to girls (40%). 30% of these admissions are for respiratory conditions, with bronchiolitis accounting for the winter peak in activity.

9 Of specific interest to commissioners of paediatric intensive care services is the presentation of the geographical distribution of the volume of patients receiving paediatric intensive care by Strategic Health Authority (SHA) or Health Board (HB) (Scotland, Northern Ireland). This is made possible by linkage of individual

postcodes of residential addresses to national census data. Age and sex adjusted prevalence of paediatric intensive care unit (PICU) admissions varies considerably by SHA.

10 Paediatric intensive care services are available for planned and unplanned admissions but resource allocation can be difficult with 60% of admissions being unplanned.

11 Three quarters of patient retrievals are undertaken by specialist paediatric intensive care teams.

12 Overall, invasive ventilation procedures are recorded for 66% of paediatric intensive care admissions. This proportion varies considerably by NHS trust and by SHA.

13 A total of 163,388 bed days were provided for children in PICUs, with more than 50% accounted for by patients under one year.

14 Despite the severity of their illness, extremely few children die in PICUs, with 95% being discharged alive. For 2004 and 2005 combined, no individual units showed any excess risk adjusted (PIM) mortality. Risk adjusted mortality differs between SHA populations.

15 Approximately half of the children admitted for paediatric intensive care have information available about their status at 30 days post discharge. However, the completeness of the data collection varies widely between trusts, with six trusts not collecting any 30-day status data and eight trusts collecting 30-day status for over 95% of children.

16 In collaboration with clinical colleagues, a chapter has been written describing paediatric intensive care activity for unplanned admissions of infants under one year with acute respiratory failure (ARF). Children admitted in this category live in more deprived areas than their counterparts with other critical illnesses. These conditions place winter pressures on beds and retrieval services but the outcome for these children is good.

17 Difficulties were experienced in obtaining national data on children receiving intensive care in adult units. Based on data from 2004 alone, 746 children were recorded as receiving intensive care in adult units, representing 5% of all admissions of children receiving intensive care in England and Wales.

18 All trusts responded to the nurse staffing survey in October 2005 except trust G, although trust P only provided general establishment figures. Medical staffing data

were collected from 80% of trusts surveyed. As in previous years, the majority of nurses employed in PICUs are grade D or E. 46% of trusts met the Paediatric Intensive Care Society (PICS) guidelines on nurse staffing with 6.4 whole time equivalent (WTE) or more qualified nurses per intensive care bed. The majority of medical staff working on PICUs are employed at middle grades.

19 Data presented for individual children in the report indicate that 3.3% of children admitted for paediatric intensive care are involved in multiple re-admissions with over 1% of these children having five or more admission to paediatric intensive care during the two years reported.

20 Eleven recommendations arising from this report are outlined in section 17

1 AIMS

This is the third national report produced by PICANet on data submitted by participating PICUs in the UK.

In collaboration with participating units, PICANet remains committed to achieving the following objectives:

- Identifying best practice.
- Monitoring supply and demand.
- Monitoring and reviewing outcomes of treatment episodes.
- Facilitating strategic health care planning and quantifying resource requirements.
- Studying the epidemiology of critical illness in children.

Since data collection commenced in 2002, one of the main aims of PICANet has been to provide a national database of paediatric intensive care activity of a consistently high quality, in order to help achieve the above objectives. The data collected allows comparisons of activity at a local level with nationwide benchmarks. PICANet therefore provides an important evidence base on paediatric intensive care outcomes, processes and structures, permitting planning for future practice, research and interventions.

PICANet is a resource available to clinicians and service providers, amongst others, and is being increasingly utilized, as shown in Appendix M. The provision of comprehensive, routinely available information to such parties is extremely important and is a powerful tool for supporting clinical governance. PICANet is also used to provide data to aid clinical research.

2 BACKGROUND

The importance of clinical audit is widely acknowledged. The National Service Framework for Children clearly identifies that national audit programs give powerful comparative information on performance in complex areas such as paediatric intensive care.[1] Units providing paediatric intensive care are expected to collect information on case mix (including illness severity, method, type and source of admission, length of stay, interventions and outcome). The risk adjustment tool used should allow inter-unit and regional comparisons.[2, 3]

PICANet was established in 2002, following a tender in 2000 by the DOH for a national paediatric intensive care database that would allow core data to be collected in a standardised way throughout all PICUs in the country.

Since November 2002 all NHS PICUs within England and Wales outside the Pan Thames region have been collecting data on consecutive admissions to their units. The Pan Thames units began data collection in March 2003, whilst the PICU at the Royal Hospital for Sick Children, Edinburgh began in December 2004. A full list of participating PICUs can be found in Appendix C.

PICANet receives support and advice from a CAG consisting of doctors and nurses working within the speciality. A SG, made up of professionals from various areas such as Health Services Research, the Royal Colleges of Paediatrics, Nursing and Anaesthetists, and user groups such as Action for Sick Children, monitors PICANet and offers additional support and advice. Appendices A and B provide a full list of CAG and SG members. Additional support from the clinical community is provided through PICS.

References

1 Getting the right start: National Service Framework for Children, Young People and Maternity Services: Standards for hospital services. London, DOH, April 2003.

2 Paediatric Intensive Care: “A framework for the future”, report from the National Co-ordinating Group on Paediatric Intensive Care to the Chief Executive of the NHS Executive. London, DOH, NHSE, January 1997.

3 Paediatric Intensive Care Standards Document, PICS 2001.

3 THE PICANet DATA SET

3.1 Development and description of the current data set

The PICANet data set was established in consultation with members of the PICANet CAG, representing the paediatric intensive care community, and the DOH. The overriding criteria for inclusion of specific variables were that they provided key information on activity, case mix, demographics and outcome at a national and local level, that they were feasible to collect and that the wider paediatric intensive care community supported their inclusion in the national database.

Amendments to the original data specification were approved by the CAG and SG and rolled out in May 2005 with a new version of the software. The clinical coding section has been rationalized and 'primary reason for admission' and 'primary diagnosis at discharge' have been replaced with 'primary diagnosis for this admission'. This means it is no longer possible to distinguish between an admission diagnosis and final diagnosis at discharge. This change was approved on the basis that some units only submit one diagnosis per admission and 85% of admission and discharge diagnoses were identical. A separate field to record procedures has been added.

Other changes to the data set include the addition of variables necessary to collect PIM 2[1], and the removal of intubation status and number of days intubated.

The current PICANet data set consists of 94 variables (including five address elements and the option for a second family name). These variables and their definitions are given in the PICANet Data Definitions Manual, obtainable from www.picanet.org.uk. The data collection form is included in Appendix D.

3.2 Data collection and validation

PICANet has developed a paper data collection form and bespoke data entry software to enable a consistent national data set to be assembled. Those units who use their own or commercial data collection software have been provided with an export file specification to enable data to be imported by the PICANet software. Training sessions were organised over two days to familiarise clinical and data entry staff with data definitions, data collection issues and software. Since the original training sessions, ad hoc training has been provided by the PICANet team for new staff concerned with data collection and entry.

The PICANet software performs internal logical consistency and range checks as data are entered and provides an on-screen summary of outstanding validation checks on the completion of a record. Following feedback from users, validation errors / queries are highlighted in the software and moving to the relevant field has been made easier. Units importing data from their own databases are provided with an import log detailing which records have been imported and any outstanding validation issues. Central validation and data quality issues are dealt with in the Data Quality chapter.

Data collection has been ongoing in all PICUs in England and Wales since November 2002 with the exception of nine units comprising the Pan Thames consortium who started in March 2003. Edinburgh's Royal Hospital for Sick Children began in December 2004.

3.3 Clinical coding

Clinical diagnoses and procedures are coded using Clinical Terms 3 (The Read Codes) referred to as CT3. CT3 encompasses a huge range of diagnostic, procedural and context-dependent clinical codes designed to reflect all aspects of clinical care in the population in general. Initially, the PICANet software contained a 'pick-list' of diagnoses that were judged by a group of paediatric intensive care consultants to cover the majority of paediatric intensive care admissions. Additional diagnoses could be added to this pick-list using the NHS Clinical Terms Browser, a copy of which was distributed to each unit. This process did not prove flexible enough for units who wanted to code with a high level of detail, and as a result, the new version of the software has the entire CT3 code set integrated with the software. Feedback from units has confirmed that this has made clinical coding data entry easier and faster. The long term strategy of the NHS is to use SNOMED CT® for clinical coding of diagnostic information (see http://www.connectingforhealth.nhs.uk for further details). PICANet will migrate to SNOMED CT when the appropriate support architecture is in place but will continue to use CT3 in the meantime.

3.4 Confidentiality

PICANet collects patient identifiable information including name, address, date of birth and NHS number. With this information PICANet can identify multiple admissions for the same individual making the data set person and episode-based. An application has been made to link personally identifiable information with death registration details held by the Office for National Statistics (ONS) to assess long-term mortality in children admitted to paediatric intensive care. National census and other geographical data

have been linked with validated postcodes of individual children to enable PICANet to assess the association between social class, population density and other geo-demographic and environmental information and paediatric intensive care admissions.

To comply with the provisions of the Data Protection Act[2], PICANet has implemented stringent confidentiality and data protection arrangements. The Patient Information Advisory Group (PIAG) has granted PICANet exemption from gaining signed parental consent under Section 60 of the Health and Social Care Act. This class support enables PICANet to collect and process patient identifiable information for the purpose of auditing, monitoring and analysing patient treatments to ensure that adequate and appropriate paediatric intensive care services are available for all children admitted for paediatric intensive care. Exemption was given under specified conditions in December 2002 and is due for review in June 2006.

Posters providing information about PICANet are displayed in PICUs, and information leaflets for parents / guardians and children are available (see Appendix E for a copy of the information leaflet).

3.5 Data transmission

The PICANet data entry software includes the facility to transmit data electronically via NHSnet if local IT infrastructure can be configured appropriately. The data are first encrypted using public key encryption and then placed on the server in a folder specific to each unit. Periodically, uploaded data is moved to a secure holding area, decrypted and uploaded onto the central server database.

Where local IT departments have been unable or unwilling to configure their systems and firewalls to allow electronic transfer via NHSnet, the data is encrypted and placed in a local folder and then sent as an email attachment.

Currently two thirds of units are able to transfer data by NHSnet (n=20).

References

1 Slater A, Shann F, Pearson G. PIM2: a revised version of the Paediatric Index of Mortality. Intensive Care Medicine 2003;29:278-285

2 Data Protection Act 1998. www.hmso.gov.uk/acts/acts1998/19980029.htm (accessed 03 Mar 2005).

4 DATA SET DEFINITIONS FOR THIS REPORT

This report covers the two year period January 2004 - December 2005. During this time, there were 28,432 admissions to participating PICUs.

There are 25 participating NHS trusts (located in England, Wales and Scotland), 24 of whom collected data for the entire reporting period. The Royal Hospital for Sick Children, Edinburgh did not join PICANet until December 2004.

Trusts are identified for the first time in this report, with agreement from all participating trusts' Chief Executives.

A key enabling identification of each trust can be found on the inside cover.

The data set used for this report was frozen in March 2006. Two patients were excluded due to unresolved date inconsistencies and five patients did not have a date of birth recorded and hence were excluded. This left a final data set of 28,425.

The majority of this report is concerned with admissions aged 0 - 15 years; there was a total of 27,859 over the two year period. There were 566 admissions aged 16 years and above.

Unless stated otherwise, the proportions in tables throughout the report are row percentages, except in the total column where they are column percentages.

'Unknown' includes cases where the unit have specifically recorded 'not known' and also cases where a required value has been left blank.

5 DATA QUALITY

It is widely recognised that poor information is a risk to health care services and governance in the NHS.[1, 2] Good quality information underpins decision making at every level in the NHS, and access to high quality data is vital for care, audit and governance. It is acknowledged by the Department of Health that such data should be produced as part of the routine daily activity within a hospital.[1]

Data quality is concerned with the following attributes: relevance, accuracy, timeliness, accessibility, comparability, and coherence.[3] Whilst considerable attention has been focused on readily measurable aspects of data quality (such as completeness of data items), harder to measure aspects (such as accuracy), have often been neglected.[1, 4]

Data quality control and assurance have remained important and stringent since PICANet's inception. One of the most common definitions of quality is 'degree of excellence'.[5] In PICANet, we aim to assess both completeness (sensitivity) and correctness (positive predictive value) of the data and provide units with the means to collect high quality data.

5.1 Key for this section

In this report, participating trusts are identified for the first time. Data in this chapter are presented by unit rather than by trust in order to assess the quality of data collected by individual units. In the majority of trusts only one unit submits data to PICANet (either because there is only one in the trust, or because data are combined locally and submitted by just one unit). In this instance, the general key for the report (inside cover) is applicable to this chapter. Trusts with more than one unit submitting data to PICANet include:

Q1: Sheffield Children's Hospital (NSU)

Q2: Sheffield Children's Hospital (PICU)

K1: Newcastle General Hospital

K2: Newcastle Freeman Hospital

K3: Newcastle Royal Victoria Infirmary

X1: Leicester Glenfield Hospital

X2: Leicester Royal Infirmary

5.2 Assessing and maintaining data quality

Full details of the PICANet data quality control and assurance process are provided in the PICANet National Report 2003 - 2004.[6]

Two main data quality monitoring processes are conducted within PICANet:

1 Validation checks on computerised data

Systematic and routine checks are run on the computerised data both locally (at the units) and centrally (in Sheffield) to monitor and control data quality. These focus on data completeness and on internal consistency. Units are regularly provided with monthly admission reports (Appendix F), data validation reports (Appendix G) and error status reports (Appendix H) following central validation checks in Sheffield.

2 PICU visits to assess data accuracy

Members of the PICANet team visit each PICU and compare data recorded in the PICANet database with corresponding local records (i.e. clinical notes) to assess the correctness of the data gathered. Feedback to units is provided by means of written and verbal reports in order to address any differences.

Table 5.2.1 Number of case notes reviewed

Visit	Year	Number of units	Number of case notes
First	2003	28	205
Second	2003	29	192
Third	2004	13	98
Fourth	2005	30	218
Total			**713**

Table 5.2.1 details the sequence of four validation visits made to PICANet units and the number of clinical notes reviewed. A summary of the differences identified during the visits between data gathered by the PICANet team and the data recorded by the units is shown in Appendix I. Differences greater than 10% are highlighted in bold to emphasise those variables that require attention in the future. For many data items the level of discordance is minimal. In some circumstances the differences can be explained and do not affect the analyses. For example, where primary reason for admission / diagnosis differ this may merely reflect the level of precision of the coding while not affecting the aggregated analyses presented in this report.

Variables with discordance above 20% include the following:

- Primary reason for admission as recorded in notes (22.2%)
- Systolic blood pressure (24.5%)
- Base excess in arterial capillary blood (23.7%)
- PaO_2 - oxygen pressure, kPa (21.7%)
- Invasive ventilation days (20.2%).

Bland-Altman plots are typically used to assess the reliability of two methods of measurements.[7] PICANet has used this method to compare data collected by the PICANet team with data collected by unit staff. For each item of data, the differences between the two measurements (y axis) are plotted against the mean for the two measurements (x axis). The difference gives a measure of the discrepancy between the two data extractions. If there is no difference between the two measurements then all points will lie on the line of agreement where y=0. The 95% confidence limits of agreement are also plotted on each graph. Values that lie outside these limits are extreme and would not be expected to occur frequently when measurements are similar.

The Bland-Altman plots for systolic blood pressure and base excess readings are displayed on the following page.

Figure 5.2.1 Unit recorded values compared to PICANet recorded values for base excess

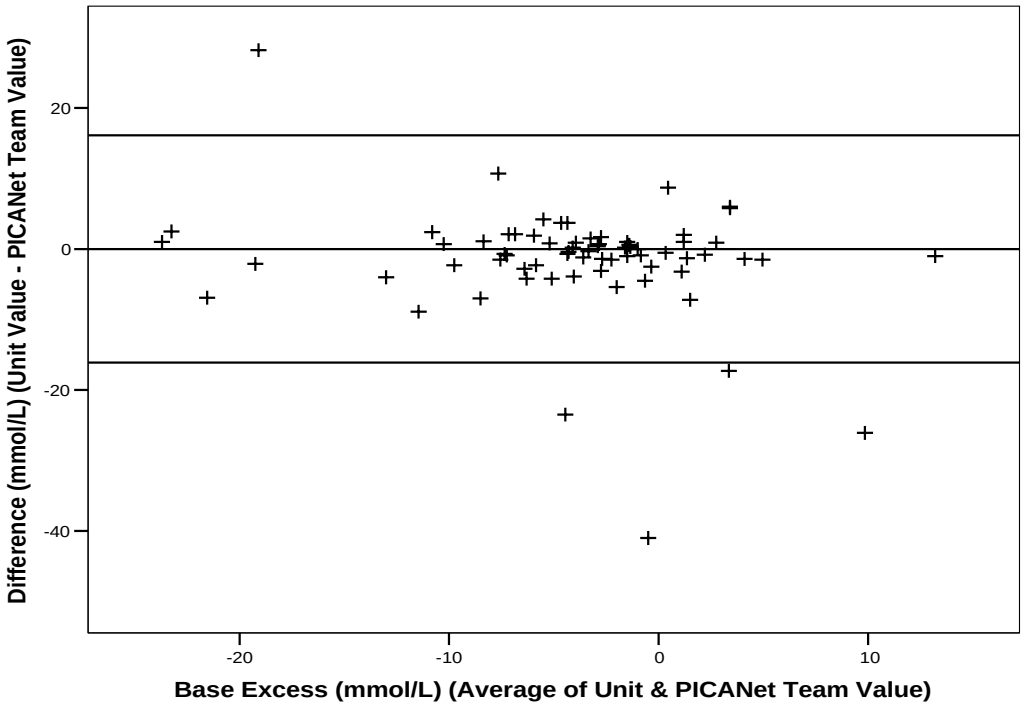
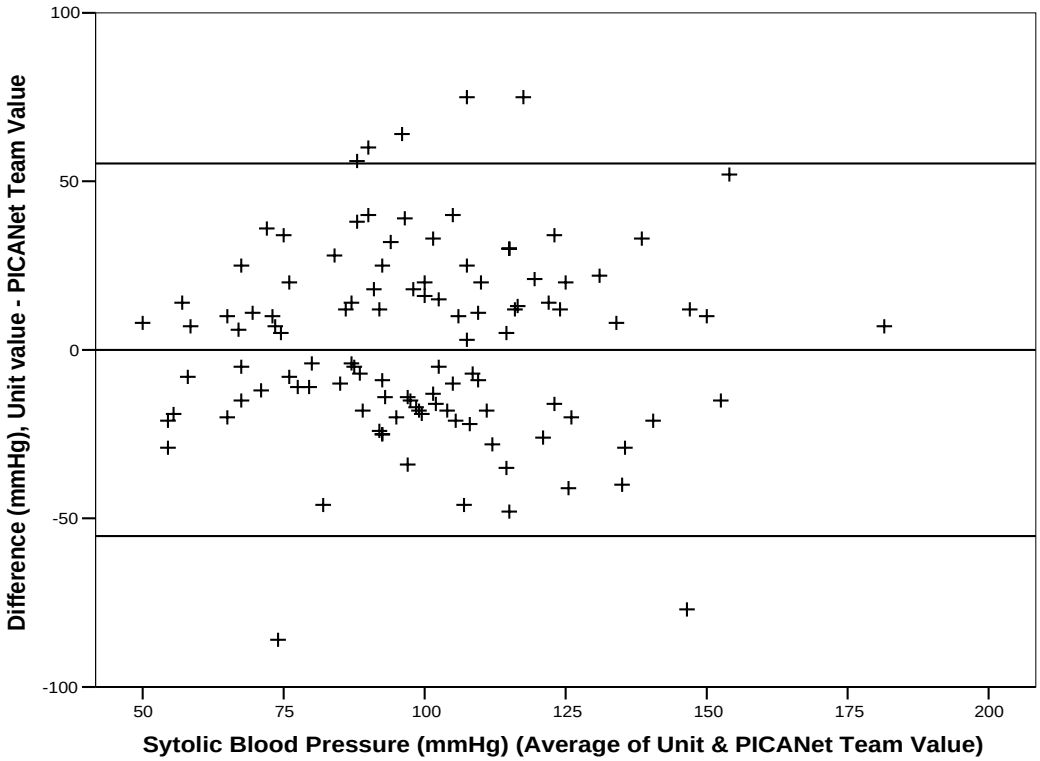


Figure 5.2.2 Unit recorded values compared to PICANet recorded values for systolic blood pressure



Examination of the numerical variables using Bland-Altman plots (figures 5.2.1 & 5.2.2) indicates that the differences between data collected by the PICANet team and local data gatherers are random (i.e. fall with the limits of confidence) but that these differences are of clinical significance (i.e. a difference of 5mmol/l between two measurements of base excess for a patient would be of importance).

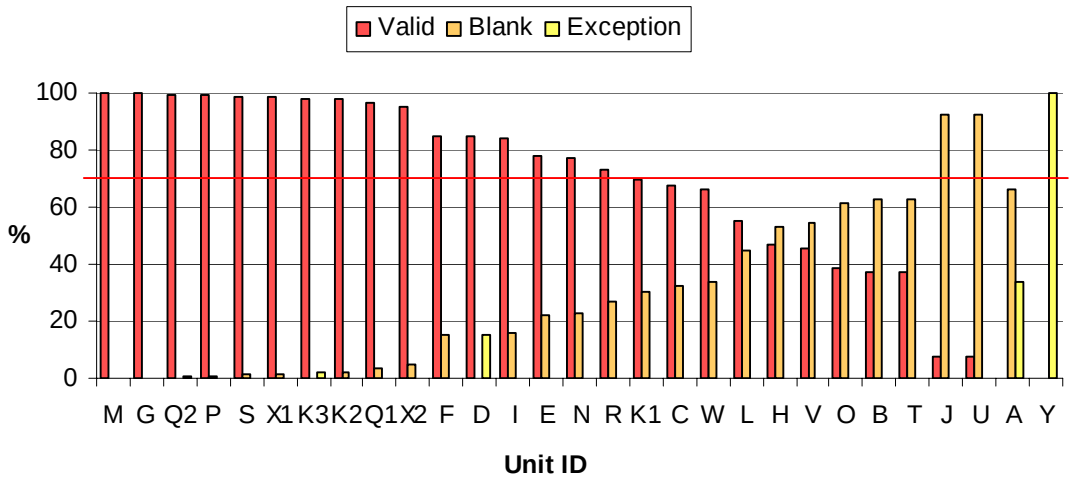
5.3 Completeness of variables

Appendix J details those variables that have undergone completeness checks on the central PICANet server. Only NHS number has a completeness level below 95%. This is a substantial improvement on the 2003-04 data when six variables were less than 95% complete.[6]

Variables can have valid, invalid, exception or blank values. Exceptions are used to indicate that the data is not known or was not recorded in the medical notes. Although only 5% of the overall data set has exception values recorded, there is variation between variables. Fields with the highest levels of exception values include:

- 30-day follow up (51%)
- PaO_2 - oxygen pressure (35%)
- Gestational age at delivery (32%)

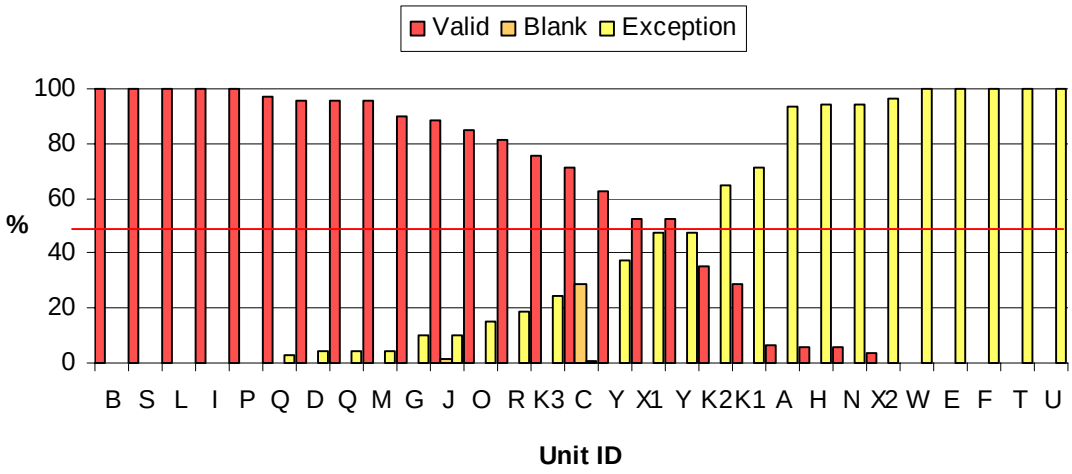
Figure 5.3.1 Completeness of NHS number by unit



Note: The red line indicates the mean level of NHS number recording currently across all PICANet units (70%). This shows an improvement on the 2003-04 PICANet National Report when the mean level of NHS number recording was 60%.[6]

Nine units within PICANet have greater than 95% of their patients' NHS numbers recorded. However, nine other units have recorded the NHS number in less than 50% of their patients.

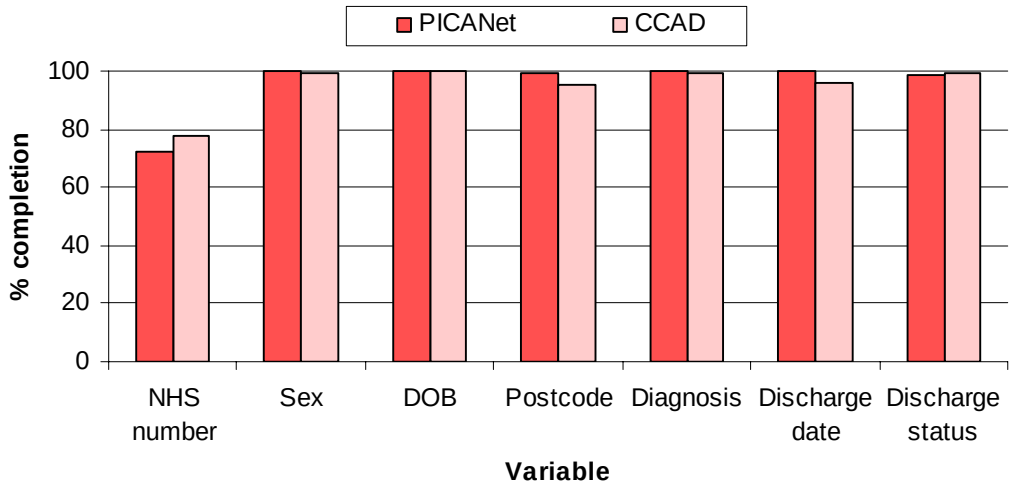
Figure 5.3.2 Completion of follow-up status (30-day post PICU discharge)



Note: The red line indicates the mean level of 30 day-follow-up status recording across all the units (48%). This is a reduction from the 57% seen in the 2003-04 PICANet National Report.[6]

30-day follow-up data is over 99% complete (Appendix J). However, nine units, primarily those that are larger, record follow-up status as 'not known'. Thirteen units have more than 80% valid data but overall 51% of the data collected are exceptions.

Figure 5.3.3 Comparison of variables common to PICANet and the Central Cardiac Audit Database (CCAD)



The Central Cardiac Audit Database (CCAD) is a national audit system for cardiovascular disease.[8] CCAD aims to collect patient-specific data relating to cardiac interventions and major clinical events. CCAD is recognised to hold high quality data for clinical audit.[9]

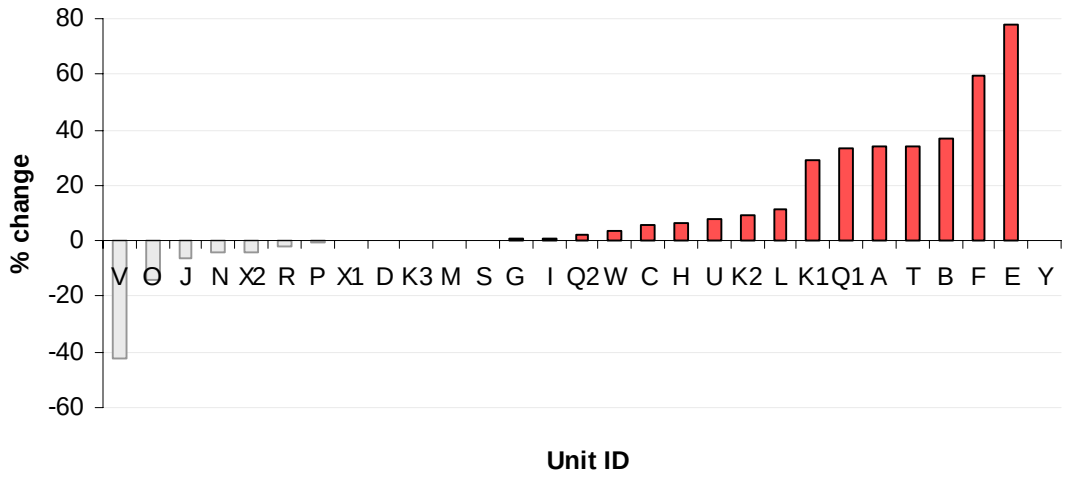
The completeness of these data items shows that there is a high degree of concurrence between PICANet and CCAD.

Table 5.3.1 Overall variable completion rates by month

Year	Month	Eligible	Completion											
			Complete						Incomplete					
			Valid		Exceptions		Total		Invalid		Blank		Total	
			n	%	n	%	n	%	n	%	n	%	n	%
2004	**1**	**58471**	55232	(94.5)	2769	(4.7)	**58001**	**(99.2)**	0	(0.0)	470	(0.8)	**470**	**(0.8)**
	2	**55079**	51982	(94.4)	2668	(4.8)	**54650**	**(99.2)**	0	(0.0)	429	(0.8)	**429**	**(0.8)**
	3	**58093**	54599	(94.0)	3005	(5.2)	**57604**	**(99.2)**	0	(0.0)	489	(0.8)	**489**	**(0.8)**
	4	**52451**	49490	(94.4)	2552	(4.9)	**52042**	**(99.2)**	0	(0.0)	409	(0.8)	**409**	**(0.8)**
	5	**51813**	48877	(94.3)	2517	(4.9)	**51394**	**(99.2)**	0	(0.0)	419	(0.8)	**419**	**(0.8)**
	6	**52774**	49955	(94.7)	2429	(4.6)	**52384**	**(99.3)**	0	(0.0)	390	(0.7)	**390**	**(0.7)**
	7	**49746**	46877	(94.2)	2505	(5.0)	**49382**	**(99.3)**	0	(0.0)	364	(0.7)	**364**	**(0.7)**
	8	**49315**	46407	(94.1)	2532	(5.1)	**48939**	**(99.2)**	0	(0.0)	376	(0.8)	**376**	**(0.8)**
	9	**50337**	47543	(94.4)	2434	(4.8)	**49977**	**(99.3)**	0	(0.0)	360	(0.7)	**360**	**(0.7)**
	10	**51299**	48283	(94.1)	2570	(5.0)	**50853**	**(99.1)**	0	(0.0)	446	(0.9)	**446**	**(0.9)**
	11	**54998**	51903	(94.4)	2586	(4.7)	**54489**	**(99.1)**	0	(0.0)	509	(0.9)	**509**	**(0.9)**
	12	**56636**	53544	(94.5)	2668	(4.7)	**56212**	**(99.3)**	0	(0.0)	424	(0.7)	**424**	**(0.7)**
2004 Total		**641012**	**604692**	**(94.3)**	**31235**	**(4.9)**	**635927**	**(99.2)**	**0**	**(0.0)**	**5085**	**(0.8)**	**5085**	**(0.8)**
2005	**1**	**55493**	51665	(93.1)	3342	(6.0)	**55007**	**(99.1)**	0	(0.0)	486	(0.9)	**486**	**(0.9)**
	2	**52502**	48861	(93.1)	3198	(6.1)	**52059**	**(99.2)**	0	(0.0)	443	(0.8)	**443**	**(0.8)**
	3	**56253**	52247	(92.9)	3603	(6.4)	**55850**	**(99.3)**	0	(0.0)	403	(0.7)	**403**	**(0.7)**
	4	**51750**	48287	(93.3)	3113	(6.0)	**51400**	**(99.3)**	0	(0.0)	350	(0.7)	**350**	**(0.7)**
	5	**55021**	51477	(93.6)	3132	(5.7)	**54609**	**(99.3)**	0	(0.0)	412	(0.7)	**412**	**(0.7)**
	6	**58020**	54429	(93.8)	3134	(5.4)	**57563**	**(99.2)**	0	(0.0)	457	(0.8)	**457**	**(0.8)**
	7	**57601**	53959	(93.7)	3143	(5.5)	**57102**	**(99.1)**	0	(0.0)	499	(0.9)	**499**	**(0.9)**
	8	**53762**	50443	(93.8)	2933	(5.5)	**53376**	**(99.3)**	0	(0.0)	386	(0.7)	**386**	**(0.7)**
	9	**56464**	52938	(93.8)	3109	(5.5)	**56047**	**(99.3)**	0	(0.0)	417	(0.7)	**417**	**(0.7)**
	10	**54330**	51091	(94.0)	2822	(5.2)	**53913**	**(99.2)**	0	(0.0)	417	(0.8)	**417**	**(0.8)**
	11	**61300**	57542	(93.9)	3301	(5.4)	**60843**	**(99.3)**	0	(0.0)	457	(0.7)	**457**	**(0.7)**
	12	**61047**	57032	(93.4)	3527	(5.8)	**60559**	**(99.2)**	0	(0.0)	488	(0.8)	**488**	**(0.8)**
2005 Total		**673543**	**629971**	**(93.5)**	**38357**	**(5.7)**	**668328**	**(99.2)**	**0**	**(0.0)**	**5215**	**(0.8)**	**5215**	**(0.8)**
Total		**1314555**	**1234663**	**(93.9)**	**69592**	**(5.3)**	**1304255**	**(99.2)**	**0**	**(0.0)**	**10300**	**(0.8)**	**10300**	**(0.8)**

Table 5.3.1 shows the number and percentage of valid, invalid, exception and blank values by month for 2004 and 2005.

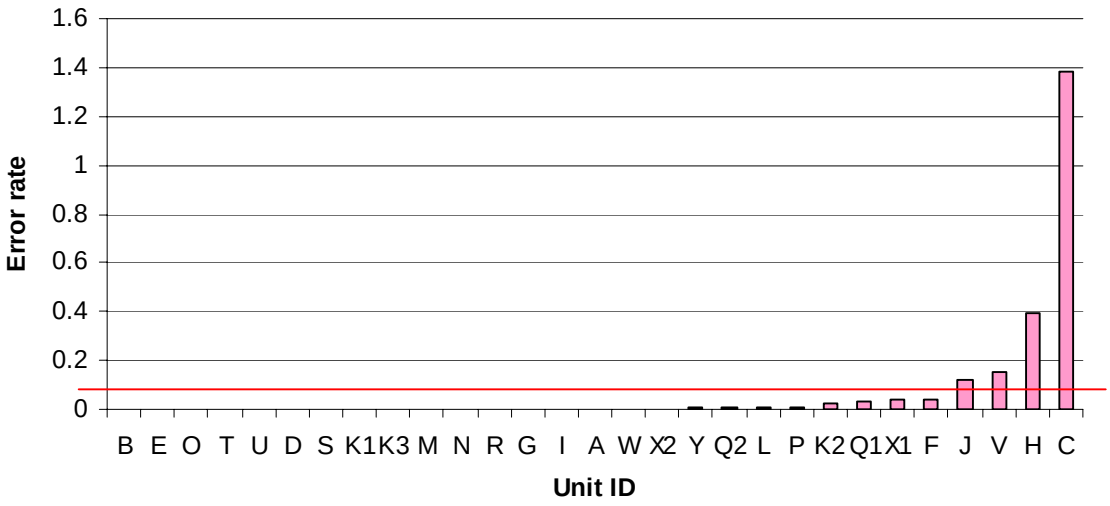
Figure 5.3.4 Percentage change in NHS number completeness level (2003 - 04 National Report compared to 2004 - 05 National Report)



Completeness includes both valid and exception data. In units where the percentage change is negative, NHS number completion is lower in 2004-05 than 2003-04.

The NHS number is a ten-digit unique patient identifier. This information is essential for the National Programme for Information Technology since it allows for patients to be traced and verified (via the NHS Strategic Tracing Service).[10, 11] Newborns can receive their NHS number via the same service. Within PICANet the NHS number is crucial for the effective follow-up of patients, particularly of those who migrate between trusts. An electronic connection to the hospital's Patient Administration System may be the most effective method for improving the completeness of such data.

Figure 5.3.5 Data error rate by unit



Note: The red line indicates the current mean data error rate for all PICANet units (0.056). The mean data error rate in the PICANet National Report 2003 - 2004 was 0.559.[6]

The error rate is a summary index which illustrates the number of 'errors' per patient. Appendix G shows a breakdown of how this is calculated for each unit.

The figures for 2004-05 show a dramatic improvement from those in 2003-04. 13 units have no errors at all for the most recent data period.

There are some limitations to using the error rate as a tool to assess data quality, and in comparing the error rate over different periods in time:

- Error rates between the two periods of time are not directly comparable, as new checks have been added.
- Some types of error are more significant than others (e.g. a date of birth after a date of admission error compared to a missing value for delivery order), and at present the index is not weighted to reflect this.
- Some units may be quick to enter exception values for particular data items, whilst others might spend considerable time and effort locating the data (but leaving it missing for a time).

Figure 5.3.6 Change in data error rate between the PICANet National Reports 2003-04 and 2004-05.

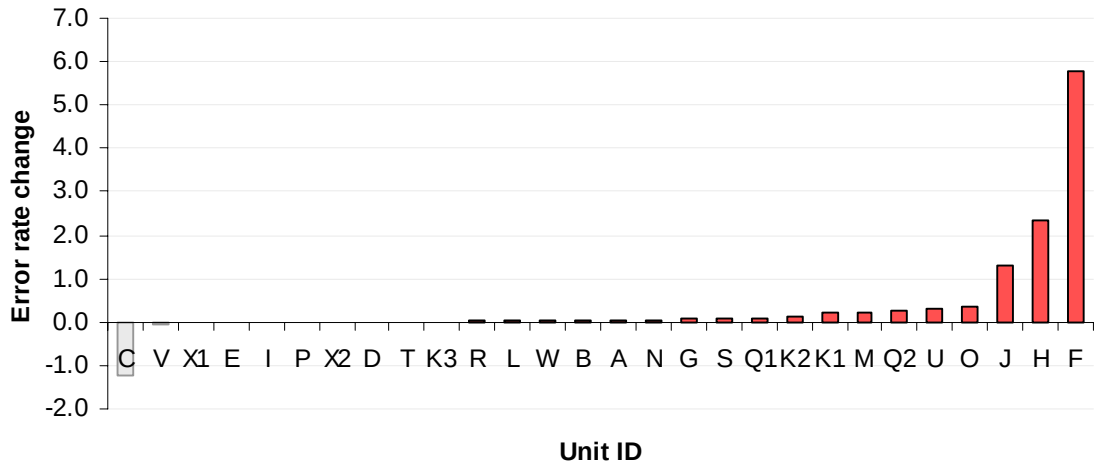


Figure 5.3.6 presents the change in data error rates since the PICANet National Report 2003 - 2004.[6] Units have been ordered by error rate change, with unit F showing the greatest improvement. It can be seen that in most units, error rates have decreased.

5.4 Summary

- The PICANet data set quality has improved markedly during 2005. As a result the data are of very high quality and all resulting analyses will provide a complete and accurate picture of PICU activity.
- PICU visits to assess data accuracy enable the PICANet team to identify and address errors and difficulties specific to units.
- The routine checks that assess the completeness of variables enable regular monitoring and feedback to units on data collection standards. This constant attention to data quality has enabled PICANet to establish a premium data set and a framework for continued improvements in data management for the future.

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6 ADMISSION DATA

6.1 Admissions by age

Figure 6.1.1 Admissions by age and sex

Table 6.1.1 Admissions by age and sex

Age (years)	Sex									
	Male		Female		Ambiguous		Unknown		Total	
	n	%	n	%	n	%	n	%	n	%
0	7956	(59)	5402	(40)	6	(0)	22	(0)	**13386**	**(48.0)**
1	1675	(54)	1406	(46)	3	(0)	5	(0)	**3089**	**(11.1)**
2	883	(57)	672	(43)	0	(0)	2	(0)	**1557**	**(5.6)**
3	735	(57)	548	(43)	1	(0)	1	(0)	**1285**	**(4.6)**
4	553	(56)	428	(44)	0	(0)	1	(0)	**982**	**(3.5)**
5	474	(53)	413	(46)	0	(0)	2	(0)	**889**	**(3.2)**
6	391	(56)	302	(44)	0	(0)	1	(0)	**694**	**(2.5)**
7	337	(58)	247	(42)	0	(0)	0	(0)	**584**	**(2.1)**
8	295	(54)	252	(46)	0	(0)	0	(0)	**547**	**(2.0)**
9	301	(54)	260	(46)	0	(0)	0	(0)	**561**	**(2.0)**
10	361	(56)	279	(44)	0	(0)	0	(0)	**640**	**(2.3)**
11	369	(55)	303	(45)	0	(0)	0	(0)	**672**	**(2.4)**
12	368	(52)	333	(48)	0	(0)	0	(0)	**701**	**(2.5)**
13	400	(55)	332	(45)	0	(0)	1	(0)	**733**	**(2.6)**
14	452	(55)	373	(45)	0	(0)	0	(0)	**825**	**(3.0)**
15	378	(53)	336	(47)	0	(0)	0	(0)	**714**	**(2.6)**
Total	**15928**	**(57.2)**	**11886**	**(42.7)**	**10**	**(0.0)**	**35**	**(0.1)**	**27859**	

Figure 6.1.2 Admissions by age (age less than one year) and sex

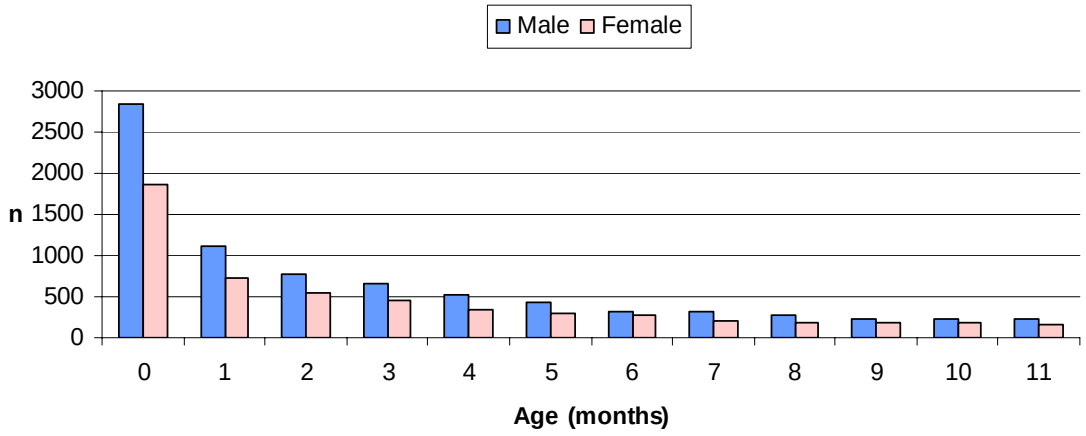


Table 6.1.2 Admissions by age (age less than one year) and sex

Age (months)	Sex									
	Male		Female		Ambiguous		Unknown		Total	
	n	%	n	%	n	%	n	%	n	%
0	2846	(60)	1856	(39)	4	(0)	10	(0)	**4716**	**(35.2)**
1	1121	(61)	718	(39)	0	(0)	1	(0)	**1840**	**(13.7)**
2	770	(58)	546	(41)	1	(0)	1	(0)	**1318**	**(9.8)**
3	654	(58)	463	(41)	1	(0)	2	(0)	**1120**	**(8.4)**
4	515	(60)	337	(39)	0	(0)	2	(0)	**854**	**(6.4)**
5	427	(59)	291	(41)	0	(0)	0	(0)	**718**	**(5.4)**
6	328	(56)	262	(44)	0	(0)	0	(0)	**590**	**(4.4)**
7	320	(60)	213	(40)	0	(0)	0	(0)	**533**	**(4.0)**
8	279	(59)	193	(41)	0	(0)	1	(0)	**473**	**(3.5)**
9	236	(57)	178	(43)	0	(0)	1	(0)	**415**	**(3.1)**
10	235	(56)	186	(44)	0	(0)	2	(0)	**423**	**(3.2)**
11	225	(58)	159	(41)	0	(0)	2	(1)	**386**	**(2.9)**
Total	**7956**	**(59.4)**	**5402**	**(40.4)**	**6**	**(0.0)**	**22**	**(0.2)**	**13386**	

Table 6.1.3 Admissions by age and NHS trust

Year	NHS trust	Age group (years) <1 n	%	1-4 n	%	5-10 n	%	11-15 n	%	Total n	%
2004	**A**	151	(34)	110	(25)	91	(21)	90	(20)	**442**	**(3.2)**
	B	134	(47)	75	(26)	45	(16)	31	(11)	**285**	**(2.1)**
	C	110	(42)	56	(21)	42	(16)	57	(22)	**265**	**(1.9)**
	D	249	(43)	162	(28)	84	(14)	89	(15)	**584**	**(4.2)**
	E	966	(54)	380	(21)	215	(12)	215	(12)	**1776**	**(12.8)**
	F	709	(61)	268	(23)	99	(8)	89	(8)	**1165**	**(8.4)**
	G	13	(30)	12	(27)	9	(20)	10	(23)	**44**	**(0.3)**
	H	92	(30)	110	(36)	56	(18)	49	(16)	**307**	**(2.2)**
	I	393	(46)	233	(27)	130	(15)	103	(12)	**859**	**(6.2)**
	J	36	(44)	22	(27)	13	(16)	11	(13)	**82**	**(0.6)**
	K	519	(59)	145	(16)	111	(13)	108	(12)	**883**	**(6.4)**
	L	79	(35)	49	(22)	44	(19)	54	(24)	**226**	**(1.6)**
	M	110	(29)	107	(29)	75	(20)	81	(22)	**373**	**(2.7)**
	N	155	(46)	96	(28)	43	(13)	43	(13)	**337**	**(2.4)**
	O	273	(49)	175	(32)	65	(12)	39	(7)	**552**	**(4.0)**
	P	536	(55)	239	(24)	101	(10)	106	(11)	**982**	**(7.1)**
	Q	247	(45)	135	(25)	82	(15)	85	(15)	**549**	**(4.0)**
	R	286	(49)	145	(25)	82	(14)	72	(12)	**585**	**(4.2)**
	S	62	(37)	47	(28)	31	(19)	27	(16)	**167**	**(1.2)**
	T	124	(34)	125	(34)	52	(14)	65	(18)	**366**	**(2.6)**
	U	139	(35)	141	(36)	66	(17)	46	(12)	**392**	**(2.8)**
	V	494	(50)	242	(25)	129	(13)	118	(12)	**983**	**(7.1)**
	W	329	(51)	146	(23)	100	(15)	73	(11)	**648**	**(4.7)**
	X	500	(52)	211	(22)	122	(13)	132	(14)	**965**	**(7.0)**
	Y	9	(45)	6	(30)	3	(15)	2	(10)	**20**	**(0.1)**
2004 Total		**6715**	**(48.5)**	**3437**	**(24.8)**	**1890**	**(13.7)**	**1795**	**(13.0)**	**13837**	
2005	**A**	136	(33)	98	(24)	108	(26)	72	(17)	**414**	**(3.0)**
	B	108	(46)	64	(27)	27	(12)	34	(15)	**233**	**(1.7)**
	C	97	(38)	64	(25)	40	(16)	53	(21)	**254**	**(1.8)**
	D	219	(38)	155	(27)	98	(17)	108	(19)	**580**	**(4.1)**
	E	830	(55)	332	(22)	194	(13)	154	(10)	**1510**	**(10.8)**
	F	654	(58)	274	(24)	106	(9)	88	(8)	**1122**	**(8.0)**
	G	14	(28)	13	(26)	10	(20)	13	(26)	**50**	**(0.4)**
	H	111	(33)	109	(32)	54	(16)	62	(18)	**336**	**(2.4)**
	I	412	(48)	204	(24)	120	(14)	117	(14)	**853**	**(6.1)**
	J	48	(50)	24	(25)	13	(14)	11	(11)	**96**	**(0.7)**
	K	481	(54)	194	(22)	104	(12)	104	(12)	**883**	**(6.3)**
	L	93	(34)	63	(23)	56	(20)	62	(23)	**274**	**(2.0)**
	M	108	(30)	107	(30)	61	(17)	79	(22)	**355**	**(2.5)**
	N	134	(45)	75	(25)	39	(13)	47	(16)	**295**	**(2.1)**
	O	359	(59)	142	(23)	71	(12)	39	(6)	**611**	**(4.4)**
	P	545	(54)	261	(26)	110	(11)	101	(10)	**1017**	**(7.3)**
	Q	241	(41)	151	(26)	97	(17)	92	(16)	**581**	**(4.1)**
	R	327	(49)	134	(20)	90	(14)	114	(17)	**665**	**(4.7)**
	S	61	(34)	42	(23)	32	(18)	45	(25)	**180**	**(1.3)**
	T	105	(25)	157	(38)	89	(22)	62	(15)	**413**	**(2.9)**
	U	160	(39)	146	(36)	71	(17)	31	(8)	**408**	**(2.9)**
	V	488	(54)	196	(22)	130	(14)	95	(10)	**909**	**(6.5)**
	W	323	(46)	190	(27)	111	(16)	77	(11)	**701**	**(5.0)**
	X	487	(55)	189	(21)	110	(12)	105	(12)	**891**	**(6.4)**
	Y	130	(33)	92	(24)	84	(21)	85	(22)	**391**	**(2.8)**
2005 Total		**6671**	**(47.6)**	**3476**	**(24.8)**	**2025**	**(14.4)**	**1850**	**(13.2)**	**14022**	
Total		**13386**	**(48.0)**	**6913**	**(24.8)**	**3915**	**(14.1)**	**3645**	**(13.1)**	**27859**	

Table 6.1.4 Admissions by age (age less than one year) and NHS trust

Year	NHS trust	Age group (months) <1 n	%	1-2 n	%	3-5 n	%	6-11 n	%	Total n	%
2004	**A**	42	(28)	37	(25)	33	(22)	39	(26)	**151**	**(2.2)**
	B	38	(28)	39	(29)	28	(21)	29	(22)	**134**	**(2.0)**
	C	26	(24)	25	(23)	31	(28)	28	(25)	**110**	**(1.6)**
	D	51	(20)	76	(31)	60	(24)	62	(25)	**249**	**(3.7)**
	E	420	(43)	190	(20)	178	(18)	178	(18)	**966**	**(14.4)**
	F	313	(44)	149	(21)	122	(17)	125	(18)	**709**	**(10.6)**
	G	4	(31)	4	(31)	1	(8)	4	(31)	**13**	**(0.2)**
	H	21	(23)	25	(27)	14	(15)	32	(35)	**92**	**(1.4)**
	I	103	(26)	100	(25)	98	(25)	92	(23)	**393**	**(5.9)**
	J	4	(11)	8	(22)	14	(39)	10	(28)	**36**	**(0.5)**
	K	226	(44)	137	(26)	90	(17)	66	(13)	**519**	**(7.7)**
	L	19	(24)	28	(35)	18	(23)	14	(18)	**79**	**(1.2)**
	M	26	(24)	33	(30)	18	(16)	33	(30)	**110**	**(1.6)**
	N	51	(33)	37	(24)	41	(26)	26	(17)	**155**	**(2.3)**
	O	105	(38)	55	(20)	59	(22)	54	(20)	**273**	**(4.1)**
	P	211	(39)	133	(25)	96	(18)	96	(18)	**536**	**(8.0)**
	Q	80	(32)	75	(30)	45	(18)	47	(19)	**247**	**(3.7)**
	R	121	(42)	52	(18)	50	(17)	63	(22)	**286**	**(4.3)**
	S	17	(27)	20	(32)	18	(29)	7	(11)	**62**	**(0.9)**
	T	23	(19)	30	(24)	28	(23)	43	(35)	**124**	**(1.8)**
	U	26	(19)	41	(29)	31	(22)	41	(29)	**139**	**(2.1)**
	V	208	(42)	100	(20)	93	(19)	93	(19)	**494**	**(7.4)**
	W	88	(27)	78	(24)	75	(23)	88	(27)	**329**	**(4.9)**
	X	179	(36)	103	(21)	101	(20)	117	(23)	**500**	**(7.4)**
	Y	1	(11)	5	(56)	2	(22)	1	(11)	**9**	**(0.1)**
2004 Total		**2403**	**(35.8)**	**1580**	**(23.5)**	**1344**	**(20.0)**	**1388**	**(20.7)**	**6715**	
2005	**A**	30	(22)	41	(30)	32	(24)	33	(24)	**136**	**(2.0)**
	B	22	(20)	33	(31)	30	(28)	23	(21)	**108**	**(1.6)**
	C	13	(13)	28	(29)	29	(30)	27	(28)	**97**	**(1.5)**
	D	54	(25)	69	(32)	47	(21)	49	(22)	**219**	**(3.3)**
	E	332	(40)	174	(21)	158	(19)	166	(20)	**830**	**(12.4)**
	F	268	(41)	149	(23)	110	(17)	127	(19)	**654**	**(9.8)**
	G	4	(29)	7	(50)	0	(0)	3	(21)	**14**	**(0.2)**
	H	22	(20)	21	(19)	28	(25)	40	(36)	**111**	**(1.7)**
	I	117	(28)	90	(22)	113	(27)	92	(22)	**412**	**(6.2)**
	J	9	(19)	13	(27)	13	(27)	13	(27)	**48**	**(0.7)**
	K	189	(39)	124	(26)	74	(15)	94	(20)	**481**	**(7.2)**
	L	19	(20)	38	(41)	19	(20)	17	(18)	**93**	**(1.4)**
	M	19	(18)	28	(26)	28	(26)	33	(31)	**108**	**(1.6)**
	N	36	(27)	33	(25)	36	(27)	29	(22)	**134**	**(2.0)**
	O	145	(40)	71	(20)	70	(19)	73	(20)	**359**	**(5.4)**
	P	204	(37)	120	(22)	114	(21)	107	(20)	**545**	**(8.2)**
	Q	83	(34)	67	(28)	38	(16)	53	(22)	**241**	**(3.6)**
	R	138	(42)	72	(22)	60	(18)	57	(17)	**327**	**(4.9)**
	S	16	(26)	20	(33)	17	(28)	8	(13)	**61**	**(0.9)**
	T	23	(22)	25	(24)	20	(19)	37	(35)	**105**	**(1.6)**
	U	35	(22)	36	(23)	37	(23)	52	(33)	**160**	**(2.4)**
	V	180	(37)	118	(24)	114	(23)	76	(16)	**488**	**(7.3)**
	W	110	(34)	72	(22)	66	(20)	75	(23)	**323**	**(4.8)**
	X	200	(41)	95	(20)	77	(16)	115	(24)	**487**	**(7.3)**
	Y	45	(35)	34	(26)	18	(14)	33	(25)	**130**	**(1.9)**
2005 Total		**2313**	**(34.7)**	**1578**	**(23.7)**	**1348**	**(20.2)**	**1432**	**(21.5)**	**6671**	
Total		**4716**	**(35.2)**	**3158**	**(23.6)**	**2692**	**(20.1)**	**2820**	**(21.1)**	**13386**	

Table 6.1.5 For 16 years and above: admissions by age and NHS trust

Year	NHS trust	Age group (years) 16 n	16 %	17-20 n	17-20 %	21-25 n	21-25 %	26+ n	26+ %	Total n	Total %
2004	**A**	6	(100)	0	(0)	0	(0)	0	(0)	**6**	**(2.2)**
	B	6	(75)	2	(25)	0	(0)	0	(0)	**8**	**(2.9)**
	C	4	(100)	0	(0)	0	(0)	0	(0)	**4**	**(1.4)**
	D	10	(71)	4	(29)	0	(0)	0	(0)	**14**	**(5.0)**
	E	29	(74)	10	(26)	0	(0)	0	(0)	**39**	**(14.0)**
	F	8	(57)	6	(43)	0	(0)	0	(0)	**14**	**(5.0)**
	G	1	(100)	0	(0)	0	(0)	0	(0)	**1**	**(0.4)**
	H	9	(100)	0	(0)	0	(0)	0	(0)	**9**	**(3.2)**
	I	10	(53)	8	(42)	1	(5)	0	(0)	**19**	**(6.8)**
	J	0	-	0	-	0	-	0	-	**0**	**(0.0)**
	K	11	(61)	6	(33)	1	(6)	0	(0)	**18**	**(6.5)**
	L	2	(25)	5	(63)	0	(0)	1	(13)	**8**	**(2.9)**
	M	6	(86)	1	(14)	0	(0)	0	(0)	**7**	**(2.5)**
	N	2	(67)	1	(33)	0	(0)	0	(0)	**3**	**(1.1)**
	O	0	-	0	-	0	-	0	-	**0**	**(0.0)**
	P	6	(55)	4	(36)	1	(9)	0	(0)	**11**	**(4.0)**
	Q	14	(78)	4	(22)	0	(0)	0	(0)	**18**	**(6.5)**
	R	15	(52)	13	(45)	1	(3)	0	(0)	**29**	**(10.4)**
	S	3	(43)	3	(43)	1	(14)	0	(0)	**7**	**(2.5)**
	T	3	(50)	3	(50)	0	(0)	0	(0)	**6**	**(2.2)**
	U	0	(0)	2	(100)	0	(0)	0	(0)	**2**	**(0.7)**
	V	5	(38)	8	(62)	0	(0)	0	(0)	**13**	**(4.7)**
	W	11	(85)	2	(15)	0	(0)	0	(0)	**13**	**(4.7)**
	X	13	(50)	12	(46)	1	(4)	0	(0)	**26**	**(9.4)**
	Y	3	(100)	0	(0)	0	(0)	0	(0)	**3**	**(1.1)**
2004 Total		**177**	**(63.7)**	**94**	**(33.8)**	**6**	**(2.2)**	**1**	**(0.4)**	**278**	
2005	**A**	4	(80)	1	(20)	0	(0)	0	(0)	**5**	**(1.7)**
	B	1	(33)	2	(67)	0	(0)	0	(0)	**3**	**(1.0)**
	C	2	(100)	0	(0)	0	(0)	0	(0)	**2**	**(0.7)**
	D	11	(65)	6	(35)	0	(0)	0	(0)	**17**	**(5.9)**
	E	23	(74)	7	(23)	0	(0)	1	(3)	**31**	**(10.8)**
	F	5	(56)	3	(33)	0	(0)	1	(11)	**9**	**(3.1)**
	G	0	-	0	-	0	-	0	-	**0**	**(0.0)**
	H	2	(67)	1	(33)	0	(0)	0	(0)	**3**	**(1.0)**
	I	12	(67)	6	(33)	0	(0)	0	(0)	**18**	**(6.3)**
	J	1	(100)	0	(0)	0	(0)	0	(0)	**1**	**(0.3)**
	K	8	(36)	11	(50)	3	(14)	0	(0)	**22**	**(7.6)**
	L	14	(78)	3	(17)	1	(6)	0	(0)	**18**	**(6.3)**
	M	0	(0)	2	(100)	0	(0)	0	(0)	**2**	**(0.7)**
	N	1	(50)	1	(50)	0	(0)	0	(0)	**2**	**(0.7)**
	O	2	(67)	1	(33)	0	(0)	0	(0)	**3**	**(1.0)**
	P	9	(53)	8	(47)	0	(0)	0	(0)	**17**	**(5.9)**
	Q	8	(35)	15	(65)	0	(0)	0	(0)	**23**	**(8.0)**
	R	11	(48)	11	(48)	1	(4)	0	(0)	**23**	**(8.0)**
	S	3	(60)	2	(40)	0	(0)	0	(0)	**5**	**(1.7)**
	T	4	(67)	2	(33)	0	(0)	0	(0)	**6**	**(2.1)**
	U	2	(50)	2	(50)	0	(0)	0	(0)	**4**	**(1.4)**
	V	9	(69)	4	(31)	0	(0)	0	(0)	**13**	**(4.5)**
	W	12	(86)	2	(14)	0	(0)	0	(0)	**14**	**(4.9)**
	X	10	(91)	1	(9)	0	(0)	0	(0)	**11**	**(3.8)**
	Y	17	(47)	19	(53)	0	(0)	0	(0)	**36**	**(12.5)**
2005 Total		**171**	**(59.4)**	**110**	**(38.2)**	**5**	**(1.7)**	**2**	**(0.7)**	**288**	
Total		**348**	**(61.5)**	**204**	**(36.0)**	**11**	**(1.9)**	**3**	**(0.5)**	**566**	

6.2 Admissions by month

Figure 6.2.1 Admissions by month and age

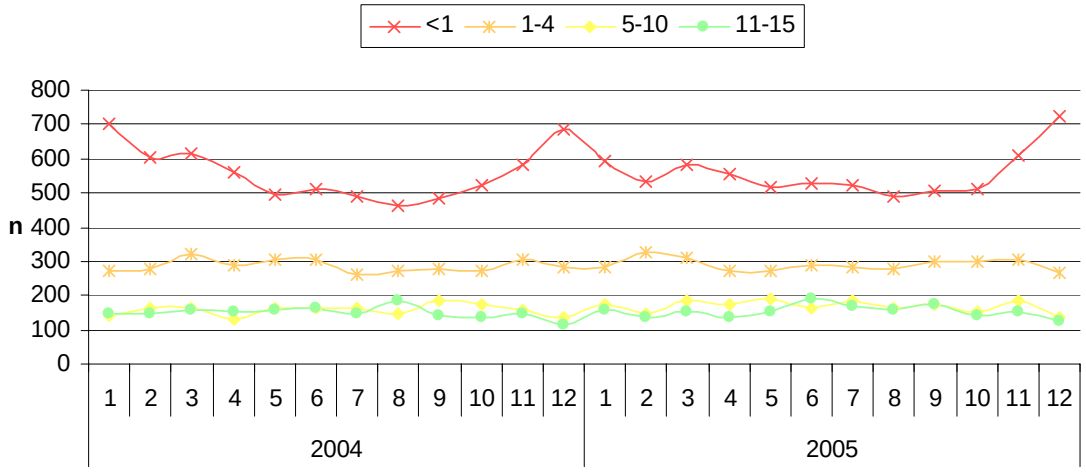
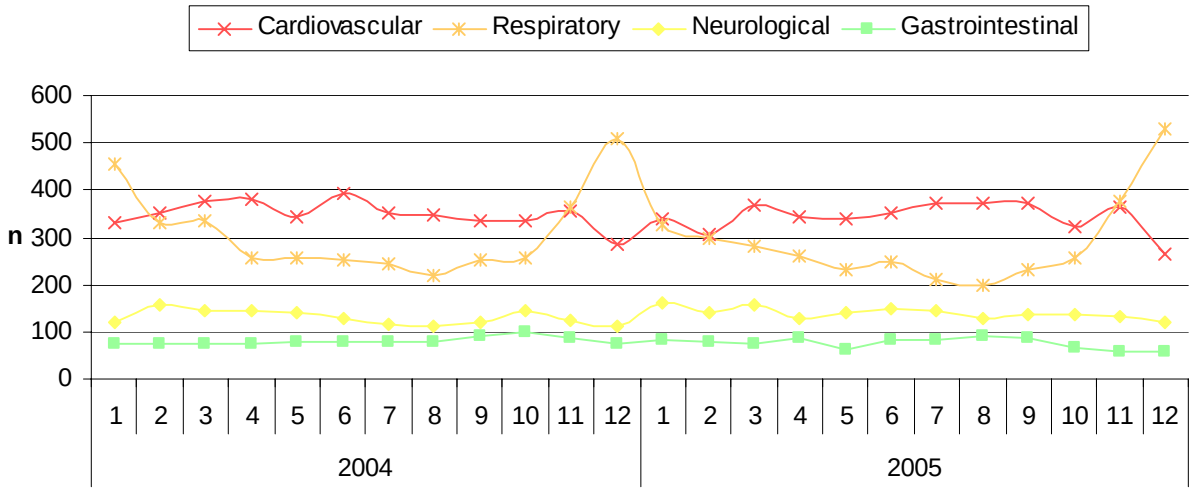


Table 6.2.1 Admissions by month and age

Year	Month	Age group (years) <1 n	%	1-4 n	%	5-10 n	%	11-15 n	%	Total n	%
2004	**1**	704	(56)	273	(22)	143	(11)	148	(12)	**1268**	**(9.2)**
	2	604	(51)	275	(23)	164	(14)	147	(12)	**1190**	**(8.6)**
	3	613	(49)	319	(25)	162	(13)	157	(13)	**1251**	**(9.0)**
	4	561	(49)	291	(26)	130	(11)	153	(13)	**1135**	**(8.2)**
	5	497	(44)	306	(27)	162	(14)	158	(14)	**1123**	**(8.1)**
	6	513	(45)	307	(27)	165	(14)	162	(14)	**1147**	**(8.3)**
	7	491	(46)	262	(25)	165	(16)	145	(14)	**1063**	**(7.7)**
	8	460	(43)	271	(25)	148	(14)	187	(18)	**1066**	**(7.7)**
	9	483	(44)	277	(26)	183	(17)	143	(13)	**1086**	**(7.8)**
	10	523	(47)	270	(24)	174	(16)	137	(12)	**1104**	**(8.0)**
	11	581	(49)	305	(26)	156	(13)	146	(12)	**1188**	**(8.6)**
	12	685	(56)	281	(23)	138	(11)	112	(9)	**1216**	**(8.8)**
2004 Total		**6715**	**(48.5)**	**3437**	**(24.8)**	**1890**	**(13.7)**	**1795**	**(13.0)**	**13837**	
2005	**1**	593	(49)	281	(23)	172	(14)	158	(13)	**1204**	**(8.6)**
	2	535	(47)	324	(28)	146	(13)	138	(12)	**1143**	**(8.2)**
	3	584	(47)	312	(25)	186	(15)	152	(12)	**1234**	**(8.8)**
	4	556	(49)	271	(24)	172	(15)	137	(12)	**1136**	**(8.1)**
	5	516	(46)	271	(24)	189	(17)	150	(13)	**1126**	**(8.0)**
	6	529	(45)	287	(24)	165	(14)	193	(16)	**1174**	**(8.4)**
	7	521	(45)	283	(24)	185	(16)	171	(15)	**1160**	**(8.3)**
	8	488	(45)	278	(26)	165	(15)	156	(14)	**1087**	**(7.8)**
	9	504	(44)	301	(26)	175	(15)	176	(15)	**1156**	**(8.2)**
	10	513	(47)	298	(27)	152	(14)	140	(13)	**1103**	**(7.9)**
	11	610	(49)	304	(24)	183	(15)	155	(12)	**1252**	**(8.9)**
	12	722	(58)	266	(21)	135	(11)	124	(10)	**1247**	**(8.9)**
2005 Total		**6671**	**(47.6)**	**3476**	**(24.8)**	**2025**	**(14.4)**	**1850**	**(13.2)**	**14022**	
Total		**13386**	**(48.0)**	**6913**	**(24.8)**	**3915**	**(14.1)**	**3645**	**(13.1)**	**27859**	

Figure 6.2.2 Admissions by month and primary diagnostic group



The primary reason for admission has been categorised into 13 diagnostic groups to enable a simple comparison between NHS trusts. The classification is based on CT3 (The Read Codes). The groups are mutually exclusive:

- Infection excludes any respiratory or gastrointestinal infection but includes meningitis
- Neurological disorders include neurovascular complications
- Oncology includes neuro-oncology (brain tumours)
- Other includes those diagnoses not covered by the other 12 groups

Read codes are five characters in length and can be made up of numbers, letters, or periods. The ordering of the individual characters does not indicate the hierarchy (e.g. patent ductus arteriosus (P70..) is a subset of congenital abnormality of ductus arteriosus (Xa6aC)).

Table 6.2.2 Admissions by month and primary diagnostic group

Year	Month	Diagnostic group																													
		Blood / lymphatic		Body wall and cavities		Cardiovascular		Endocrine / metabolic		Gastrointestinal		Infection		Multisystem		Musculoskeletal		Neurological		Oncology		Respiratory		Trauma		Other		Unknown		Total	
		n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
2004	**1**	8	(1)	25	(2)	332	(26)	22	(2)	74	(6)	66	(5)	0	(0)	44	(3)	121	(10)	43	(3)	454	(36)	27	(2)	52	(4)	0	(0)	**1268**	**(9.2)**
	2	4	(0)	34	(3)	352	(30)	21	(2)	73	(6)	53	(4)	1	(0)	31	(3)	156	(13)	41	(3)	332	(28)	34	(3)	52	(4)	6	(1)	**1190**	**(8.6)**
	3	6	(0)	35	(3)	377	(30)	27	(2)	75	(6)	72	(6)	2	(0)	47	(4)	145	(12)	37	(3)	336	(27)	39	(3)	50	(4)	3	(0)	**1251**	**(9.0)**
	4	6	(1)	23	(2)	380	(33)	17	(1)	75	(7)	63	(6)	2	(0)	30	(3)	143	(13)	48	(4)	255	(22)	47	(4)	43	(4)	3	(0)	**1135**	**(8.2)**
	5	7	(1)	19	(2)	345	(31)	21	(2)	78	(7)	35	(3)	1	(0)	40	(4)	139	(12)	43	(4)	255	(23)	85	(8)	53	(5)	2	(0)	**1123**	**(8.1)**
	6	11	(1)	26	(2)	393	(34)	14	(1)	77	(7)	41	(4)	6	(1)	45	(4)	128	(11)	44	(4)	251	(22)	59	(5)	52	(5)	0	(0)	**1147**	**(8.3)**
	7	10	(1)	21	(2)	352	(33)	22	(2)	77	(7)	45	(4)	3	(0)	36	(3)	115	(11)	34	(3)	243	(23)	56	(5)	48	(5)	1	(0)	**1063**	**(7.7)**
	8	7	(1)	21	(2)	349	(33)	28	(3)	80	(8)	57	(5)	1	(0)	40	(4)	113	(11)	42	(4)	218	(20)	54	(5)	54	(5)	2	(0)	**1066**	**(7.7)**
	9	7	(1)	28	(3)	335	(31)	20	(2)	91	(8)	41	(4)	1	(0)	36	(3)	120	(11)	52	(5)	253	(23)	44	(4)	56	(5)	2	(0)	**1086**	**(7.8)**
	10	7	(1)	23	(2)	334	(30)	22	(2)	98	(9)	37	(3)	0	(0)	43	(4)	146	(13)	46	(4)	256	(23)	42	(4)	46	(4)	4	(0)	**1104**	**(8.0)**
	11	9	(1)	22	(2)	355	(30)	21	(2)	85	(7)	35	(3)	1	(0)	40	(3)	123	(10)	41	(3)	365	(31)	32	(3)	57	(5)	2	(0)	**1188**	**(8.6)**
	12	5	(0)	17	(1)	287	(24)	25	(2)	73	(6)	67	(6)	0	(0)	20	(2)	113	(9)	41	(3)	510	(42)	21	(2)	34	(3)	3	(0)	**1216**	**(8.8)**
2004 Total		**87**	**(0.6)**	**294**	**(2.1)**	**4191**	**(30.3)**	**260**	**(1.9)**	**956**	**(6.9)**	**612**	**(4.4)**	**18**	**(0.1)**	**452**	**(3.3)**	**1562**	**(11.3)**	**512**	**(3.7)**	**3728**	**(26.9)**	**540**	**(3.9)**	**597**	**(4.3)**	**28**	**(0.2)**	13837	
2005	**1**	6	(0)	16	(1)	340	(28)	27	(2)	82	(7)	83	(7)	3	(0)	45	(4)	163	(14)	31	(3)	325	(27)	27	(2)	50	(4)	6	(0)	**1204**	**(8.6)**
	2	12	(1)	20	(2)	308	(27)	31	(3)	80	(7)	71	(6)	4	(0)	36	(3)	142	(12)	39	(3)	298	(26)	36	(3)	51	(4)	15	(1)	**1143**	**(8.2)**
	3	8	(1)	28	(2)	367	(30)	37	(3)	76	(6)	76	(6)	5	(0)	46	(4)	156	(13)	44	(4)	283	(23)	36	(3)	63	(5)	9	(1)	**1234**	**(8.8)**
	4	8	(1)	35	(3)	342	(30)	23	(2)	85	(7)	66	(6)	3	(0)	34	(3)	127	(11)	40	(4)	259	(23)	39	(3)	66	(6)	9	(1)	**1136**	**(8.1)**
	5	15	(1)	29	(3)	340	(30)	19	(2)	64	(6)	58	(5)	7	(1)	47	(4)	142	(13)	48	(4)	230	(20)	69	(6)	46	(4)	12	(1)	**1126**	**(8.0)**
	6	16	(1)	28	(2)	353	(30)	15	(1)	83	(7)	45	(4)	4	(0)	36	(3)	148	(13)	43	(4)	249	(21)	69	(6)	77	(7)	8	(1)	**1174**	**(8.4)**
	7	10	(1)	38	(3)	372	(32)	24	(2)	82	(7)	64	(6)	3	(0)	40	(3)	144	(12)	48	(4)	213	(18)	59	(5)	50	(4)	13	(1)	**1160**	**(8.3)**
	8	9	(1)	27	(2)	374	(34)	21	(2)	90	(8)	35	(3)	3	(0)	37	(3)	128	(12)	39	(4)	198	(18)	64	(6)	54	(5)	8	(1)	**1087**	**(7.8)**
	9	6	(1)	29	(3)	371	(32)	29	(3)	85	(7)	32	(3)	2	(0)	47	(4)	135	(12)	62	(5)	233	(20)	59	(5)	43	(4)	23	(2)	**1156**	**(8.2)**
	10	7	(1)	26	(2)	323	(29)	24	(2)	67	(6)	68	(6)	1	(0)	43	(4)	135	(12)	45	(4)	256	(23)	32	(3)	43	(4)	33	(3)	**1103**	**(7.9)**
	11	11	(1)	22	(2)	363	(29)	30	(2)	57	(5)	56	(4)	4	(0)	50	(4)	134	(11)	53	(4)	377	(30)	41	(3)	28	(2)	26	(2)	**1252**	**(8.9)**
	12	9	(1)	18	(1)	263	(21)	23	(2)	60	(5)	65	(5)	1	(0)	28	(2)	118	(9)	41	(3)	529	(42)	29	(2)	28	(2)	35	(3)	**1247**	**(8.9)**
2005 Total		**117**	**(0.8)**	**316**	**(2.3)**	**4116**	**(29.4)**	**303**	**(2.2)**	**911**	**(6.5)**	**719**	**(5.1)**	**40**	**(0.3)**	**489**	**(3.5)**	**1672**	**(11.9)**	**533**	**(3.8)**	**3450**	**(24.6)**	**560**	**(4.0)**	**599**	**(4.3)**	**197**	**(1.4)**	14022	
Total		**204**	**(0.7)**	**610**	**(2.2)**	**8307**	**(29.8)**	**563**	**(2.0)**	**1867**	**(6.7)**	**1331**	**(4.8)**	**58**	**(0.2)**	**941**	**(3.4)**	**3234**	**(11.6)**	**1045**	**(3.8)**	**7178**	**(25.8)**	**1100**	**(3.9)**	**1196**	**(4.3)**	**225**	**(0.8)**	27859	

Figure 6.2.3 Respiratory admissions by month and age

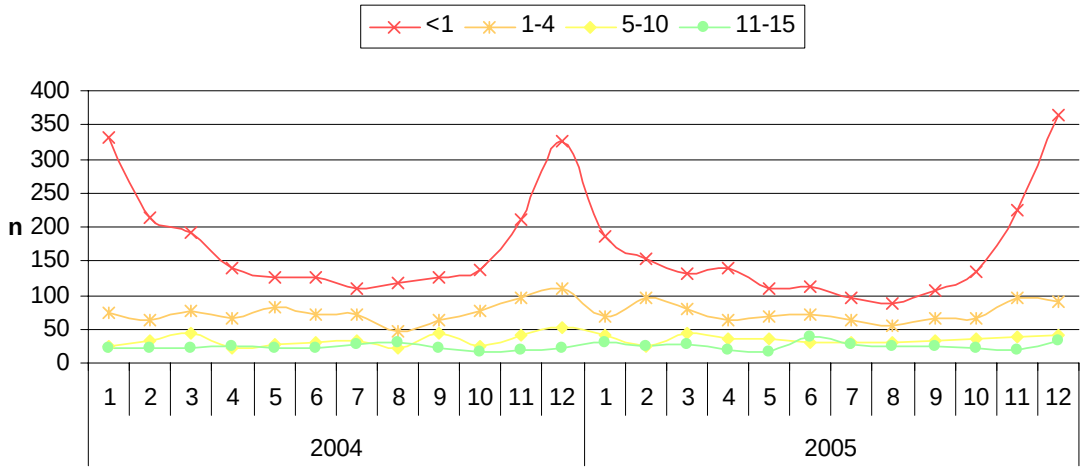


Table 6.2.3 Respiratory admissions by month and age

Year	Month	Age group (years) <1 n	%	1-4 n	%	5-10 n	%	11-15 n	%	Total n	%
2004	**1**	332	(73)	73	(16)	26	(6)	23	(5)	**454**	**(12.2)**
	2	214	(64)	63	(19)	33	(10)	22	(7)	**332**	**(8.9)**
	3	193	(57)	78	(23)	44	(13)	21	(6)	**336**	**(9.0)**
	4	141	(55)	66	(26)	23	(9)	25	(10)	**255**	**(6.8)**
	5	125	(49)	81	(32)	27	(11)	22	(9)	**255**	**(6.8)**
	6	127	(51)	71	(28)	30	(12)	23	(9)	**251**	**(6.7)**
	7	109	(45)	72	(30)	34	(14)	28	(12)	**243**	**(6.5)**
	8	119	(55)	47	(22)	22	(10)	30	(14)	**218**	**(5.8)**
	9	125	(49)	62	(25)	45	(18)	21	(8)	**253**	**(6.8)**
	10	138	(54)	76	(30)	26	(10)	16	(6)	**256**	**(6.9)**
	11	210	(58)	96	(26)	40	(11)	19	(5)	**365**	**(9.8)**
	12	326	(64)	109	(21)	53	(10)	22	(4)	**510**	**(13.7)**
2004 Total		**2159**	**(57.9)**	**894**	**(24.0)**	**403**	**(10.8)**	**272**	**(7.3)**	**3728**	
2005	**1**	185	(57)	68	(21)	42	(13)	30	(9)	**325**	**(9.4)**
	2	153	(51)	96	(32)	24	(8)	25	(8)	**298**	**(8.6)**
	3	132	(47)	80	(28)	43	(15)	28	(10)	**283**	**(8.2)**
	4	140	(54)	64	(25)	35	(14)	20	(8)	**259**	**(7.5)**
	5	109	(47)	68	(30)	36	(16)	17	(7)	**230**	**(6.7)**
	6	112	(45)	70	(28)	30	(12)	37	(15)	**249**	**(7.2)**
	7	95	(45)	62	(29)	29	(14)	27	(13)	**213**	**(6.2)**
	8	89	(45)	55	(28)	29	(15)	25	(13)	**198**	**(5.7)**
	9	107	(46)	67	(29)	33	(14)	26	(11)	**233**	**(6.8)**
	10	134	(52)	65	(25)	36	(14)	21	(8)	**256**	**(7.4)**
	11	225	(60)	96	(25)	37	(10)	19	(5)	**377**	**(10.9)**
	12	365	(69)	91	(17)	41	(8)	32	(6)	**529**	**(15.3)**
2005 Total		**1846**	**(53.5)**	**882**	**(25.6)**	**415**	**(12.0)**	**307**	**(8.9)**	**3450**	
Total		**4005**	**(55.8)**	**1776**	**(24.7)**	**818**	**(11.4)**	**579**	**(8.1)**	**7178**	

Figure 6.2.4 Respiratory admissions by month (specific conditions)

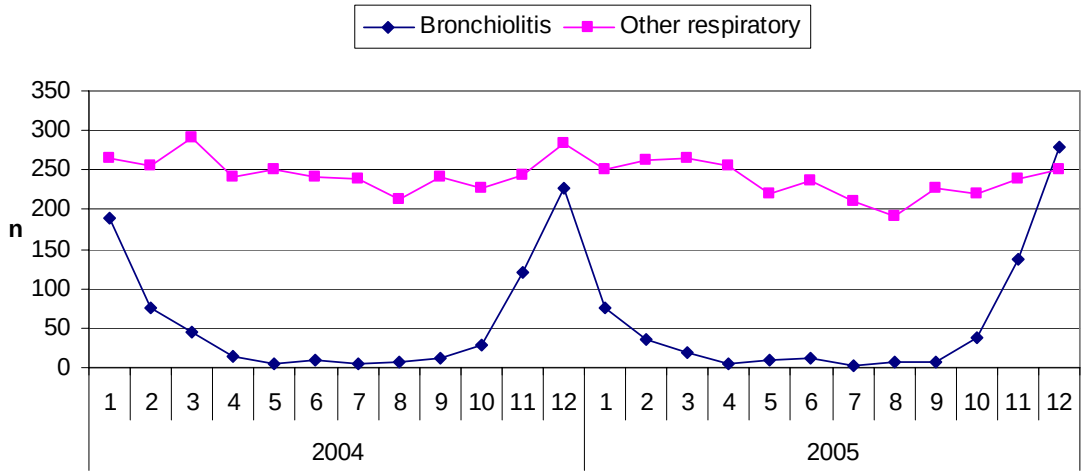


Table 6.2.4 Admissions by month and NHS trust

Year	NHS trust	Month																									
		January		February		March		April		May		June		July		August		September		October		November		December		Total	
		n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
2004	A	33	(7)	35	(8)	41	(9)	37	(8)	34	(8)	33	(7)	39	(9)	28	(6)	42	(10)	42	(10)	43	(10)	35	(8)	442	(3.2)
	B	23	(8)	35	(12)	34	(12)	20	(7)	12	(4)	16	(6)	17	(6)	23	(8)	24	(8)	24	(8)	30	(11)	27	(9)	285	(2.1)
	C	39	(15)	25	(9)	26	(10)	25	(9)	15	(6)	13	(5)	21	(8)	17	(6)	19	(7)	11	(4)	24	(9)	30	(11)	265	(1.9)
	D	53	(9)	53	(9)	58	(10)	49	(8)	45	(8)	42	(7)	45	(8)	39	(7)	46	(8)	46	(8)	59	(10)	49	(8)	584	(4.2)
	E	130	(7)	142	(8)	164	(9)	145	(8)	149	(8)	159	(9)	151	(9)	158	(9)	153	(9)	134	(8)	143	(8)	148	(8)	1776	(12.8)
	F	112	(10)	86	(7)	104	(9)	102	(9)	100	(9)	90	(8)	89	(8)	74	(6)	80	(7)	97	(8)	103	(9)	128	(11)	1165	(8.4)
	G	5	(11)	8	(18)	2	(5)	7	(16)	2	(5)	4	(9)	0	(0)	2	(5)	3	(7)	3	(7)	4	(9)	4	(9)	44	(0.3)
	H	20	(7)	19	(6)	19	(6)	21	(7)	35	(11)	30	(10)	25	(8)	22	(7)	28	(9)	25	(8)	27	(9)	36	(12)	307	(2.2)
	I	99	(12)	76	(9)	68	(8)	83	(10)	76	(9)	77	(9)	57	(7)	61	(7)	66	(8)	69	(8)	57	(7)	70	(8)	859	(6.2)
	J	10	(12)	4	(5)	12	(15)	8	(10)	4	(5)	9	(11)	5	(6)	5	(6)	9	(11)	7	(9)	6	(7)	3	(4)	82	(0.6)
	K	77	(9)	72	(8)	75	(8)	84	(10)	82	(9)	67	(8)	66	(7)	67	(8)	85	(10)	66	(7)	67	(8)	75	(8)	883	(6.4)
	L	29	(13)	20	(9)	21	(9)	16	(7)	23	(10)	17	(8)	12	(5)	12	(5)	17	(8)	19	(8)	19	(8)	21	(9)	226	(1.6)
	M	30	(8)	24	(6)	42	(11)	26	(7)	25	(7)	34	(9)	26	(7)	41	(11)	37	(10)	25	(7)	35	(9)	28	(8)	373	(2.7)
	N	28	(8)	33	(10)	31	(9)	28	(8)	27	(8)	33	(10)	27	(8)	33	(10)	15	(4)	32	(9)	24	(7)	26	(8)	337	(2.4)
	O	48	(9)	50	(9)	53	(10)	36	(7)	44	(8)	51	(9)	53	(10)	47	(9)	41	(7)	48	(9)	51	(9)	30	(5)	552	(4.0)
	P	88	(9)	87	(9)	103	(10)	78	(8)	74	(8)	84	(9)	76	(8)	72	(7)	84	(9)	70	(7)	77	(8)	89	(9)	982	(7.1)
	Q	47	(9)	62	(11)	48	(9)	45	(8)	41	(7)	45	(8)	44	(8)	37	(7)	35	(6)	51	(9)	42	(8)	52	(9)	549	(4.0)
	R	43	(7)	46	(8)	50	(9)	47	(8)	44	(8)	53	(9)	37	(6)	50	(9)	47	(8)	70	(12)	55	(9)	43	(7)	585	(4.2)
	S	18	(11)	6	(4)	17	(10)	10	(6)	13	(8)	12	(7)	17	(10)	18	(11)	9	(5)	17	(10)	15	(9)	15	(9)	167	(1.2)
	T	29	(8)	18	(5)	27	(7)	26	(7)	42	(11)	29	(8)	34	(9)	28	(8)	29	(8)	31	(8)	38	(10)	35	(10)	366	(2.6)
	U	41	(10)	39	(10)	39	(10)	27	(7)	32	(8)	23	(6)	29	(7)	23	(6)	27	(7)	34	(9)	43	(11)	35	(9)	392	(2.8)
	V	108	(11)	92	(9)	85	(9)	87	(9)	71	(7)	69	(7)	68	(7)	76	(8)	80	(8)	73	(7)	90	(9)	84	(9)	983	(7.1)
	W	69	(11)	70	(11)	49	(8)	50	(8)	53	(8)	53	(8)	45	(7)	44	(7)	52	(8)	49	(8)	56	(9)	58	(9)	648	(4.7)
	X	89	(9)	88	(9)	83	(9)	78	(8)	80	(8)	104	(11)	80	(8)	89	(9)	58	(6)	61	(6)	80	(8)	75	(8)	965	(7.0)
	Y	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	20	(100)	20	(0.1)
2004 Total		1268	(9.2)	1190	(8.6)	1251	(9.0)	1135	(8.2)	1123	(8.1)	1147	(8.3)	1063	(7.7)	1066	(7.7)	1086	(7.8)	1104	(8.0)	1188	(8.6)	1216	(8.8)	13837	
2005	A	33	(8)	39	(9)	45	(11)	31	(7)	40	(10)	34	(8)	36	(9)	30	(7)	30	(7)	29	(7)	35	(8)	32	(8)	414	(3.0)
	B	32	(14)	20	(9)	13	(6)	22	(9)	23	(10)	11	(5)	16	(7)	8	(3)	20	(9)	23	(10)	24	(10)	21	(9)	233	(1.7)
	C	24	(9)	32	(13)	23	(9)	18	(7)	18	(7)	24	(9)	25	(10)	16	(6)	17	(7)	11	(4)	21	(8)	25	(10)	254	(1.8)
	D	63	(11)	37	(6)	62	(11)	50	(9)	43	(7)	33	(6)	53	(9)	43	(7)	54	(9)	45	(8)	47	(8)	50	(9)	580	(4.1)
	E	147	(10)	97	(6)	130	(9)	129	(9)	128	(8)	126	(8)	141	(9)	130	(9)	114	(8)	116	(8)	116	(8)	136	(9)	1510	(10.8)
	F	94	(8)	92	(8)	103	(9)	88	(8)	72	(6)	96	(9)	103	(9)	87	(8)	85	(8)	75	(7)	110	(10)	117	(10)	1122	(8.0)
	G	5	(10)	1	(2)	9	(18)	2	(4)	4	(8)	5	(10)	4	(8)	6	(12)	2	(4)	3	(6)	4	(8)	5	(10)	50	(0.4)
	H	22	(7)	31	(9)	26	(8)	29	(9)	26	(8)	37	(11)	36	(11)	23	(7)	27	(8)	20	(6)	30	(9)	29	(9)	336	(2.4)
	I	77	(9)	78	(9)	67	(8)	71	(8)	67	(8)	66	(8)	72	(8)	51	(6)	66	(8)	76	(9)	75	(9)	87	(10)	853	(6.1)
	J	18	(19)	5	(5)	9	(9)	4	(4)	13	(14)	9	(9)	11	(11)	7	(7)	5	(5)	4	(4)	6	(6)	5	(5)	96	(0.7)
	K	65	(7)	71	(8)	79	(9)	65	(7)	61	(7)	83	(9)	75	(8)	73	(8)	78	(9)	63	(7)	81	(9)	89	(10)	883	(6.3)
	L	23	(8)	22	(8)	23	(8)	15	(5)	23	(8)	19	(7)	21	(8)	23	(8)	21	(8)	20	(7)	30	(11)	34	(12)	274	(2.0)
	M	28	(8)	36	(10)	26	(7)	26	(7)	26	(7)	36	(10)	28	(8)	25	(7)	34	(10)	36	(10)	31	(9)	23	(6)	355	(2.5)
	N	17	(6)	29	(10)	25	(8)	19	(6)	28	(9)	30	(10)	16	(5)	24	(8)	30	(10)	26	(9)	30	(10)	21	(7)	295	(2.1)
	O	56	(9)	43	(7)	38	(6)	46	(8)	35	(6)	56	(9)	65	(11)	60	(10)	50	(8)	60	(10)	55	(9)	47	(8)	611	(4.4)
	P	90	(9)	86	(8)	77	(8)	86	(8)	95	(9)	101	(10)	77	(8)	73	(7)	76	(7)	89	(9)	95	(9)	72	(7)	1017	(7.3)
	Q	48	(8)	54	(9)	42	(7)	55	(9)	40	(7)	45	(8)	44	(8)	41	(7)	45	(8)	43	(7)	68	(12)	56	(10)	581	(4.1)
	R	48	(7)	58	(9)	44	(7)	57	(9)	54	(8)	54	(8)	52	(8)	58	(9)	68	(10)	60	(9)	60	(9)	52	(8)	665	(4.7)
	S	17	(9)	12	(7)	18	(10)	18	(10)	14	(8)	9	(5)	7	(4)	12	(7)	19	(11)	11	(6)	19	(11)	24	(13)	180	(1.3)
	T	33	(8)	36	(9)	55	(13)	30	(7)	29	(7)	30	(7)	30	(7)	34	(8)	34	(8)	33	(8)	33	(8)	36	(9)	413	(2.9)
	U	34	(8)	34	(8)	34	(8)	34	(8)	30	(7)	27	(7)	30	(7)	21	(5)	29	(7)	39	(10)	50	(12)	46	(11)	408	(2.9)
	V	71	(8)	72	(8)	90	(10)	74	(8)	81	(9)	77	(8)	72	(8)	66	(7)	84	(9)	63	(7)	77	(8)	82	(9)	909	(6.5)
	W	54	(8)	64	(9)	58	(8)	55	(8)	60	(9)	69	(10)	58	(8)	56	(8)	56	(8)	60	(9)	58	(8)	53	(8)	701	(5.0)
	X	73	(8)	65	(7)	101	(11)	81	(9)	87	(10)	66	(7)	61	(7)	77	(9)	75	(8)	67	(8)	69	(8)	69	(8)	891	(6.4)
	Y	32	(8)	29	(7)	37	(9)	31	(8)	29	(7)	31	(8)	27	(7)	43	(11)	37	(9)	31	(8)	28	(7)	36	(9)	391	(2.8)
2005 Total		1204	(8.6)	1143	(8.2)	1234	(8.8)	1136	(8.1)	1126	(8.0)	1174	(8.4)	1160	(8.3)	1087	(7.8)	1156	(8.2)	1103	(7.9)	1252	(8.9)	1247	(8.9)	14022	
Total		2472	(8.9)	2333	(8.4)	2485	(8.9)	2271	(8.2)	2249	(8.1)	2321	(8.3)	2223	(8.0)	2153	(7.7)	2242	(8.0)	2207	(7.9)	2440	(8.8)	2463	(8.8)	27859	

6.3 Admissions by Strategic Health Authority (SHA) / Health Board (HB)

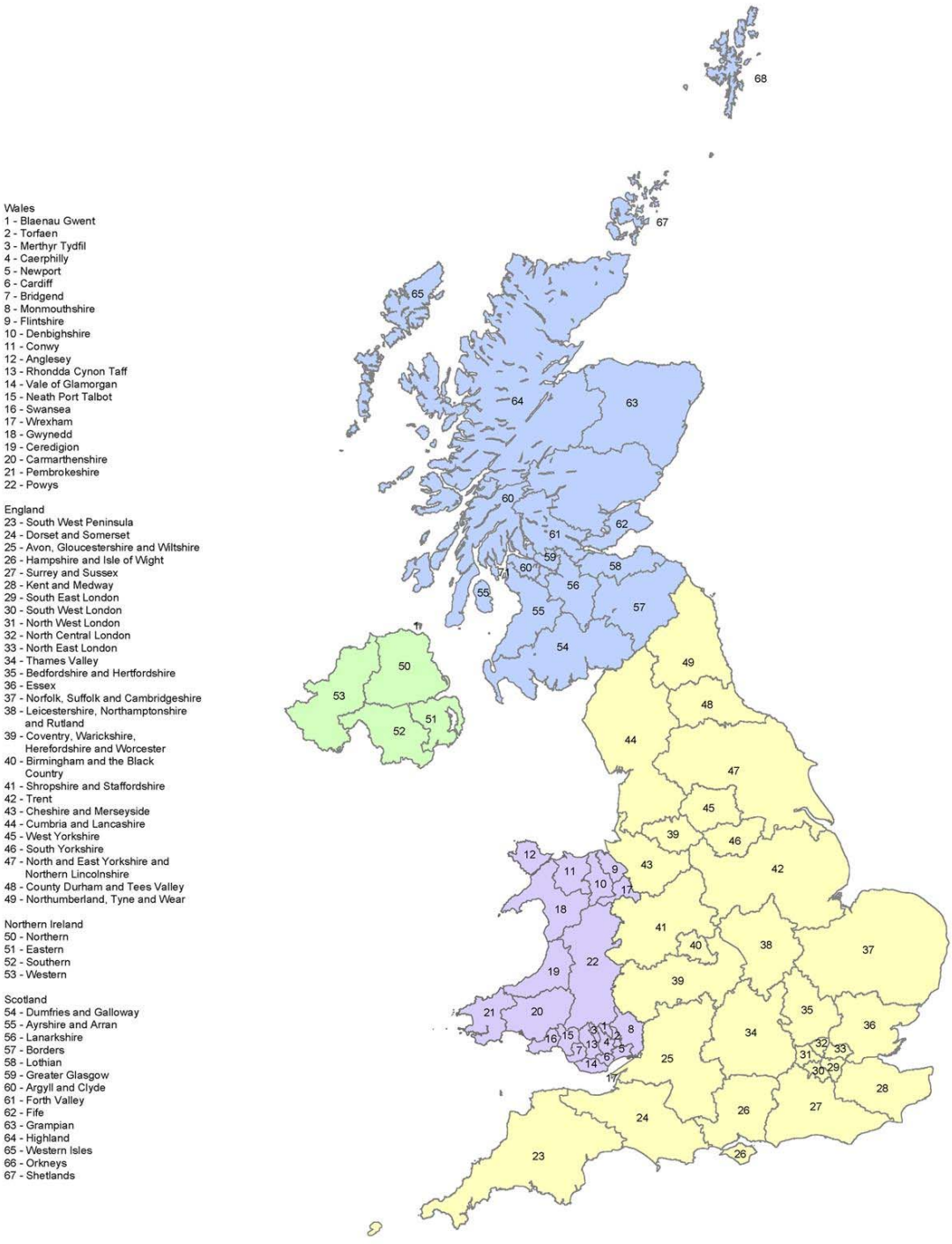
The number of admissions by SHA / HB was obtained by linking the validated home address of children admitted to PICU to SHA / HB via the All Fields Postcode Directory (AFPD).

All percentages in table 6.3.1 are shown as column percentages. Of the total number of admissions, 97.9% had addresses which were validated. The remaining 2.1% included foreign addresses (2.0%) and missing addresses (0.1%).

Table 6.3.1 Admissions by SHA / HB

Country	SHA	Year 2004 n	2004 %	2005 n	2005 %	Total n	Total %
Channel Islands	Guernsey (and Sark)	6	(0.0)	10	(0.1)	**16**	**(0.1)**
	Jersey	11	(0.1)	24	(0.2)	**35**	**(0.1)**
Channel Islands Total		**17**	**(0.1)**	**34**	**(0.2)**	**51**	**(0.2)**
England	Avon, Gloucestershire and Wiltshire	474	(3.4)	445	(3.2)	**919**	**(3.3)**
	Bedfordshire and Hertfordshire	397	(2.9)	413	(2.9)	**810**	**(2.9)**
	Birmingham and the Black Country	522	(3.8)	522	(3.7)	**1044**	**(3.7)**
	Cheshire & Merseyside	622	(4.5)	554	(4.0)	**1176**	**(4.2)**
	County Durham and Tees Valley	476	(3.4)	465	(3.3)	**941**	**(3.4)**
	Cumbria and Lancashire	385	(2.8)	405	(2.9)	**790**	**(2.8)**
	Dorset and Somerset	215	(1.6)	206	(1.5)	**421**	**(1.5)**
	Essex	332	(2.4)	284	(2.0)	**616**	**(2.2)**
	Greater Manchester	554	(4.0)	627	(4.5)	**1181**	**(4.2)**
	Hampshire and Isle of Wight	422	(3.0)	447	(3.2)	**869**	**(3.1)**
	Kent and Medway	385	(2.8)	389	(2.8)	**774**	**(2.8)**
	Leicestershire, Northamptonshire and Rutland	631	(4.6)	563	(4.0)	**1194**	**(4.3)**
	Norfolk, Suffolk and Cambridgeshire	507	(3.7)	445	(3.2)	**952**	**(3.4)**
	North and East Yorkshire and Northern Lincolnshire	321	(2.3)	291	(2.1)	**612**	**(2.2)**
	North Central London	354	(2.6)	339	(2.4)	**693**	**(2.5)**
	North East London	541	(3.9)	489	(3.5)	**1030**	**(3.7)**
	North West London	487	(3.5)	544	(3.9)	**1031**	**(3.7)**
	Northumberland, Tyne & Wear	454	(3.3)	460	(3.3)	**914**	**(3.3)**
	Shropshire and Staffordshire	323	(2.3)	343	(2.4)	**666**	**(2.4)**
	South East London	522	(3.8)	506	(3.6)	**1028**	**(3.7)**
	South West London	453	(3.3)	426	(3.0)	**879**	**(3.2)**
	South West Peninsula	161	(1.2)	208	(1.5)	**369**	**(1.3)**
	South Yorkshire	464	(3.4)	542	(3.9)	**1006**	**(3.6)**
	Surrey and Sussex	794	(5.7)	740	(5.3)	**1534**	**(5.5)**
	Thames Valley	408	(2.9)	407	(2.9)	**815**	**(2.9)**
	Trent	808	(5.8)	710	(5.1)	**1518**	**(5.4)**
	West Midlands South	253	(1.8)	254	(1.8)	**507**	**(1.8)**
	West Yorkshire	610	(4.4)	629	(4.5)	**1239**	**(4.4)**
England Total		**12875**	**(93.0)**	**12653**	**(90.2)**	**25528**	**(91.6)**
Isle of Man Total		**10**	**(0.1)**	**22**	**(0.2)**	**32**	**(0.1)**
Northern Ireland	Eastern Health Board	9	(0.1)	7	(0.0)	**16**	**(0.1)**
	Northern Health Board	3	(0.0)	3	(0.0)	**6**	**(0.0)**
	Southern Health Board	10	(0.1)	4	(0.0)	**14**	**(0.1)**
	Western Health Board	8	(0.1)	6	(0.0)	**14**	**(0.1)**
Northern Ireland Total		**30**	**(0.2)**	**20**	**(0.1)**	**50**	**(0.2)**
Scotland	Argyll and Clyde	6	(0.0)	9	(0.1)	**15**	**(0.1)**
	Ayrshire and Arran	10	(0.1)	6	(0.0)	**16**	**(0.1)**
	Borders	5	(0.0)	20	(0.1)	**25**	**(0.1)**
	Dumfries and Galloway	5	(0.0)	11	(0.1)	**16**	**(0.1)**
	Fife	3	(0.0)	59	(0.4)	**62**	**(0.2)**
	Forth Valley	0	(0.0)	23	(0.2)	**23**	**(0.1)**
	Grampian	7	(0.1)	38	(0.3)	**45**	**(0.2)**
	Greater Glasgow	8	(0.1)	30	(0.2)	**38**	**(0.1)**
	Highland	0	(0.0)	15	(0.1)	**15**	**(0.1)**
	Lanarkshire	1	(0.0)	18	(0.1)	**19**	**(0.1)**
	Lothian	19	(0.1)	161	(1.1)	**180**	**(0.6)**
	Orkney	0	(0.0)	3	(0.0)	**3**	**(0.0)**
	Shetland	0	(0.0)	2	(0.0)	**2**	**(0.0)**
	Tayside	5	(0.0)	51	(0.4)	**56**	**(0.2)**
	Western Isles	0	(0.0)	2	(0.0)	**2**	**(0.0)**
Scotland Total		**69**	**(0.5)**	**448**	**(3.2)**	**517**	**(1.9)**
Wales Total		**549**	**(4.0)**	**550**	**(3.9)**	**1099**	**(3.9)**
Non-UK / Missing		**287**	**(2.1)**	**295**	**(2.1)**	**582**	**(2.1)**
Total		**13837**		**14022**		**27859**	

Figure 6.3.1 Map showing SHA / HB boundaries



6.4 Admissions by mortality risk category

The expected probability of mortality was estimated using PIM[1], taking the recalibrated coefficients supplied by UK PICOS. The categorization into <1%, 1-<5%, 5%-<15%, 15-<30% and 30% plus expected probability of mortality reflects those used by the Australian New Zealand Intensive Care Society (ANZPICS) for comparability.[2]

Table 6.4.1 Admissions by mortality risk group and NHS trust

Year	NHS trust	PIM group <1% n	<1% %	1 - <5% n	1 - <5% %	5 - <15% n	5 - <15% %	15 - <30% n	15 - <30% %	30%+ n	30%+ %	Total n	Total %
2004	**A**	112	(25)	269	(61)	54	(12)	4	(1)	3	(1)	**442**	**(3.2)**
	B	67	(24)	169	(59)	44	(15)	4	(1)	1	(0)	**285**	**(2.1)**
	C	26	(10)	101	(38)	102	(38)	27	(10)	9	(3)	**265**	**(1.9)**
	D	49	(8)	237	(41)	238	(41)	43	(7)	17	(3)	**584**	**(4.2)**
	E	264	(15)	846	(48)	497	(28)	127	(7)	42	(2)	**1776**	**(12.8)**
	F	64	(5)	589	(51)	416	(36)	65	(6)	31	(3)	**1165**	**(8.4)**
	G	1	(2)	13	(30)	23	(52)	6	(14)	1	(2)	**44**	**(0.3)**
	H	49	(16)	159	(52)	77	(25)	11	(4)	11	(4)	**307**	**(2.2)**
	I	175	(20)	439	(51)	199	(23)	32	(4)	14	(2)	**859**	**(6.2)**
	J	22	(27)	46	(56)	10	(12)	3	(4)	1	(1)	**82**	**(0.6)**
	K	186	(21)	468	(53)	181	(20)	28	(3)	20	(2)	**883**	**(6.4)**
	L	49	(22)	95	(42)	68	(30)	8	(4)	6	(3)	**226**	**(1.6)**
	M	73	(20)	177	(47)	99	(27)	15	(4)	9	(2)	**373**	**(2.7)**
	N	47	(14)	180	(53)	86	(26)	14	(4)	10	(3)	**337**	**(2.4)**
	O	82	(15)	397	(72)	55	(10)	12	(2)	6	(1)	**552**	**(4.0)**
	P	138	(14)	548	(56)	259	(26)	27	(3)	10	(1)	**982**	**(7.1)**
	Q	125	(23)	283	(52)	117	(21)	18	(3)	6	(1)	**549**	**(4.0)**
	R	64	(11)	303	(52)	175	(30)	40	(7)	3	(1)	**585**	**(4.2)**
	S	28	(17)	104	(62)	31	(19)	3	(2)	1	(1)	**167**	**(1.2)**
	T	109	(30)	178	(49)	60	(16)	15	(4)	4	(1)	**366**	**(2.6)**
	U	23	(6)	180	(46)	151	(39)	28	(7)	10	(3)	**392**	**(2.8)**
	V	34	(3)	503	(51)	312	(32)	75	(8)	59	(6)	**983**	**(7.1)**
	W	43	(7)	361	(56)	205	(32)	30	(5)	9	(1)	**648**	**(4.7)**
	X	364	(38)	423	(44)	152	(16)	20	(2)	6	(1)	**965**	**(7.0)**
	Y	1	(5)	8	(40)	10	(50)	0	(0)	1	(5)	**20**	**(0.1)**
2004 Total		**2195**	**(15.9)**	**7076**	**(51.1)**	**3621**	**(26.2)**	**655**	**(4.7)**	**290**	**(2.1)**	**13837**	
2005	**A**	112	(27)	214	(52)	76	(18)	8	(2)	4	(1)	**414**	**(3.0)**
	B	73	(31)	125	(54)	27	(12)	6	(3)	2	(1)	**233**	**(1.7)**
	C	28	(11)	122	(48)	79	(31)	17	(7)	8	(3)	**254**	**(1.8)**
	D	65	(11)	260	(45)	205	(35)	31	(5)	19	(3)	**580**	**(4.1)**
	E	154	(10)	764	(51)	452	(30)	106	(7)	34	(2)	**1510**	**(10.8)**
	F	46	(4)	587	(52)	385	(34)	79	(7)	25	(2)	**1122**	**(8.0)**
	G	1	(2)	13	(26)	24	(48)	4	(8)	8	(16)	**50**	**(0.4)**
	H	75	(22)	173	(51)	72	(21)	8	(2)	8	(2)	**336**	**(2.4)**
	I	149	(17)	461	(54)	193	(23)	34	(4)	16	(2)	**853**	**(6.1)**
	J	28	(29)	57	(59)	11	(11)	0	(0)	0	(0)	**96**	**(0.7)**
	K	180	(20)	427	(48)	217	(25)	42	(5)	17	(2)	**883**	**(6.3)**
	L	54	(20)	128	(47)	82	(30)	8	(3)	2	(1)	**274**	**(2.0)**
	M	68	(19)	162	(46)	104	(29)	15	(4)	6	(2)	**355**	**(2.5)**
	N	24	(8)	165	(56)	86	(29)	14	(5)	6	(2)	**295**	**(2.1)**
	O	74	(12)	446	(73)	72	(12)	16	(3)	3	(0)	**611**	**(4.4)**
	P	130	(13)	568	(56)	264	(26)	41	(4)	14	(1)	**1017**	**(7.3)**
	Q	136	(23)	321	(55)	113	(19)	7	(1)	4	(1)	**581**	**(4.1)**
	R	96	(14)	368	(55)	173	(26)	20	(3)	8	(1)	**665**	**(4.7)**
	S	37	(21)	95	(53)	44	(24)	3	(2)	1	(1)	**180**	**(1.3)**
	T	144	(35)	182	(44)	70	(17)	14	(3)	3	(1)	**413**	**(2.9)**
	U	13	(3)	148	(36)	209	(51)	30	(7)	8	(2)	**408**	**(2.9)**
	V	33	(4)	454	(50)	294	(32)	77	(8)	51	(6)	**909**	**(6.5)**
	W	42	(6)	418	(60)	191	(27)	38	(5)	12	(2)	**701**	**(5.0)**
	X	297	(33)	425	(48)	132	(15)	28	(3)	9	(1)	**891**	**(6.4)**
	Y	89	(23)	183	(47)	102	(26)	11	(3)	6	(2)	**391**	**(2.8)**
2005 Total		**2148**	**(15.3)**	**7266**	**(51.8)**	**3677**	**(26.2)**	**657**	**(4.7)**	**274**	**(2.0)**	**14022**	
Total		**4343**	**(15.6)**	**14342**	**(51.5)**	**7298**	**(26.2)**	**1312**	**(4.7)**	**564**	**(2.0)**	**27859**	

6.5 Admissions by admission type

We have used the following definitions for type of admission:

- An admission that is 'planned - following surgery' is one that the unit is aware of before the surgery begins and one that could have been delayed for 24 hours without risk (e.g. spinal surgery).
- An admission that is 'unplanned - following surgery' is one that the unit was not aware of before surgery began and one that could not have been delayed without risk (e.g. bleeding tonsillectomy).
- A 'planned - other' admission is any other planned admission that is not an emergency (e.g. liver biopsy).
- An 'unplanned - other' admission is one that the unit was not expecting and is therefore an emergency admission (e.g. status epilepticus).

Notes: Surgery is defined as undergoing all or part of a procedure or anaesthesia for a procedure in an operating theatre or anaesthetic room. Patients admitted from the operating theatre where surgery is not the main reason for admission (e.g. a patient with a head injury who is admitted from theatre after insertion of an ICP monitor) are not included here. In such patients the main reason for admission is head injury and thus the admission type would be 'unplanned - other'.

Figure 6.5.1 Admissions by admission type

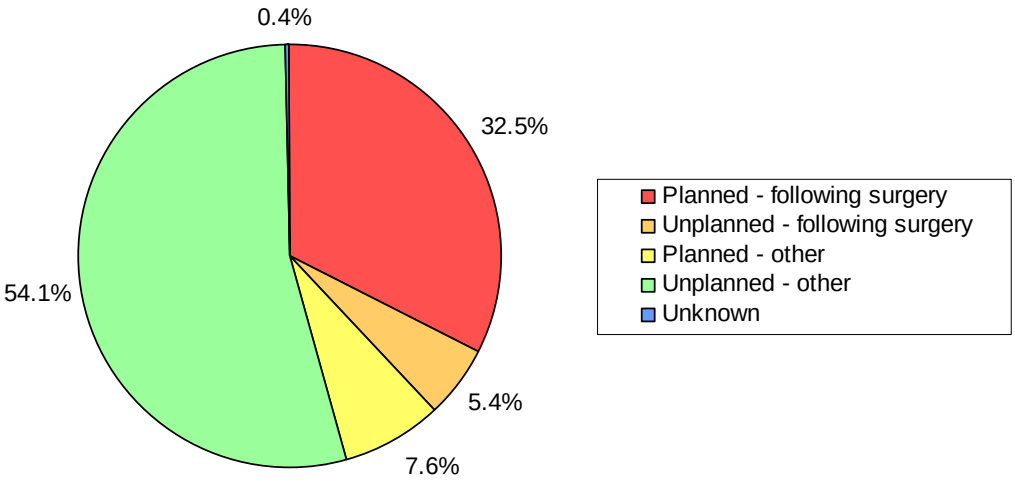


Table 6.5.1 Admissions by admission type and age

Admission type	Age group (years) <1 n	%	1-4 n	%	5-10 n	%	11-15 n	%	Total n	%
Planned - following surgery	3985	(44)	2433	(27)	1344	(15)	1306	(14)	**9068**	**(32.5)**
Unplanned - following surgery	675	(45)	359	(24)	235	(16)	231	(15)	**1500**	**(5.4)**
Planned - other	1168	(55)	416	(20)	287	(14)	240	(11)	**2111**	**(7.6)**
Unplanned - other	7518	(50)	3679	(24)	2029	(13)	1856	(12)	**15082**	**(54.1)**
Unknown	40	(41)	26	(27)	20	(20)	12	(12)	**98**	**(0.4)**
Total	**13386**	**(48.0)**	**6913**	**(24.8)**	**3915**	**(14.1)**	**3645**	**(13.1)**	**27859**	

Table 6.5.2 Admissions by admission type and NHS trust

Year	NHS trust	Admission type: Planned - following surgery n	%	Unplanned - following surgery n	%	Planned - other n	%	Unplanned - other n	%	Unknown n	%	Total n	%
2004	**A**	130	(29)	56	(13)	7	(2)	247	(56)	2	(0)	**442**	**(3.2)**
	B	81	(28)	36	(13)	22	(8)	146	(51)	0	(0)	**285**	**(2.1)**
	C	72	(27)	18	(7)	6	(2)	169	(64)	0	(0)	**265**	**(1.9)**
	D	66	(11)	67	(11)	36	(6)	415	(71)	0	(0)	**584**	**(4.2)**
	E	525	(30)	62	(3)	244	(14)	944	(53)	1	(0)	**1776**	**(12.8)**
	F	392	(34)	98	(8)	25	(2)	650	(56)	0	(0)	**1165**	**(8.4)**
	G	1	(2)	1	(2)	1	(2)	41	(93)	0	(0)	**44**	**(0.3)**
	H	72	(23)	23	(7)	53	(17)	155	(50)	4	(1)	**307**	**(2.2)**
	I	378	(44)	20	(2)	51	(6)	410	(48)	0	(0)	**859**	**(6.2)**
	J	29	(35)	6	(7)	2	(2)	45	(55)	0	(0)	**82**	**(0.6)**
	K	302	(34)	77	(9)	107	(12)	397	(45)	0	(0)	**883**	**(6.4)**
	L	36	(16)	8	(4)	25	(11)	157	(69)	0	(0)	**226**	**(1.6)**
	M	104	(28)	36	(10)	19	(5)	214	(57)	0	(0)	**373**	**(2.7)**
	N	131	(39)	29	(9)	6	(2)	171	(51)	0	(0)	**337**	**(2.4)**
	O	362	(66)	6	(1)	62	(11)	114	(21)	8	(1)	**552**	**(4.0)**
	P	402	(41)	23	(2)	84	(9)	473	(48)	0	(0)	**982**	**(7.1)**
	Q	150	(27)	36	(7)	11	(2)	349	(64)	3	(1)	**549**	**(4.0)**
	R	198	(34)	31	(5)	53	(9)	302	(52)	1	(0)	**585**	**(4.2)**
	S	26	(16)	12	(7)	14	(8)	115	(69)	0	(0)	**167**	**(1.2)**
	T	126	(34)	30	(8)	12	(3)	198	(54)	0	(0)	**366**	**(2.6)**
	U	29	(7)	8	(2)	6	(2)	348	(89)	1	(0)	**392**	**(2.8)**
	V	371	(38)	71	(7)	3	(0)	538	(55)	0	(0)	**983**	**(7.1)**
	W	218	(34)	11	(2)	23	(4)	385	(59)	11	(2)	**648**	**(4.7)**
	X	256	(27)	6	(1)	234	(24)	465	(48)	4	(0)	**965**	**(7.0)**
	Y	1	(5)	0	(0)	0	(0)	19	(95)	0	(0)	**20**	**(0.1)**
2004 Total		**4458**	**(32.2)**	**771**	**(5.6)**	**1106**	**(8.0)**	**7467**	**(54.0)**	**35**	**(0.3)**	**13837**	
2005	**A**	129	(31)	33	(8)	11	(3)	241	(58)	0	(0)	**414**	**(3.0)**
	B	74	(32)	19	(8)	13	(6)	127	(55)	0	(0)	**233**	**(1.7)**
	C	71	(28)	11	(4)	7	(3)	164	(65)	1	(0)	**254**	**(1.8)**
	D	89	(15)	75	(13)	46	(8)	370	(64)	0	(0)	**580**	**(4.1)**
	E	472	(31)	53	(4)	135	(9)	850	(56)	0	(0)	**1510**	**(10.8)**
	F	365	(33)	79	(7)	23	(2)	655	(58)	0	(0)	**1122**	**(8.0)**
	G	1	(2)	3	(6)	0	(0)	46	(92)	0	(0)	**50**	**(0.4)**
	H	100	(30)	22	(7)	56	(17)	143	(43)	15	(4)	**336**	**(2.4)**
	I	367	(43)	32	(4)	72	(8)	382	(45)	0	(0)	**853**	**(6.1)**
	J	32	(33)	7	(7)	9	(9)	48	(50)	0	(0)	**96**	**(0.7)**
	K	297	(34)	93	(11)	91	(10)	401	(45)	1	(0)	**883**	**(6.3)**
	L	35	(13)	8	(3)	25	(9)	206	(75)	0	(0)	**274**	**(2.0)**
	M	96	(27)	31	(9)	24	(7)	204	(57)	0	(0)	**355**	**(2.5)**
	N	130	(44)	19	(6)	5	(2)	141	(48)	0	(0)	**295**	**(2.1)**
	O	380	(62)	4	(1)	82	(13)	135	(22)	10	(2)	**611**	**(4.4)**
	P	471	(46)	23	(2)	32	(3)	491	(48)	0	(0)	**1017**	**(7.3)**
	Q	143	(25)	35	(6)	16	(3)	383	(66)	4	(1)	**581**	**(4.1)**
	R	246	(37)	21	(3)	60	(9)	338	(51)	0	(0)	**665**	**(4.7)**
	S	29	(16)	9	(5)	17	(9)	125	(69)	0	(0)	**180**	**(1.3)**
	T	165	(40)	21	(5)	14	(3)	213	(52)	0	(0)	**413**	**(2.9)**
	U	15	(4)	7	(2)	5	(1)	379	(93)	2	(0)	**408**	**(2.9)**
	V	327	(36)	56	(6)	47	(5)	479	(53)	0	(0)	**909**	**(6.5)**
	W	230	(33)	26	(4)	18	(3)	406	(58)	21	(3)	**701**	**(5.0)**
	X	203	(23)	2	(0)	184	(21)	493	(55)	9	(1)	**891**	**(6.4)**
	Y	143	(37)	40	(10)	13	(3)	195	(50)	0	(0)	**391**	**(2.8)**
2005 Total		**4610**	**(32.9)**	**729**	**(5.2)**	**1005**	**(7.2)**	**7615**	**(54.3)**	**63**	**(0.4)**	**14022**	
Total		**9068**	**(32.5)**	**1500**	**(5.4)**	**2111**	**(7.6)**	**15082**	**(54.1)**	**98**	**(0.4)**	**27859**	

Table 6.5.3 Admissions by source of admission (admission type 'unplanned - other') and NHS trust

Year	NHS trust	Admission source: Same hospital n	Same hospital %	Other hospital n	Other hospital %	Clinic n	Clinic %	Home n	Home %	Unknown n	Unknown %	Total n	Total %
2004	**A**	135	(55)	110	(45)	0	(0)	2	(1)	0	(0)	**247**	**(3.3)**
	B	119	(82)	20	(14)	0	(0)	7	(5)	0	(0)	**146**	**(2.0)**
	C	59	(35)	110	(65)	0	(0)	0	(0)	0	(0)	**169**	**(2.3)**
	D	115	(28)	300	(72)	0	(0)	0	(0)	0	(0)	**415**	**(5.6)**
	E	221	(23)	706	(75)	1	(0)	16	(2)	0	(0)	**944**	**(12.6)**
	F	84	(13)	566	(87)	0	(0)	0	(0)	0	(0)	**650**	**(8.7)**
	G	40	(98)	1	(2)	0	(0)	0	(0)	0	(0)	**41**	**(0.5)**
	H	75	(48)	79	(51)	0	(0)	1	(1)	0	(0)	**155**	**(2.1)**
	I	208	(51)	202	(49)	0	(0)	0	(0)	0	(0)	**410**	**(5.5)**
	J	42	(93)	3	(7)	0	(0)	0	(0)	0	(0)	**45**	**(0.6)**
	K	178	(45)	218	(55)	0	(0)	1	(0)	0	(0)	**397**	**(5.3)**
	L	50	(32)	101	(64)	0	(0)	6	(4)	0	(0)	**157**	**(2.1)**
	M	140	(65)	69	(32)	0	(0)	5	(2)	0	(0)	**214**	**(2.9)**
	N	89	(52)	82	(48)	0	(0)	0	(0)	0	(0)	**171**	**(2.3)**
	O	40	(35)	72	(63)	1	(1)	1	(1)	0	(0)	**114**	**(1.5)**
	P	241	(51)	232	(49)	0	(0)	0	(0)	0	(0)	**473**	**(6.3)**
	Q	172	(49)	169	(48)	0	(0)	8	(2)	0	(0)	**349**	**(4.7)**
	R	110	(36)	192	(64)	0	(0)	0	(0)	0	(0)	**302**	**(4.0)**
	S	92	(80)	21	(18)	0	(0)	2	(2)	0	(0)	**115**	**(1.5)**
	T	84	(42)	109	(55)	0	(0)	5	(3)	0	(0)	**198**	**(2.7)**
	U	68	(20)	280	(80)	0	(0)	0	(0)	0	(0)	**348**	**(4.7)**
	V	264	(49)	265	(49)	0	(0)	3	(1)	6	(1)	**538**	**(7.2)**
	W	179	(46)	198	(51)	0	(0)	8	(2)	0	(0)	**385**	**(5.2)**
	X	243	(52)	214	(46)	2	(0)	4	(1)	2	(0)	**465**	**(6.2)**
	Y	6	(32)	13	(68)	0	(0)	0	(0)	0	(0)	**19**	**(0.3)**
2004 Total		**3054**	**(40.9)**	**4332**	**(58.0)**	**4**	**(0.1)**	**69**	**(0.9)**	**8**	**(0.1)**	7467	
2005	**A**	115	(48)	126	(52)	0	(0)	0	(0)	0	(0)	**241**	**(3.2)**
	B	115	(91)	8	(6)	0	(0)	4	(3)	0	(0)	**127**	**(1.7)**
	C	68	(41)	96	(59)	0	(0)	0	(0)	0	(0)	**164**	**(2.2)**
	D	102	(28)	268	(72)	0	(0)	0	(0)	0	(0)	**370**	**(4.9)**
	E	213	(25)	629	(74)	0	(0)	8	(1)	0	(0)	**850**	**(11.2)**
	F	105	(16)	550	(84)	0	(0)	0	(0)	0	(0)	**655**	**(8.6)**
	G	41	(89)	5	(11)	0	(0)	0	(0)	0	(0)	**46**	**(0.6)**
	H	72	(50)	71	(50)	0	(0)	0	(0)	0	(0)	**143**	**(1.9)**
	I	187	(49)	193	(51)	0	(0)	2	(1)	0	(0)	**382**	**(5.0)**
	J	48	(100)	0	(0)	0	(0)	0	(0)	0	(0)	**48**	**(0.6)**
	K	169	(42)	231	(58)	0	(0)	1	(0)	0	(0)	**401**	**(5.3)**
	L	68	(33)	130	(63)	0	(0)	8	(4)	0	(0)	**206**	**(2.7)**
	M	111	(54)	93	(46)	0	(0)	0	(0)	0	(0)	**204**	**(2.7)**
	N	73	(52)	68	(48)	0	(0)	0	(0)	0	(0)	**141**	**(1.9)**
	O	64	(47)	65	(48)	1	(1)	3	(2)	2	(1)	**135**	**(1.8)**
	P	242	(49)	247	(50)	0	(0)	2	(0)	0	(0)	**491**	**(6.4)**
	Q	198	(52)	175	(46)	0	(0)	10	(3)	0	(0)	**383**	**(5.0)**
	R	92	(27)	246	(73)	0	(0)	0	(0)	0	(0)	**338**	**(4.4)**
	S	105	(84)	19	(15)	0	(0)	1	(1)	0	(0)	**125**	**(1.6)**
	T	98	(46)	113	(53)	0	(0)	2	(1)	0	(0)	**213**	**(2.8)**
	U	74	(20)	302	(80)	0	(0)	0	(0)	3	(1)	**379**	**(5.0)**
	V	281	(59)	195	(41)	0	(0)	0	(0)	3	(1)	**479**	**(6.3)**
	W	192	(47)	206	(51)	0	(0)	8	(2)	0	(0)	**406**	**(5.3)**
	X	249	(51)	232	(47)	1	(0)	1	(0)	10	(2)	**493**	**(6.5)**
	Y	59	(30)	133	(68)	0	(0)	3	(2)	0	(0)	**195**	**(2.6)**
2005 Total		**3141**	**(41.2)**	**4401**	**(57.8)**	**2**	**(0.0)**	**53**	**(0.7)**	**18**	**(0.2)**	7615	
Total		**6195**	**(41.1)**	**8733**	**(57.9)**	**6**	**(0.0)**	**122**	**(0.8)**	**26**	**(0.2)**	15082	

Table 6.5.4 Admissions by care area admitted from (admission type ‘unplanned - other’) and NHS trust

Year	NHS trust	Care area: X-ray, endoscopy, CT scanner or similar		Recovery only		HDU (step-up/step-down unit)		Other intermediate care area (not ICU / PICU / NICU)		ICU / PICU / NICU		Ward		Theatre and recovery		Accident & emergency		Unknown		Total	
		n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
2004	A	3	(1)	0	(0)	0	(0)	4	(2)	14	(6)	93	(38)	7	(3)	69	(28)	55	(22)	**245**	**(3.3)**
	B	4	(3)	0	(0)	0	(0)	1	(1)	9	(6)	51	(37)	5	(4)	69	(50)	0	(0)	**139**	**(1.9)**
	C	0	(0)	2	(1)	44	(26)	3	(2)	50	(30)	22	(13)	7	(4)	41	(24)	0	(0)	**169**	**(2.3)**
	D	4	(1)	2	(0)	58	(14)	18	(4)	28	(7)	130	(31)	44	(11)	131	(32)	0	(0)	**415**	**(5.6)**
	E	14	(2)	1	(0)	11	(1)	91	(10)	326	(35)	257	(28)	12	(1)	214	(23)	1	(0)	**927**	**(12.6)**
	F	5	(1)	0	(0)	28	(4)	2	(0)	152	(23)	225	(35)	25	(4)	0	(0)	213	(33)	**650**	**(8.8)**
	G	4	(10)	0	(0)	13	(32)	0	(0)	0	(0)	1	(2)	2	(5)	21	(51)	0	(0)	**41**	**(0.6)**
	H	2	(1)	0	(0)	5	(3)	13	(8)	7	(5)	66	(43)	5	(3)	56	(36)	0	(0)	**154**	**(2.1)**
	I	5	(1)	4	(1)	5	(1)	2	(0)	42	(10)	221	(54)	7	(2)	120	(29)	4	(1)	**410**	**(5.6)**
	J	0	(0)	0	(0)	1	(2)	0	(0)	0	(0)	12	(27)	2	(4)	29	(64)	1	(2)	**45**	**(0.6)**
	K	5	(1)	3	(1)	2	(1)	32	(8)	92	(23)	165	(42)	27	(7)	70	(18)	0	(0)	**396**	**(5.4)**
	L	0	(0)	0	(0)	26	(17)	0	(0)	13	(9)	69	(46)	1	(1)	42	(28)	0	(0)	**151**	**(2.0)**
	M	3	(1)	0	(0)	13	(6)	1	(0)	5	(2)	68	(33)	8	(4)	111	(53)	0	(0)	**209**	**(2.8)**
	N	2	(1)	0	(0)	6	(4)	2	(1)	27	(16)	76	(44)	8	(5)	50	(29)	0	(0)	**171**	**(2.3)**
	O	6	(5)	0	(0)	9	(8)	9	(8)	32	(29)	36	(32)	4	(4)	11	(10)	5	(4)	**112**	**(1.5)**
	P	9	(2)	0	(0)	77	(16)	24	(5)	40	(8)	147	(31)	25	(5)	150	(32)	1	(0)	**473**	**(6.4)**
	Q	6	(2)	4	(1)	17	(5)	7	(2)	53	(16)	126	(37)	19	(6)	108	(32)	1	(0)	**341**	**(4.6)**
	R	4	(1)	2	(1)	32	(11)	4	(1)	79	(26)	103	(34)	13	(4)	65	(22)	0	(0)	**302**	**(4.1)**
	S	0	(0)	0	(0)	0	(0)	18	(16)	1	(1)	66	(58)	0	(0)	28	(25)	0	(0)	**113**	**(1.5)**
	T	0	(0)	1	(1)	1	(1)	4	(2)	3	(2)	80	(41)	8	(4)	49	(25)	47	(24)	**193**	**(2.6)**
	U	0	(0)	0	(0)	15	(4)	2	(1)	17	(5)	94	(27)	15	(4)	128	(37)	77	(22)	**348**	**(4.7)**
	V	1	(0)	0	(0)	5	(1)	0	(0)	116	(22)	232	(44)	39	(7)	133	(25)	3	(1)	**529**	**(7.2)**
	W	2	(1)	0	(0)	35	(9)	1	(0)	93	(25)	113	(30)	31	(8)	74	(20)	28	(7)	**377**	**(5.1)**
	X	5	(1)	0	(0)	6	(1)	10	(2)	116	(25)	219	(48)	9	(2)	80	(18)	12	(3)	**457**	**(6.2)**
	Y	0	(0)	0	(0)	3	(16)	0	(0)	4	(21)	7	(37)	1	(5)	4	(21)	0	(0)	**19**	**(0.3)**
2004 Total		**84**	**(1.1)**	**19**	**(0.3)**	**412**	**(5.6)**	**248**	**(3.4)**	**1319**	**(17.9)**	**2679**	**(36.3)**	**324**	**(4.4)**	**1853**	**(25.1)**	**448**	**(6.1)**	**7386**	
2005	A	1	(0)	0	(0)	1	(0)	2	(1)	16	(7)	59	(24)	3	(1)	75	(31)	84	(35)	**241**	**(3.2)**
	B	1	(1)	0	(0)	0	(0)	0	(0)	1	(1)	38	(31)	4	(3)	79	(64)	0	(0)	**123**	**(1.6)**
	C	4	(2)	4	(2)	40	(24)	4	(2)	40	(24)	22	(13)	14	(9)	35	(21)	1	(1)	**164**	**(2.2)**
	D	1	(0)	1	(0)	62	(17)	11	(3)	24	(6)	119	(32)	14	(4)	136	(37)	2	(1)	**370**	**(4.9)**
	E	15	(2)	1	(0)	18	(2)	45	(5)	283	(34)	262	(31)	5	(1)	212	(25)	1	(0)	**842**	**(11.2)**
	F	6	(1)	0	(0)	16	(2)	0	(0)	108	(16)	253	(39)	27	(4)	12	(2)	233	(36)	**655**	**(8.7)**
	G	9	(20)	0	(0)	13	(28)	0	(0)	1	(2)	1	(2)	1	(2)	21	(46)	0	(0)	**46**	**(0.6)**
	H	4	(3)	0	(0)	3	(2)	12	(8)	5	(3)	64	(45)	1	(1)	53	(37)	1	(1)	**143**	**(1.9)**
	I	5	(1)	0	(0)	3	(1)	1	(0)	50	(13)	186	(49)	4	(1)	131	(34)	0	(0)	**380**	**(5.0)**
	J	2	(4)	0	(0)	2	(4)	1	(2)	0	(0)	11	(23)	2	(4)	30	(63)	0	(0)	**48**	**(0.6)**
	K	4	(1)	3	(1)	0	(0)	48	(12)	99	(25)	159	(40)	10	(3)	77	(19)	0	(0)	**400**	**(5.3)**
	L	0	(0)	0	(0)	25	(13)	0	(0)	15	(8)	96	(48)	4	(2)	58	(29)	0	(0)	**198**	**(2.6)**
	M	7	(3)	3	(1)	14	(7)	3	(1)	13	(6)	76	(37)	15	(7)	73	(36)	0	(0)	**204**	**(2.7)**
	N	2	(1)	0	(0)	23	(16)	1	(1)	27	(19)	32	(23)	7	(5)	48	(34)	1	(1)	**141**	**(1.9)**
	O	8	(6)	3	(2)	4	(3)	3	(2)	33	(26)	47	(36)	4	(3)	15	(12)	12	(9)	**129**	**(1.7)**
	P	7	(1)	0	(0)	79	(16)	5	(1)	63	(13)	142	(29)	15	(3)	178	(36)	0	(0)	**489**	**(6.5)**
	Q	3	(1)	0	(0)	15	(4)	8	(2)	68	(18)	140	(38)	25	(7)	111	(30)	3	(1)	**373**	**(4.9)**
	R	14	(4)	3	(1)	23	(7)	5	(1)	94	(28)	137	(41)	17	(5)	45	(13)	0	(0)	**338**	**(4.5)**
	S	0	(0)	0	(0)	0	(0)	17	(14)	0	(0)	65	(52)	6	(5)	36	(29)	0	(0)	**124**	**(1.6)**
	T	0	(0)	0	(0)	0	(0)	7	(3)	5	(2)	91	(43)	14	(7)	69	(33)	25	(12)	**211**	**(2.8)**
	U	0	(0)	1	(0)	12	(3)	1	(0)	18	(5)	106	(28)	16	(4)	169	(45)	53	(14)	**376**	**(5.0)**
	V	0	(0)	0	(0)	3	(1)	2	(0)	65	(14)	177	(37)	63	(13)	123	(26)	43	(9)	**476**	**(6.3)**
	W	0	(0)	2	(1)	9	(2)	76	(19)	71	(18)	108	(27)	34	(9)	86	(22)	12	(3)	**398**	**(5.3)**
	X	4	(1)	0	(0)	3	(1)	5	(1)	148	(31)	209	(43)	3	(1)	96	(20)	13	(3)	**481**	**(6.4)**
	Y	2	(1)	0	(0)	36	(19)	4	(2)	24	(13)	56	(29)	16	(8)	50	(26)	4	(2)	**192**	**(2.5)**
2005 Total		**99**	**(1.3)**	**21**	**(0.3)**	**404**	**(5.4)**	**261**	**(3.5)**	**1271**	**(16.9)**	**2656**	**(35.2)**	**324**	**(4.3)**	**2018**	**(26.8)**	**488**	**(6.5)**	**7542**	
Total		**183**	**(1.2)**	**40**	**(0.3)**	**816**	**(5.5)**	**509**	**(3.4)**	**2590**	**(17.3)**	**5335**	**(35.7)**	**648**	**(4.3)**	**3871**	**(25.9)**	**936**	**(6.3)**	**14928**	

6.6 Admissions by primary diagnostic group

Figure 6.6.1 Admissions by primary diagnostic group

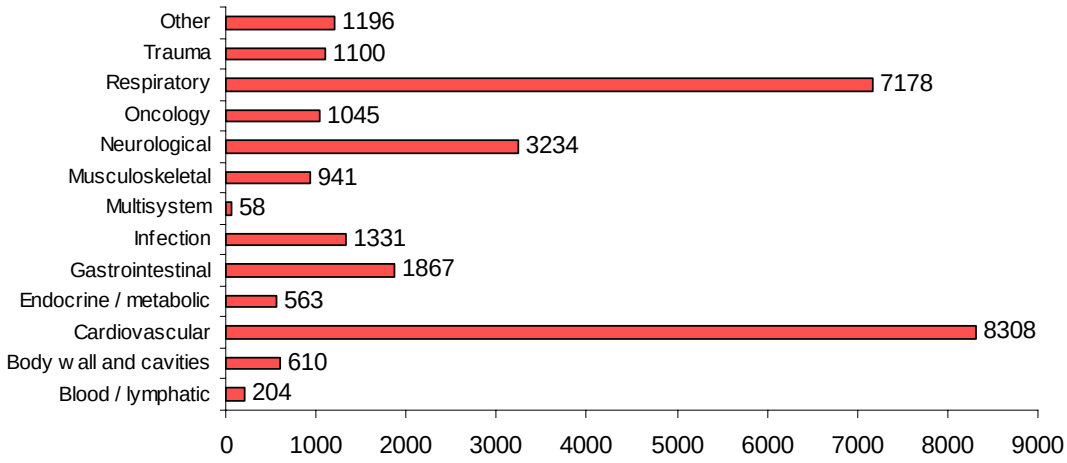


Table 6.6.1 Admissions by primary diagnostic group and age

Diagnostic group	Age group (years)								Total	
	<1		1-4		5-10		11-15			
	n	%	n	%	n	%	n	%	n	%
Blood / lymphatic	66	(32)	53	(26)	49	(24)	36	(18)	**204**	**(0.7)**
Body wall and cavities	546	(90)	36	(6)	14	(2)	14	(2)	**610**	**(2.2)**
Cardiovascular	5061	(61)	1770	(21)	839	(10)	638	(8)	**8308**	**(29.8)**
Endocrine / metabolic	204	(36)	154	(27)	96	(17)	109	(19)	**563**	**(2.0)**
Gastrointestinal	1178	(63)	365	(20)	164	(9)	160	(9)	**1867**	**(6.7)**
Infection	507	(38)	470	(35)	199	(15)	155	(12)	**1331**	**(4.8)**
Multisystem	39	(67)	9	(16)	8	(14)	2	(3)	**58**	**(0.2)**
Musculoskeletal	72	(8)	168	(18)	208	(22)	493	(52)	**941**	**(3.4)**
Neurological	924	(29)	1126	(35)	669	(21)	515	(16)	**3234**	**(11.6)**
Oncology	142	(14)	358	(34)	291	(28)	254	(24)	**1045**	**(3.8)**
Respiratory	4005	(56)	1776	(25)	818	(11)	579	(8)	**7178**	**(25.8)**
Trauma	70	(6)	286	(26)	321	(29)	423	(38)	**1100**	**(3.9)**
Other	461	(39)	286	(24)	201	(17)	248	(21)	**1196**	**(4.3)**
Unknown	111	(50)	56	(25)	38	(17)	19	(8)	**224**	**(0.8)**
Total	**13386**	**(48.0)**	**6913**	**(24.8)**	**3915**	**(14.1)**	**3645**	**(13.1)**	**27859**	

Figure 6.6.2 For 16 years and above: admissions by primary diagnostic group

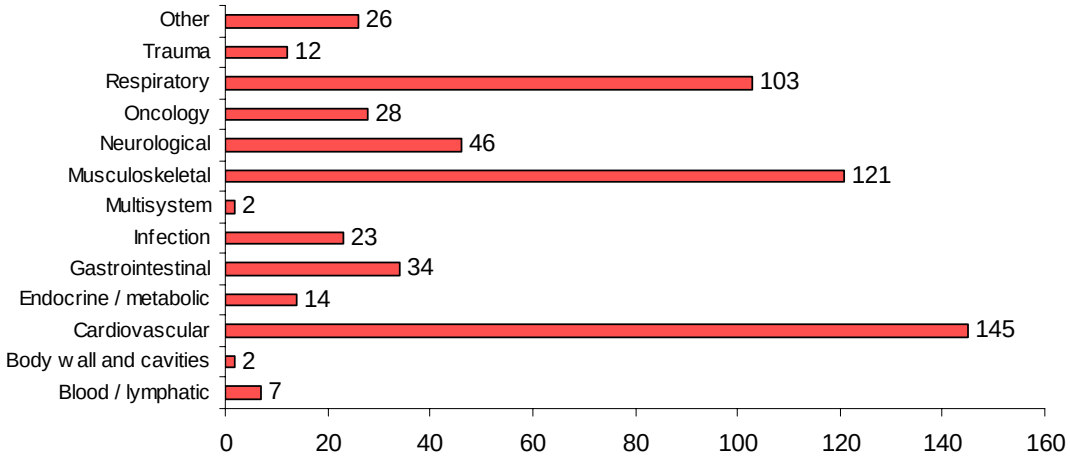


Table 6.6.2 For 16 years and above: admissions by primary diagnostic group

Diagnostic group	Age group (years) 16		17-20		21-25		26+		Total	
	n	%	n	%	n	%	n	%	n	%
Blood / lymphatic	6	(86)	1	(14)	0	(0)	0	(0)	**7**	**(1.2)**
Body wall and cavities	1	(50)	1	(50)	0	(0)	0	(0)	**2**	**(0.4)**
Cardiovascular	90	(62)	49	(34)	5	(3)	1	(1)	**145**	**(25.6)**
Endocrine / metabolic	11	(79)	3	(21)	0	(0)	0	(0)	**14**	**(2.5)**
Gastrointestinal	19	(56)	15	(44)	0	(0)	0	(0)	**34**	**(6.0)**
Infection	15	(65)	8	(35)	0	(0)	0	(0)	**23**	**(4.1)**
Multisystem	1	(50)	1	(50)	0	(0)	0	(0)	**2**	**(0.4)**
Musculoskeletal	74	(61)	47	(39)	0	(0)	0	(0)	**121**	**(21.4)**
Neurological	32	(70)	11	(24)	3	(7)	0	(0)	**46**	**(8.1)**
Oncology	21	(75)	7	(25)	0	(0)	0	(0)	**28**	**(4.9)**
Respiratory	55	(53)	45	(44)	2	(2)	1	(1)	**103**	**(18.2)**
Trauma	9	(75)	3	(25)	0	(0)	0	(0)	**12**	**(2.1)**
Other	12	(46)	12	(46)	1	(4)	1	(4)	**26**	**(4.6)**
Unknown	2	(67)	1	(33)	0	(0)	0	(0)	**3**	**(0.5)**
Total	**348**	**(61.5)**	**204**	**(36.0)**	**11**	**(1.9)**	**3**	**(0.5)**	**566**	

Table 6.6.3 Admissions by primary diagnostic group and NHS trust

Year	NHS trust	Diagnostic group: Blood / lymphatic		Body wall and cavities		Cardiovascular		Endocrine / metabolic		Gastrointestinal		Infection		Multisystem		Musculoskeletal		Neurological		Oncology		Respiratory		Trauma		Other		Unknown		Total	
		n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
2004	A	6	(1)	11	(2)	15	(3)	14	(3)	52	(12)	26	(6)	2	(0)	16	(4)	94	(21)	67	(15)	68	(15)	30	(7)	39	(9)	2	(0)	442	(3.2)
	B	2	(1)	23	(8)	9	(3)	8	(3)	68	(24)	11	(4)	0	(0)	3	(1)	43	(15)	2	(1)	85	(30)	10	(4)	21	(7)	0	(0)	285	(2.1)
	C	2	(1)	9	(3)	8	(3)	4	(2)	15	(6)	18	(7)	1	(0)	35	(13)	49	(18)	6	(2)	87	(33)	18	(7)	13	(5)	0	(0)	265	(1.9)
	D	5	(1)	8	(1)	25	(4)	16	(3)	31	(5)	46	(8)	2	(0)	16	(3)	90	(15)	24	(4)	245	(42)	50	(9)	26	(4)	0	(0)	584	(4.2)
	E	9	(1)	32	(2)	686	(39)	39	(2)	126	(7)	47	(3)	3	(0)	45	(3)	146	(8)	50	(3)	472	(27)	56	(3)	65	(4)	0	(0)	1776	(12.8)
	F	1	(0)	10	(1)	539	(46)	17	(1)	12	(1)	60	(5)	1	(0)	32	(3)	125	(11)	3	(0)	304	(26)	18	(2)	37	(3)	6	(1)	1165	(8.4)
	G	0	(0)	0	(0)	2	(5)	2	(5)	3	(7)	9	(20)	0	(0)	0	(0)	13	(30)	0	(0)	9	(20)	1	(2)	5	(11)	0	(0)	44	(0.3)
	H	7	(2)	5	(2)	14	(5)	12	(4)	61	(20)	3	(1)	0	(0)	2	(1)	57	(19)	10	(3)	43	(14)	41	(13)	50	(16)	2	(1)	307	(2.2)
	I	4	(0)	3	(0)	281	(33)	17	(2)	50	(6)	33	(4)	0	(0)	22	(3)	73	(8)	44	(5)	217	(25)	40	(5)	74	(9)	1	(0)	859	(6.2)
	J	2	(2)	3	(4)	2	(2)	5	(6)	22	(27)	2	(2)	0	(0)	0	(0)	16	(20)	0	(0)	21	(26)	0	(0)	9	(11)	0	(0)	82	(0.6)
	K	4	(0)	52	(6)	264	(30)	8	(1)	77	(9)	43	(5)	1	(0)	21	(2)	68	(8)	42	(5)	216	(24)	43	(5)	44	(5)	0	(0)	883	(6.4)
	L	1	(0)	0	(0)	14	(6)	5	(2)	7	(3)	6	(3)	0	(0)	19	(8)	36	(16)	1	(0)	119	(53)	2	(1)	14	(6)	2	(1)	226	(1.6)
	M	2	(1)	4	(1)	13	(3)	10	(3)	29	(8)	25	(7)	0	(0)	38	(10)	53	(14)	24	(6)	135	(36)	24	(6)	16	(4)	0	(0)	373	(2.7)
	N	0	(0)	9	(3)	90	(27)	5	(1)	15	(4)	7	(2)	1	(0)	24	(7)	39	(12)	18	(5)	113	(34)	12	(4)	4	(1)	0	(0)	337	(2.4)
	O	0	(0)	2	(0)	479	(87)	0	(0)	5	(1)	4	(1)	0	(0)	9	(2)	2	(0)	2	(0)	42	(8)	1	(0)	3	(1)	3	(1)	552	(4.0)
	P	1	(0)	40	(4)	359	(37)	9	(1)	58	(6)	35	(4)	0	(0)	58	(6)	80	(8)	42	(4)	242	(25)	33	(3)	24	(2)	1	(0)	982	(7.1)
	Q	4	(1)	22	(4)	14	(3)	7	(1)	56	(10)	37	(7)	0	(0)	32	(6)	68	(12)	31	(6)	227	(41)	26	(5)	20	(4)	5	(1)	549	(4.0)
	R	2	(0)	8	(1)	188	(32)	6	(1)	53	(9)	27	(5)	0	(0)	23	(4)	82	(14)	23	(4)	133	(23)	21	(4)	19	(3)	0	(0)	585	(4.2)
	S	0	(0)	0	(0)	2	(1)	8	(5)	1	(1)	5	(3)	0	(0)	22	(13)	32	(19)	0	(0)	79	(47)	11	(7)	7	(4)	0	(0)	167	(1.2)
	T	10	(3)	4	(1)	11	(3)	3	(1)	44	(12)	26	(7)	1	(0)	3	(1)	42	(11)	66	(18)	120	(33)	23	(6)	13	(4)	0	(0)	366	(2.6)
	U	9	(2)	2	(1)	7	(2)	19	(5)	10	(3)	45	(11)	0	(0)	0	(0)	90	(23)	1	(0)	187	(48)	4	(1)	17	(4)	1	(0)	392	(2.8)
	V	7	(1)	26	(3)	409	(42)	26	(3)	92	(9)	30	(3)	3	(0)	17	(2)	82	(8)	15	(2)	195	(20)	56	(6)	23	(2)	2	(0)	983	(7.1)
	W	2	(0)	9	(1)	254	(39)	11	(2)	21	(3)	21	(3)	0	(0)	4	(1)	100	(15)	17	(3)	182	(28)	2	(0)	25	(4)	0	(0)	648	(4.7)
	X	7	(1)	12	(1)	506	(52)	9	(1)	48	(5)	41	(4)	3	(0)	10	(1)	79	(8)	23	(2)	177	(18)	18	(2)	29	(3)	3	(0)	965	(7.0)
	Y	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	5	(25)	0	(0)	1	(5)	3	(15)	1	(5)	10	(50)	0	(0)	0	(0)	0	(0)	20	(0.1)
2004 Total		87	(0.6)	294	(2.1)	4191	(30.3)	260	(1.9)	956	(6.9)	612	(4.4)	18	(0.1)	452	(3.3)	1562	(11.3)	512	(3.7)	3728	(26.9)	540	(3.9)	597	(4.3)	28	(0.2)	13837	
2005	A	8	(2)	8	(2)	9	(2)	12	(3)	39	(9)	14	(3)	2	(0)	17	(4)	85	(21)	59	(14)	94	(23)	28	(7)	38	(9)	1	(0)	414	(3.0)
	B	0	(0)	16	(7)	5	(2)	6	(3)	48	(21)	20	(9)	0	(0)	3	(1)	33	(14)	3	(1)	83	(36)	6	(3)	10	(4)	0	(0)	233	(1.7)
	C	4	(2)	4	(2)	9	(4)	4	(2)	7	(3)	30	(12)	2	(1)	31	(12)	25	(10)	7	(3)	87	(34)	19	(7)	8	(3)	17	(7)	254	(1.8)
	D	7	(1)	3	(1)	37	(6)	11	(2)	27	(5)	52	(9)	1	(0)	28	(5)	119	(21)	36	(6)	186	(32)	45	(8)	28	(5)	0	(0)	580	(4.1)
	E	12	(1)	42	(3)	548	(36)	33	(2)	95	(6)	55	(4)	3	(0)	30	(2)	158	(10)	43	(3)	366	(24)	64	(4)	61	(4)	0	(0)	1510	(10.8)
	F	4	(0)	11	(1)	530	(47)	19	(2)	13	(1)	46	(4)	1	(0)	27	(2)	127	(11)	1	(0)	276	(25)	18	(2)	43	(4)	6	(1)	1122	(8.0)
	G	0	(0)	0	(0)	2	(4)	0	(0)	2	(4)	8	(16)	0	(0)	0	(0)	24	(48)	1	(2)	6	(12)	6	(12)	1	(2)	0	(0)	50	(0.4)
	H	9	(3)	5	(1)	2	(1)	13	(4)	73	(22)	12	(4)	0	(0)	1	(0)	62	(18)	11	(3)	50	(15)	23	(7)	62	(18)	13	(4)	336	(2.4)
	I	8	(1)	5	(1)	343	(40)	24	(3)	42	(5)	52	(6)	1	(0)	16	(2)	68	(8)	31	(4)	180	(21)	33	(4)	50	(6)	0	(0)	853	(6.1)
	J	2	(2)	7	(7)	2	(2)	1	(1)	21	(22)	2	(2)	0	(0)	0	(0)	18	(19)	1	(1)	28	(29)	1	(1)	9	(9)	4	(4)	96	(0.7)
	K	11	(1)	41	(5)	279	(32)	15	(2)	103	(12)	47	(5)	2	(0)	19	(2)	90	(10)	54	(6)	156	(18)	20	(2)	46	(5)	0	(0)	883	(6.3)
	L	3	(1)	4	(1)	5	(2)	7	(3)	5	(2)	16	(6)	0	(0)	25	(9)	61	(22)	0	(0)	132	(48)	8	(3)	7	(3)	1	(0)	274	(2.0)
	M	4	(1)	2	(1)	10	(3)	10	(3)	24	(7)	41	(12)	1	(0)	34	(10)	54	(15)	26	(7)	116	(33)	17	(5)	16	(5)	0	(0)	355	(2.5)
	N	0	(0)	9	(3)	109	(37)	9	(3)	10	(3)	11	(4)	6	(2)	13	(4)	39	(13)	9	(3)	54	(18)	19	(6)	7	(2)	0	(0)	295	(2.1)
	O	0	(0)	3	(0)	514	(84)	1	(0)	7	(1)	6	(1)	0	(0)	3	(0)	4	(1)	3	(0)	51	(8)	0	(0)	6	(1)	13	(2)	611	(4.4)
	P	2	(0)	46	(5)	416	(41)	15	(1)	35	(3)	54	(5)	3	(0)	44	(4)	93	(9)	41	(4)	193	(19)	45	(4)	27	(3)	3	(0)	1017	(7.3)
	Q	5	(1)	32	(6)	9	(2)	22	(4)	53	(9)	42	(7)	0	(0)	41	(7)	92	(16)	42	(7)	192	(33)	28	(5)	20	(3)	3	(1)	581	(4.1)
	R	2	(0)	15	(2)	209	(31)	4	(1)	62	(9)	31	(5)	1	(0)	44	(7)	81	(12)	19	(3)	150	(23)	25	(4)	22	(3)	0	(0)	665	(4.7)
	S	0	(0)	0	(0)	5	(3)	13	(7)	2	(1)	6	(3)	0	(0)	18	(10)	21	(12)	0	(0)	95	(53)	11	(6)	8	(4)	1	(1)	180	(1.3)
	T	11	(3)	7	(2)	9	(2)	7	(2)	42	(10)	14	(3)	3	(1)	9	(2)	66	(16)	69	(17)	149	(36)	19	(5)	8	(2)	0	(0)	413	(2.9)
	U	13	(3)	0	(0)	13	(3)	13	(3)	13	(3)	45	(11)	0	(0)	0	(0)	85	(21)	0	(0)	205	(50)	3	(1)	18	(4)	0	(0)	408	(2.9)
	V	3	(0)	22	(2)	324	(36)	32	(4)	91	(10)	10	(1)	4	(0)	9	(1)	52	(6)	16	(2)	133	(15)	63	(7)	27	(3)	123	(14)	909	(6.5)
	W	3	(0)	4	(1)	298	(43)	12	(2)	22	(3)	36	(5)	0	(0)	10	(1)	89	(13)	17	(2)	179	(26)	5	(1)	22	(3)	4	(1)	701	(5.0)
	X	6	(1)	17	(2)	410	(46)	11	(1)	49	(5)	42	(5)	5	(1)	6	(1)	63	(7)	24	(3)	199	(22)	26	(3)	26	(3)	7	(1)	891	(6.4)
	Y	0	(0)	13	(3)	19	(5)	9	(2)	26	(7)	27	(7)	5	(1)	61	(16)	63	(16)	20	(5)	90	(23)	28	(7)	29	(7)	1	(0)	391	(2.8)
2005 Total		117	(0.8)	316	(2.3)	4116	(29.4)	303	(2.2)	911	(6.5)	719	(5.1)	40	(0.3)	489	(3.5)	1672	(11.9)	533	(3.8)	3450	(24.6)	560	(4.0)	599	(4.3)	197	(1.4)	14022	
Total		204	(0.7)	610	(2.2)	8307	(29.8)	563	(2.0)	1867	(6.7)	1331	(4.8)	58	(0.2)	941	(3.4)	3234	(11.6)	1045	(3.8)	7178	(25.8)	1100	(3.9)	1196	(4.3)	225	(0.8)	27859	

Table 6.6.4 'Planned - following surgery' admissions by primary diagnostic group and NHS trust

Year	NHS trust	Diagnostic group: Blood / lymphatic		Body wall and cavities		Cardiovascular		Endocrine / metabolic		Gastrointestinal		Infection		Multisystem		Musculoskeletal		Neurological		Oncology		Respiratory		Trauma		Other		Unknown		Total	
		n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
2004	A	2	(2)	4	(3)	4	(3)	4	(3)	18	(14)	1	(1)	2	(2)	13	(10)	23	(18)	37	(28)	9	(7)	0	(0)	11	(8)	2	(2)	130	(2.9)
	B	1	(1)	13	(16)	0	(0)	0	(0)	38	(47)	0	(0)	0	(0)	2	(2)	5	(6)	0	(0)	12	(15)	1	(1)	9	(11)	0	(0)	81	(1.8)
	C	0	(0)	3	(4)	1	(1)	1	(1)	7	(10)	1	(1)	0	(0)	35	(49)	3	(4)	4	(6)	14	(19)	1	(1)	2	(3)	0	(0)	72	(1.6)
	D	0	(0)	4	(6)	2	(3)	1	(2)	8	(12)	1	(2)	2	(3)	8	(12)	8	(12)	13	(20)	13	(20)	1	(2)	5	(8)	0	(0)	66	(1.5)
	E	2	(0)	2	(0)	336	(64)	2	(0)	35	(7)	4	(1)	0	(0)	36	(7)	9	(2)	19	(4)	65	(12)	1	(0)	14	(3)	0	(0)	525	(11.8)
	F	0	(0)	1	(0)	308	(79)	0	(0)	6	(2)	0	(0)	0	(0)	29	(7)	0	(0)	0	(0)	35	(9)	0	(0)	13	(3)	0	(0)	392	(8.8)
	G	0	(0)	0	(0)	0	(0)	0	(0)	1	(100)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	1	(0.0)
	H	0	(0)	1	(1)	4	(6)	1	(1)	25	(35)	1	(1)	0	(0)	1	(1)	5	(7)	8	(11)	6	(8)	1	(1)	19	(26)	0	(0)	72	(1.6)
	I	1	(0)	2	(1)	225	(60)	3	(1)	29	(8)	5	(1)	0	(0)	19	(5)	9	(2)	36	(10)	21	(6)	5	(1)	23	(6)	0	(0)	378	(8.5)
	J	0	(0)	3	(10)	0	(0)	0	(0)	13	(45)	1	(3)	0	(0)	0	(0)	6	(21)	0	(0)	4	(14)	0	(0)	2	(7)	0	(0)	29	(0.7)
	K	1	(0)	14	(5)	152	(50)	0	(0)	26	(9)	7	(2)	1	(0)	13	(4)	21	(7)	33	(11)	20	(7)	3	(1)	11	(4)	0	(0)	302	(6.8)
	L	0	(0)	0	(0)	4	(11)	0	(0)	1	(3)	0	(0)	0	(0)	15	(42)	2	(6)	1	(3)	9	(25)	0	(0)	4	(11)	0	(0)	36	(0.8)
	M	0	(0)	3	(3)	0	(0)	0	(0)	18	(17)	1	(1)	0	(0)	38	(37)	7	(7)	19	(18)	14	(13)	1	(1)	3	(3)	0	(0)	104	(2.3)
	N	0	(0)	3	(2)	68	(52)	0	(0)	10	(8)	0	(0)	0	(0)	24	(18)	1	(1)	16	(12)	8	(6)	0	(0)	1	(1)	0	(0)	131	(2.9)
	O	0	(0)	2	(1)	336	(93)	0	(0)	3	(1)	2	(1)	0	(0)	2	(1)	0	(0)	1	(0)	12	(3)	0	(0)	3	(1)	1	(0)	362	(8.1)
	P	1	(0)	13	(3)	232	(58)	1	(0)	27	(7)	2	(0)	0	(0)	54	(13)	5	(1)	26	(6)	32	(8)	2	(0)	7	(2)	0	(0)	402	(9.0)
	Q	1	(1)	8	(5)	2	(1)	0	(0)	28	(19)	1	(1)	0	(0)	29	(19)	14	(9)	27	(18)	34	(23)	0	(0)	4	(3)	2	(1)	150	(3.4)
	R	0	(0)	3	(2)	128	(65)	1	(1)	10	(5)	3	(2)	0	(0)	20	(10)	11	(6)	11	(6)	9	(5)	0	(0)	2	(1)	0	(0)	198	(4.4)
	S	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	15	(58)	4	(15)	0	(0)	6	(23)	0	(0)	1	(4)	0	(0)	26	(0.6)
	T	4	(3)	3	(2)	2	(2)	0	(0)	27	(21)	4	(3)	1	(1)	3	(2)	20	(16)	30	(24)	26	(21)	3	(2)	3	(2)	0	(0)	126	(2.8)
	U	0	(0)	1	(3)	0	(0)	0	(0)	5	(17)	1	(3)	0	(0)	0	(0)	1	(3)	0	(0)	16	(55)	1	(3)	4	(14)	0	(0)	29	(0.7)
	V	0	(0)	6	(2)	310	(84)	1	(0)	12	(3)	1	(0)	0	(0)	12	(3)	5	(1)	6	(2)	12	(3)	0	(0)	4	(1)	2	(1)	371	(8.3)
	W	0	(0)	1	(0)	172	(79)	0	(0)	7	(3)	0	(0)	0	(0)	4	(2)	5	(2)	10	(5)	13	(6)	1	(0)	5	(2)	0	(0)	218	(4.9)
	X	2	(1)	3	(1)	167	(65)	2	(1)	25	(10)	10	(4)	1	(0)	8	(3)	5	(2)	13	(5)	9	(4)	2	(1)	7	(3)	2	(1)	256	(5.7)
	Y	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	1	(100)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	1	(0.0)
2004 Total		**15**	**(0.3)**	**93**	**(2.1)**	**2453**	**(55.0)**	**17**	**(0.4)**	**379**	**(8.5)**	**46**	**(1.0)**	**7**	**(0.2)**	**381**	**(8.5)**	**169**	**(3.8)**	**310**	**(7.0)**	**399**	**(9.0)**	**23**	**(0.5)**	**157**	**(3.5)**	**9**	**(0.2)**	**4458**	
2005	A	2	(2)	4	(3)	1	(1)	0	(0)	14	(11)	2	(2)	0	(0)	13	(10)	17	(13)	38	(29)	19	(15)	1	(1)	18	(14)	0	(0)	129	(2.8)
	B	0	(0)	9	(12)	1	(1)	1	(1)	32	(43)	2	(3)	0	(0)	2	(3)	1	(1)	1	(1)	19	(26)	0	(0)	6	(8)	0	(0)	74	(1.6)
	C	0	(0)	4	(6)	0	(0)	1	(1)	5	(7)	1	(1)	0	(0)	31	(44)	3	(4)	4	(6)	8	(11)	1	(1)	4	(6)	9	(13)	71	(1.5)
	D	0	(0)	2	(2)	1	(1)	0	(0)	10	(11)	2	(2)	0	(0)	19	(21)	18	(20)	15	(17)	11	(12)	1	(1)	10	(11)	0	(0)	89	(1.9)
	E	2	(0)	6	(1)	329	(70)	0	(0)	24	(5)	4	(1)	2	(0)	22	(5)	19	(4)	14	(3)	35	(7)	0	(0)	15	(3)	0	(0)	472	(10.2)
	F	0	(0)	3	(1)	296	(81)	0	(0)	7	(2)	1	(0)	0	(0)	26	(7)	0	(0)	0	(0)	18	(5)	0	(0)	14	(4)	0	(0)	365	(7.9)
	G	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	1	(100)	0	(0)	0	(0)	0	(0)	0	(0)	1	(0.0)
	H	0	(0)	2	(2)	1	(1)	1	(1)	45	(45)	3	(3)	0	(0)	0	(0)	8	(8)	7	(7)	4	(4)	0	(0)	29	(29)	0	(0)	100	(2.2)
	I	1	(0)	5	(1)	242	(66)	4	(1)	34	(9)	3	(1)	1	(0)	15	(4)	7	(2)	21	(6)	21	(6)	2	(1)	11	(3)	0	(0)	367	(8.0)
	J	1	(3)	1	(3)	0	(0)	0	(0)	14	(44)	1	(3)	0	(0)	0	(0)	2	(6)	0	(0)	4	(13)	0	(0)	5	(16)	4	(13)	32	(0.7)
	K	0	(0)	15	(5)	153	(52)	1	(0)	24	(8)	3	(1)	0	(0)	15	(5)	21	(7)	41	(14)	11	(4)	2	(1)	11	(4)	0	(0)	297	(6.4)
	L	0	(0)	1	(3)	0	(0)	0	(0)	1	(3)	1	(3)	0	(0)	22	(63)	1	(3)	0	(0)	9	(26)	0	(0)	0	(0)	0	(0)	35	(0.8)
	M	0	(0)	2	(2)	3	(3)	0	(0)	6	(6)	0	(0)	1	(1)	29	(30)	3	(3)	20	(21)	30	(31)	0	(0)	2	(2)	0	(0)	96	(2.1)
	N	0	(0)	5	(4)	80	(62)	0	(0)	4	(3)	1	(1)	6	(5)	13	(10)	4	(3)	8	(6)	6	(5)	0	(0)	3	(2)	0	(0)	130	(2.8)
	O	0	(0)	2	(1)	350	(92)	1	(0)	6	(2)	2	(1)	0	(0)	2	(1)	1	(0)	2	(1)	11	(3)	0	(0)	1	(0)	2	(1)	380	(8.2)
	P	0	(0)	30	(6)	293	(62)	1	(0)	21	(4)	9	(2)	0	(0)	42	(9)	13	(3)	26	(6)	26	(6)	2	(0)	8	(2)	0	(0)	471	(10.2)
	Q	1	(1)	7	(5)	1	(1)	1	(1)	15	(10)	3	(2)	0	(0)	34	(24)	22	(15)	24	(17)	30	(21)	3	(2)	2	(1)	0	(0)	143	(3.1)
	R	0	(0)	10	(4)	144	(59)	0	(0)	13	(5)	6	(2)	0	(0)	41	(17)	4	(2)	8	(3)	15	(6)	1	(0)	4	(2)	0	(0)	246	(5.3)
	S	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	1	(3)	0	(0)	14	(48)	2	(7)	0	(0)	7	(24)	3	(10)	2	(7)	0	(0)	29	(0.6)
	T	7	(4)	7	(4)	1	(1)	0	(0)	25	(15)	4	(2)	3	(2)	8	(5)	18	(11)	46	(28)	38	(23)	5	(3)	3	(2)	0	(0)	165	(3.6)
	U	3	(20)	0	(0)	1	(7)	0	(0)	4	(27)	1	(7)	0	(0)	0	(0)	1	(7)	0	(0)	5	(33)	0	(0)	0	(0)	0	(0)	15	(0.3)
	V	0	(0)	4	(1)	218	(67)	1	(0)	19	(6)	1	(0)	1	(0)	6	(2)	1	(0)	3	(1)	12	(4)	1	(0)	3	(1)	57	(17)	327	(7.1)
	W	0	(0)	3	(1)	199	(87)	0	(0)	6	(3)	0	(0)	0	(0)	3	(1)	0	(0)	6	(3)	10	(4)	0	(0)	2	(1)	1	(0)	230	(5.0)
	X	0	(0)	4	(2)	124	(61)	0	(0)	24	(12)	8	(4)	1	(0)	3	(1)	5	(2)	10	(5)	15	(7)	1	(0)	7	(3)	1	(0)	203	(4.4)
	Y	0	(0)	7	(5)	2	(1)	1	(1)	12	(8)	1	(1)	3	(2)	58	(41)	16	(11)	14	(10)	15	(10)	6	(4)	7	(5)	1	(1)	143	(3.1)
2005 Total		**17**	**(0.4)**	**133**	**(2.9)**	**2440**	**(52.9)**	**13**	**(0.3)**	**365**	**(7.9)**	**60**	**(1.3)**	**18**	**(0.4)**	**418**	**(9.1)**	**187**	**(4.1)**	**309**	**(6.7)**	**379**	**(8.2)**	**29**	**(0.6)**	**167**	**(3.6)**	**75**	**(1.6)**	**4610**	
Total		**32**	**(0.4)**	**226**	**(2.5)**	**4893**	**(54.0)**	**30**	**(0.3)**	**744**	**(8.2)**	**106**	**(1.2)**	**25**	**(0.3)**	**799**	**(8.8)**	**356**	**(3.9)**	**619**	**(6.8)**	**778**	**(8.6)**	**52**	**(0.6)**	**324**	**(3.6)**	**84**	**(0.9)**	**9068**	

Table 6.6.5 'Unplanned - following surgery' admissions by primary diagnostic group and NHS trust

Year	NHS trust	Diagnostic group																													
		Blood / lymphatic		Body wall and cavities		Cardiovascular		Endocrine / metabolic		Gastrointestinal		Infection		Multisystem		Musculoskeletal		Neurological		Oncology		Respiratory		Trauma		Other		Unknown		Total	
		n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
2004	A	0	(0)	3	(5)	0	(0)	0	(0)	11	(20)	1	(2)	0	(0)	2	(4)	16	(29)	7	(13)	3	(5)	4	(7)	9	(16)	0	(0)	56	(7.3)
	B	0	(0)	4	(11)	0	(0)	0	(0)	14	(39)	3	(8)	0	(0)	1	(3)	2	(6)	0	(0)	7	(19)	1	(3)	4	(11)	0	(0)	36	(4.7)
	C	0	(0)	2	(11)	1	(6)	0	(0)	4	(22)	1	(6)	0	(0)	0	(0)	6	(33)	0	(0)	2	(11)	0	(0)	2	(11)	0	(0)	18	(2.3)
	D	1	(1)	0	(0)	1	(1)	2	(3)	14	(21)	4	(6)	0	(0)	5	(7)	5	(7)	4	(6)	25	(37)	2	(3)	4	(6)	0	(0)	67	(8.7)
	E	1	(2)	0	(0)	7	(11)	0	(0)	10	(16)	2	(3)	0	(0)	2	(3)	7	(11)	11	(18)	20	(32)	0	(0)	2	(3)	0	(0)	62	(8.0)
	F	0	(0)	4	(4)	68	(69)	1	(1)	0	(0)	1	(1)	0	(0)	0	(0)	3	(3)	0	(0)	18	(18)	1	(1)	1	(1)	1	(1)	98	(12.7)
	G	0	(0)	0	(0)	1	(100)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	1	(0.1)
	H	1	(4)	2	(9)	0	(0)	2	(9)	3	(13)	0	(0)	0	(0)	0	(0)	3	(13)	0	(0)	3	(13)	2	(9)	7	(30)	0	(0)	23	(3.0)
	I	1	(5)	0	(0)	4	(20)	0	(0)	4	(20)	1	(5)	0	(0)	0	(0)	0	(0)	1	(5)	5	(25)	1	(5)	3	(15)	0	(0)	20	(2.6)
	J	1	(17)	0	(0)	0	(0)	0	(0)	3	(50)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	1	(17)	0	(0)	1	(17)	0	(0)	6	(0.8)
	K	0	(0)	4	(5)	9	(12)	1	(1)	11	(14)	10	(13)	0	(0)	2	(3)	4	(5)	4	(5)	22	(29)	5	(6)	5	(6)	0	(0)	77	(10.0)
	L	0	(0)	0	(0)	0	(0)	0	(0)	3	(38)	0	(0)	0	(0)	0	(0)	1	(13)	0	(0)	2	(25)	0	(0)	2	(25)	0	(0)	8	(1.0)
	M	0	(0)	1	(3)	1	(3)	0	(0)	4	(11)	1	(3)	0	(0)	0	(0)	2	(6)	3	(8)	16	(44)	5	(14)	3	(8)	0	(0)	36	(4.7)
	N	0	(0)	1	(3)	1	(3)	1	(3)	2	(7)	0	(0)	1	(3)	0	(0)	5	(17)	2	(7)	15	(52)	0	(0)	1	(3)	0	(0)	29	(3.8)
	O	0	(0)	0	(0)	4	(67)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	1	(17)	1	(17)	0	(0)	0	(0)	0	(0)	6	(0.8)
	P	0	(0)	0	(0)	2	(9)	0	(0)	3	(13)	3	(13)	0	(0)	0	(0)	2	(9)	0	(0)	7	(30)	4	(17)	2	(9)	0	(0)	23	(3.0)
	Q	0	(0)	2	(6)	1	(3)	0	(0)	8	(22)	2	(6)	0	(0)	0	(0)	3	(8)	1	(3)	17	(47)	1	(3)	1	(3)	0	(0)	36	(4.7)
	R	1	(3)	0	(0)	4	(13)	0	(0)	9	(29)	1	(3)	0	(0)	0	(0)	4	(13)	4	(13)	6	(19)	1	(3)	1	(3)	0	(0)	31	(4.0)
	S	0	(0)	0	(0)	0	(0)	1	(8)	1	(8)	0	(0)	0	(0)	3	(25)	1	(8)	0	(0)	5	(42)	0	(0)	1	(8)	0	(0)	12	(1.6)
	T	2	(7)	0	(0)	0	(0)	0	(0)	11	(37)	2	(7)	0	(0)	0	(0)	3	(10)	3	(10)	6	(20)	2	(7)	1	(3)	0	(0)	30	(3.9)
	U	0	(0)	0	(0)	1	(13)	0	(0)	3	(38)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	4	(50)	0	(0)	0	(0)	0	(0)	8	(1.0)
	V	0	(0)	4	(6)	6	(8)	1	(1)	40	(56)	2	(3)	0	(0)	0	(0)	2	(3)	3	(4)	6	(8)	4	(6)	3	(4)	0	(0)	71	(9.2)
	W	0	(0)	3	(27)	1	(9)	0	(0)	2	(18)	1	(9)	0	(0)	0	(0)	0	(0)	0	(0)	3	(27)	0	(0)	1	(9)	0	(0)	11	(1.4)
	X	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	2	(33)	1	(17)	1	(17)	2	(33)	0	(0)	6	(0.8)
	Y	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	(0.0)
2004 Total		8	(1.0)	30	(3.9)	112	(14.5)	9	(1.2)	160	(20.8)	35	(4.5)	1	(0.1)	15	(1.9)	69	(8.9)	46	(6.0)	195	(25.3)	34	(4.4)	56	(7.3)	1	(0.1)	771	
2005	A	0	(0)	1	(3)	2	(6)	0	(0)	8	(24)	1	(3)	0	(0)	0	(0)	10	(30)	2	(6)	5	(15)	1	(3)	3	(9)	0	(0)	33	(4.5)
	B	0	(0)	3	(16)	1	(5)	0	(0)	4	(21)	3	(16)	0	(0)	0	(0)	1	(5)	0	(0)	7	(37)	0	(0)	0	(0)	0	(0)	19	(2.6)
	C	1	(9)	0	(0)	1	(9)	0	(0)	1	(9)	1	(9)	0	(0)	0	(0)	1	(9)	0	(0)	5	(45)	0	(0)	0	(0)	1	(9)	11	(1.5)
	D	1	(1)	0	(0)	2	(3)	0	(0)	13	(17)	10	(13)	1	(1)	3	(4)	10	(13)	8	(11)	24	(32)	2	(3)	1	(1)	0	(0)	75	(10.3)
	E	1	(2)	1	(2)	7	(13)	2	(4)	13	(25)	2	(4)	0	(0)	0	(0)	4	(8)	6	(11)	12	(23)	0	(0)	5	(9)	0	(0)	53	(7.3)
	F	0	(0)	3	(4)	65	(82)	0	(0)	1	(1)	1	(1)	0	(0)	0	(0)	0	(0)	1	(1)	7	(9)	0	(0)	1	(1)	0	(0)	79	(10.8)
	G	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	1	(33)	0	(0)	0	(0)	2	(67)	0	(0)	0	(0)	3	(0.4)
	H	0	(0)	1	(5)	0	(0)	0	(0)	4	(18)	2	(9)	0	(0)	0	(0)	4	(18)	1	(5)	6	(27)	0	(0)	4	(18)	0	(0)	22	(3.0)
	I	0	(0)	0	(0)	9	(28)	3	(9)	1	(3)	1	(3)	0	(0)	0	(0)	1	(3)	1	(3)	12	(38)	1	(3)	3	(9)	0	(0)	32	(4.4)
	J	0	(0)	2	(29)	0	(0)	0	(0)	4	(57)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	1	(14)	0	(0)	7	(1.0)
	K	1	(1)	2	(2)	11	(12)	0	(0)	27	(29)	12	(13)	1	(1)	1	(1)	11	(12)	1	(1)	15	(16)	2	(2)	9	(10)	0	(0)	93	(12.8)
	L	0	(0)	0	(0)	0	(0)	0	(0)	1	(13)	0	(0)	0	(0)	0	(0)	4	(50)	0	(0)	1	(13)	2	(25)	0	(0)	0	(0)	8	(1.1)
	M	1	(3)	0	(0)	2	(6)	1	(3)	6	(19)	0	(0)	0	(0)	0	(0)	7	(23)	1	(3)	10	(32)	1	(3)	2	(6)	0	(0)	31	(4.3)
	N	0	(0)	1	(5)	2	(11)	1	(5)	5	(26)	0	(0)	0	(0)	0	(0)	2	(11)	1	(5)	4	(21)	3	(16)	0	(0)	0	(0)	19	(2.6)
	O	0	(0)	0	(0)	3	(75)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	1	(25)	0	(0)	0	(0)	0	(0)	0	(0)	4	(0.5)
	P	0	(0)	1	(4)	6	(26)	0	(0)	2	(9)	2	(9)	1	(4)	0	(0)	2	(9)	1	(4)	7	(30)	1	(4)	0	(0)	0	(0)	23	(3.2)
	Q	0	(0)	4	(11)	0	(0)	0	(0)	10	(29)	5	(14)	0	(0)	0	(0)	4	(11)	2	(6)	7	(20)	1	(3)	1	(3)	1	(3)	35	(4.8)
	R	0	(0)	1	(5)	3	(14)	1	(5)	1	(5)	2	(10)	0	(0)	0	(0)	4	(19)	1	(5)	5	(24)	2	(10)	1	(5)	0	(0)	21	(2.9)
	S	0	(0)	0	(0)	1	(11)	0	(0)	1	(11)	1	(11)	0	(0)	2	(22)	1	(11)	0	(0)	2	(22)	0	(0)	1	(11)	0	(0)	9	(1.2)
	T	0	(0)	0	(0)	2	(10)	0	(0)	8	(38)	0	(0)	0	(0)	1	(5)	1	(5)	2	(10)	5	(24)	0	(0)	2	(10)	0	(0)	21	(2.9)
	U	0	(0)	0	(0)	0	(0)	0	(0)	5	(71)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	2	(29)	0	(0)	0	(0)	0	(0)	7	(1.0)
	V	1	(2)	2	(4)	14	(25)	2	(4)	14	(25)	0	(0)	0	(0)	1	(2)	0	(0)	3	(5)	3	(5)	4	(7)	3	(5)	9	(16)	56	(7.7)
	W	1	(4)	0	(0)	3	(12)	0	(0)	5	(19)	1	(4)	0	(0)	2	(8)	0	(0)	1	(4)	6	(23)	1	(4)	6	(23)	0	(0)	26	(3.6)
	X	0	(0)	0	(0)	0	(0)	0	(0)	1	(50)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	1	(50)	0	(0)	0	(0)	0	(0)	2	(0.3)
	Y	0	(0)	1	(3)	3	(8)	1	(3)	7	(18)	5	(13)	2	(5)	2	(5)	6	(15)	0	(0)	7	(18)	2	(5)	4	(10)	0	(0)	40	(5.5)
2005 Total		7	(1.0)	23	(3.2)	137	(18.8)	11	(1.5)	142	(19.5)	49	(6.7)	5	(0.7)	12	(1.6)	74	(10.2)	33	(4.5)	153	(21.0)	25	(3.4)	47	(6.4)	11	(1.5)	729	
Total		15	(1.0)	53	(3.5)	249	(16.6)	20	(1.3)	302	(20.1)	84	(5.6)	6	(0.4)	27	(1.8)	143	(9.5)	79	(5.3)	348	(23.2)	59	(3.9)	103	(6.9)	12	(0.8)	1500	

Table 6.6.6 'Planned - other' admissions by primary diagnostic group and NHS trust

Year	NHS trust	Diagnostic group																													
		Blood / lymphatic		Body wall and cavities		Cardiovascular		Endocrine / metabolic		Gastrointestinal		Infection		Multisystem		Musculoskeletal		Neurological		Oncology		Respiratory		Trauma		Other		Unknown		Total	
		n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
2004	A	0	(0)	1	(14)	0	(0)	0	(0)	2	(29)	0	(0)	0	(0)	0	(0)	0	(0)	2	(29)	1	(14)	0	(0)	1	(14)	0	(0)	**7**	**(0.6)**
	B	0	(0)	5	(23)	1	(5)	0	(0)	7	(32)	0	(0)	0	(0)	0	(0)	2	(9)	1	(5)	4	(18)	0	(0)	2	(9)	0	(0)	**22**	**(2.0)**
	C	0	(0)	1	(17)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	5	(83)	0	(0)	0	(0)	0	(0)	**6**	**(0.5)**
	D	0	(0)	1	(3)	1	(3)	2	(6)	0	(0)	2	(6)	0	(0)	0	(0)	7	(19)	0	(0)	18	(50)	2	(6)	3	(8)	0	(0)	**36**	**(3.3)**
	E	2	(1)	9	(4)	124	(51)	0	(0)	11	(5)	2	(1)	0	(0)	3	(1)	14	(6)	5	(2)	63	(26)	0	(0)	11	(5)	0	(0)	**244**	**(22.1)**
	F	0	(0)	0	(0)	10	(40)	0	(0)	1	(4)	0	(0)	0	(0)	1	(4)	0	(0)	1	(4)	10	(40)	0	(0)	2	(8)	0	(0)	**25**	**(2.3)**
	G	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	1	(100)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	**1**	**(0.1)**
	H	2	(4)	1	(2)	1	(2)	4	(8)	18	(34)	0	(0)	0	(0)	1	(2)	9	(17)	1	(2)	4	(8)	8	(15)	4	(8)	0	(0)	**53**	**(4.8)**
	I	0	(0)	1	(2)	16	(31)	0	(0)	5	(10)	0	(0)	0	(0)	2	(4)	1	(2)	4	(8)	13	(25)	2	(4)	7	(14)	0	(0)	**51**	**(4.6)**
	J	1	(50)	0	(0)	0	(0)	0	(0)	1	(50)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	**2**	**(0.2)**
	K	1	(1)	5	(5)	49	(46)	0	(0)	8	(7)	5	(5)	0	(0)	3	(3)	7	(7)	2	(2)	22	(21)	0	(0)	5	(5)	0	(0)	**107**	**(9.7)**
	L	0	(0)	0	(0)	1	(4)	0	(0)	0	(0)	0	(0)	0	(0)	4	(16)	2	(8)	0	(0)	16	(64)	0	(0)	1	(4)	1	(4)	**25**	**(2.3)**
	M	0	(0)	0	(0)	3	(16)	0	(0)	2	(11)	0	(0)	0	(0)	0	(0)	2	(11)	1	(5)	8	(42)	0	(0)	3	(16)	0	(0)	**19**	**(1.7)**
	N	0	(0)	2	(33)	1	(17)	0	(0)	1	(17)	0	(0)	0	(0)	0	(0)	1	(17)	0	(0)	1	(17)	0	(0)	0	(0)	0	(0)	**6**	**(0.5)**
	O	0	(0)	0	(0)	48	(77)	0	(0)	1	(2)	0	(0)	0	(0)	4	(6)	1	(2)	0	(0)	7	(11)	0	(0)	0	(0)	1	(2)	**62**	**(5.6)**
	P	0	(0)	6	(7)	50	(60)	2	(2)	7	(8)	1	(1)	0	(0)	2	(2)	4	(5)	6	(7)	5	(6)	0	(0)	1	(1)	0	(0)	**84**	**(7.6)**
	Q	0	(0)	1	(9)	0	(0)	0	(0)	1	(9)	0	(0)	0	(0)	2	(18)	3	(27)	0	(0)	4	(36)	0	(0)	0	(0)	0	(0)	**11**	**(1.0)**
	R	1	(2)	3	(6)	14	(26)	0	(0)	9	(17)	3	(6)	0	(0)	1	(2)	2	(4)	4	(8)	10	(19)	0	(0)	6	(11)	0	(0)	**53**	**(4.8)**
	S	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	3	(21)	1	(7)	0	(0)	6	(43)	3	(21)	1	(7)	0	(0)	**14**	**(1.3)**
	T	0	(0)	0	(0)	2	(17)	0	(0)	0	(0)	3	(25)	0	(0)	0	(0)	0	(0)	2	(17)	5	(42)	0	(0)	0	(0)	0	(0)	**12**	**(1.1)**
	U	0	(0)	0	(0)	0	(0)	0	(0)	1	(17)	0	(0)	0	(0)	0	(0)	2	(33)	0	(0)	2	(33)	0	(0)	1	(17)	0	(0)	**6**	**(0.5)**
	V	0	(0)	0	(0)	1	(33)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	2	(67)	0	(0)	0	(0)	0	(0)	**3**	**(0.3)**
	W	0	(0)	0	(0)	4	(17)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	4	(17)	0	(0)	15	(65)	0	(0)	0	(0)	0	(0)	**23**	**(2.1)**
	X	1	(0)	0	(0)	222	(95)	0	(0)	0	(0)	3	(1)	0	(0)	1	(0)	2	(1)	0	(0)	4	(2)	0	(0)	0	(0)	1	(0)	**234**	**(21.2)**
	Y	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	**0**	**(0.0)**
2004 Total		**8**	**(0.7)**	**36**	**(3.3)**	**548**	**(49.5)**	**8**	**(0.7)**	**75**	**(6.8)**	**20**	**(1.8)**	**0**	**(0.0)**	**27**	**(2.4)**	**64**	**(5.8)**	**29**	**(2.6)**	**225**	**(20.3)**	**15**	**(1.4)**	**48**	**(4.3)**	**3**	**(0.3)**	**1106**	
2005	A	0	(0)	0	(0)	1	(9)	0	(0)	0	(0)	0	(0)	0	(0)	1	(9)	3	(27)	5	(45)	0	(0)	0	(0)	1	(9)	0	(0)	**11**	**(1.1)**
	B	0	(0)	1	(8)	0	(0)	0	(0)	5	(38)	1	(8)	0	(0)	1	(8)	0	(0)	0	(0)	4	(31)	0	(0)	1	(8)	0	(0)	**13**	**(1.3)**
	C	0	(0)	0	(0)	1	(14)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	1	(14)	5	(71)	0	(0)	0	(0)	0	(0)	**7**	**(0.7)**
	D	0	(0)	0	(0)	4	(9)	1	(2)	1	(2)	2	(4)	0	(0)	0	(0)	11	(24)	2	(4)	20	(43)	4	(9)	1	(2)	0	(0)	**46**	**(4.6)**
	E	2	(1)	8	(6)	60	(44)	0	(0)	2	(1)	1	(1)	0	(0)	3	(2)	6	(4)	4	(3)	41	(30)	3	(2)	5	(4)	0	(0)	**135**	**(13.4)**
	F	1	(4)	1	(4)	8	(35)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	8	(35)	0	(0)	4	(17)	1	(4)	**23**	**(2.3)**
	G	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	**0**	**(0.0)**
	H	7	(13)	2	(4)	1	(2)	4	(7)	7	(13)	2	(4)	0	(0)	0	(0)	9	(16)	1	(2)	6	(11)	8	(14)	9	(16)	0	(0)	**56**	**(5.6)**
	I	4	(6)	0	(0)	37	(51)	1	(1)	2	(3)	5	(7)	0	(0)	1	(1)	2	(3)	1	(1)	16	(22)	1	(1)	2	(3)	0	(0)	**72**	**(7.2)**
	J	0	(0)	4	(44)	0	(0)	0	(0)	2	(22)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	1	(11)	0	(0)	2	(22)	0	(0)	**9**	**(0.9)**
	K	4	(4)	6	(7)	31	(34)	2	(2)	5	(5)	0	(0)	1	(1)	1	(1)	5	(5)	4	(4)	23	(25)	0	(0)	9	(10)	0	(0)	**91**	**(9.1)**
	L	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	1	(4)	1	(4)	0	(0)	22	(88)	1	(4)	0	(0)	0	(0)	**25**	**(2.5)**
	M	0	(0)	0	(0)	1	(4)	0	(0)	5	(21)	0	(0)	0	(0)	3	(13)	5	(21)	0	(0)	8	(33)	0	(0)	2	(8)	0	(0)	**24**	**(2.4)**
	N	0	(0)	1	(20)	3	(60)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	1	(20)	0	(0)	**5**	**(0.5)**
	O	0	(0)	0	(0)	62	(76)	0	(0)	0	(0)	1	(1)	0	(0)	0	(0)	1	(1)	0	(0)	15	(18)	0	(0)	2	(2)	1	(1)	**82**	**(8.2)**
	P	0	(0)	4	(13)	22	(69)	0	(0)	0	(0)	0	(0)	0	(0)	1	(3)	2	(6)	0	(0)	2	(6)	0	(0)	1	(3)	0	(0)	**32**	**(3.2)**
	Q	0	(0)	4	(25)	0	(0)	0	(0)	1	(6)	1	(6)	0	(0)	2	(13)	2	(13)	0	(0)	4	(25)	0	(0)	2	(13)	0	(0)	**16**	**(1.6)**
	R	1	(2)	2	(3)	14	(23)	0	(0)	12	(20)	2	(3)	1	(2)	3	(5)	1	(2)	2	(3)	17	(28)	0	(0)	5	(8)	0	(0)	**60**	**(6.0)**
	S	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	2	(12)	0	(0)	2	(12)	1	(6)	0	(0)	10	(59)	0	(0)	1	(6)	1	(6)	**17**	**(1.7)**
	T	1	(7)	0	(0)	0	(0)	0	(0)	0	(0)	1	(7)	0	(0)	0	(0)	0	(0)	1	(7)	9	(64)	1	(7)	1	(7)	0	(0)	**14**	**(1.4)**
	U	0	(0)	0	(0)	1	(20)	0	(0)	0	(0)	1	(20)	0	(0)	0	(0)	0	(0)	0	(0)	2	(40)	0	(0)	1	(20)	0	(0)	**5**	**(0.5)**
	V	0	(0)	1	(2)	6	(13)	2	(4)	9	(19)	0	(0)	1	(2)	0	(0)	5	(11)	1	(2)	9	(19)	0	(0)	3	(6)	10	(21)	**47**	**(4.7)**
	W	0	(0)	0	(0)	9	(50)	0	(0)	0	(0)	0	(0)	0	(0)	3	(17)	2	(11)	0	(0)	3	(17)	0	(0)	1	(6)	0	(0)	**18**	**(1.8)**
	X	0	(0)	0	(0)	165	(90)	1	(1)	2	(1)	1	(1)	0	(0)	2	(1)	0	(0)	0	(0)	9	(5)	0	(0)	1	(1)	3	(2)	**184**	**(18.3)**
	Y	0	(0)	2	(15)	1	(8)	0	(0)	2	(15)	0	(0)	0	(0)	1	(8)	2	(15)	2	(15)	1	(8)	0	(0)	2	(15)	0	(0)	**13**	**(1.3)**
2005 Total		**20**	**(2.0)**	**36**	**(3.6)**	**427**	**(42.5)**	**11**	**(1.1)**	**55**	**(5.5)**	**20**	**(2.0)**	**3**	**(0.3)**	**25**	**(2.5)**	**58**	**(5.8)**	**24**	**(2.4)**	**235**	**(23.4)**	**18**	**(1.8)**	**57**	**(5.7)**	**16**	**(1.6)**	**1005**	
Total		**28**	**(1.3)**	**72**	**(3.4)**	**975**	**(46.2)**	**19**	**(0.9)**	**130**	**(6.2)**	**40**	**(1.9)**	**3**	**(0.1)**	**52**	**(2.5)**	**122**	**(5.8)**	**53**	**(2.5)**	**460**	**(21.8)**	**33**	**(1.6)**	**105**	**(5.0)**	**19**	**(0.9)**	**2111**	

Table 6.6.7 'Unplanned - other' admissions by primary diagnostic group and NHS trust

Year	NHS trust	Diagnostic group: Blood / lymphatic		Body wall and cavities		Cardiovascular		Endocrine / metabolic		Gastrointestinal		Infection		Multisystem		Musculoskeletal		Neurological		Oncology		Respiratory		Trauma		Other		Unknown		Total	
		n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
2004	A	3	(1)	3	(1)	11	(4)	10	(4)	20	(8)	24	(10)	0	(0)	1	(0)	55	(22)	21	(9)	55	(22)	26	(11)	18	(7)	0	(0)	247	(3.3)
	B	1	(1)	1	(1)	8	(5)	8	(5)	9	(6)	8	(5)	0	(0)	0	(0)	34	(23)	1	(1)	62	(42)	8	(5)	6	(4)	0	(0)	146	(2.0)
	C	2	(1)	3	(2)	6	(4)	3	(2)	4	(2)	16	(9)	1	(1)	0	(0)	40	(24)	2	(1)	66	(39)	17	(10)	9	(5)	0	(0)	169	(2.3)
	D	4	(1)	3	(1)	21	(5)	11	(3)	9	(2)	39	(9)	0	(0)	3	(1)	70	(17)	7	(2)	189	(46)	45	(11)	14	(3)	0	(0)	415	(5.6)
	E	4	(0)	21	(2)	219	(23)	37	(4)	69	(7)	39	(4)	3	(0)	4	(0)	116	(12)	15	(2)	324	(34)	55	(6)	38	(4)	0	(0)	944	(12.6)
	F	1	(0)	5	(1)	153	(24)	16	(2)	5	(1)	59	(9)	1	(0)	2	(0)	122	(19)	2	(0)	241	(37)	17	(3)	21	(3)	5	(1)	650	(8.7)
	G	0	(0)	0	(0)	1	(2)	2	(5)	2	(5)	8	(20)	0	(0)	0	(0)	13	(32)	0	(0)	9	(22)	1	(2)	5	(12)	0	(0)	41	(0.5)
	H	4	(3)	1	(1)	9	(6)	5	(3)	15	(10)	2	(1)	0	(0)	0	(0)	39	(25)	1	(1)	30	(19)	30	(19)	19	(12)	0	(0)	155	(2.1)
	I	2	(0)	0	(0)	36	(9)	14	(3)	12	(3)	27	(7)	0	(0)	1	(0)	63	(15)	3	(1)	178	(43)	32	(8)	41	(10)	1	(0)	410	(5.5)
	J	0	(0)	0	(0)	2	(4)	5	(11)	5	(11)	1	(2)	0	(0)	0	(0)	10	(22)	0	(0)	16	(36)	0	(0)	6	(13)	0	(0)	45	(0.6)
	K	2	(1)	29	(7)	54	(14)	7	(2)	32	(8)	21	(5)	0	(0)	3	(1)	36	(9)	3	(1)	152	(38)	35	(9)	23	(6)	0	(0)	397	(5.3)
	L	1	(1)	0	(0)	9	(6)	5	(3)	3	(2)	6	(4)	0	(0)	0	(0)	31	(20)	0	(0)	92	(59)	2	(1)	7	(4)	1	(1)	157	(2.1)
	M	2	(1)	0	(0)	9	(4)	10	(5)	5	(2)	23	(11)	0	(0)	0	(0)	42	(20)	1	(0)	97	(45)	18	(8)	7	(3)	0	(0)	214	(2.9)
	N	0	(0)	3	(2)	20	(12)	4	(2)	2	(1)	7	(4)	0	(0)	0	(0)	32	(19)	0	(0)	89	(52)	12	(7)	2	(1)	0	(0)	171	(2.3)
	O	0	(0)	0	(0)	85	(75)	0	(0)	1	(1)	2	(2)	0	(0)	3	(3)	1	(1)	0	(0)	20	(18)	1	(1)	0	(0)	1	(1)	114	(1.5)
	P	0	(0)	21	(4)	75	(16)	6	(1)	21	(4)	29	(6)	0	(0)	2	(0)	69	(15)	10	(2)	198	(42)	27	(6)	14	(3)	1	(0)	473	(6.3)
	Q	3	(1)	11	(3)	11	(3)	7	(2)	19	(5)	33	(9)	0	(0)	0	(0)	48	(14)	3	(1)	171	(49)	25	(7)	15	(4)	3	(1)	349	(4.7)
	R	0	(0)	2	(1)	42	(14)	5	(2)	25	(8)	20	(7)	0	(0)	2	(1)	64	(21)	4	(1)	108	(36)	20	(7)	10	(3)	0	(0)	302	(4.0)
	S	0	(0)	0	(0)	2	(2)	7	(6)	0	(0)	5	(4)	0	(0)	1	(1)	26	(23)	0	(0)	62	(54)	8	(7)	4	(3)	0	(0)	115	(1.5)
	T	4	(2)	1	(1)	7	(4)	3	(2)	6	(3)	17	(9)	0	(0)	0	(0)	19	(10)	31	(16)	83	(42)	18	(9)	9	(5)	0	(0)	198	(2.7)
	U	9	(3)	1	(0)	6	(2)	19	(5)	1	(0)	44	(13)	0	(0)	0	(0)	87	(25)	1	(0)	164	(47)	3	(1)	12	(3)	1	(0)	348	(4.7)
	V	7	(1)	16	(3)	92	(17)	24	(4)	40	(7)	27	(5)	3	(1)	5	(1)	75	(14)	6	(1)	175	(33)	52	(10)	16	(3)	0	(0)	538	(7.2)
	W	2	(1)	5	(1)	76	(20)	10	(3)	10	(3)	18	(5)	0	(0)	0	(0)	90	(23)	6	(2)	149	(39)	1	(0)	18	(5)	0	(0)	385	(5.2)
	X	4	(1)	9	(2)	113	(24)	7	(2)	23	(5)	28	(6)	2	(0)	1	(0)	72	(15)	8	(2)	163	(35)	15	(3)	20	(4)	0	(0)	465	(6.2)
	Y	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	5	(26)	0	(0)	0	(0)	3	(16)	1	(5)	10	(53)	0	(0)	0	(0)	0	(0)	19	(0.3)
2004 Total		55	(0.7)	135	(1.8)	1067	(14.3)	225	(3.0)	338	(4.5)	508	(6.8)	10	(0.1)	28	(0.4)	1257	(16.8)	126	(1.7)	2903	(38.9)	468	(6.3)	334	(4.5)	13	(0.2)	7467	
2005	A	6	(2)	3	(1)	5	(2)	12	(5)	17	(7)	11	(5)	2	(1)	3	(1)	55	(23)	14	(6)	70	(29)	26	(11)	16	(7)	1	(0)	241	(3.2)
	B	0	(0)	3	(2)	3	(2)	5	(4)	7	(6)	14	(11)	0	(0)	0	(0)	31	(24)	2	(2)	53	(42)	6	(5)	3	(2)	0	(0)	127	(1.7)
	C	3	(2)	0	(0)	7	(4)	3	(2)	1	(1)	28	(17)	2	(1)	0	(0)	21	(13)	2	(1)	69	(42)	18	(11)	4	(2)	6	(4)	164	(2.2)
	D	6	(2)	1	(0)	30	(8)	10	(3)	3	(1)	38	(10)	0	(0)	6	(2)	80	(22)	11	(3)	131	(35)	38	(10)	16	(4)	0	(0)	370	(4.9)
	E	7	(1)	27	(3)	152	(18)	31	(4)	56	(7)	48	(6)	1	(0)	5	(1)	129	(15)	19	(2)	278	(33)	61	(7)	36	(4)	0	(0)	850	(11.2)
	F	3	(0)	4	(1)	161	(25)	19	(3)	5	(1)	44	(7)	1	(0)	1	(0)	127	(19)	0	(0)	243	(37)	18	(3)	24	(4)	5	(1)	655	(8.6)
	G	0	(0)	0	(0)	2	(4)	0	(0)	2	(4)	8	(17)	0	(0)	0	(0)	23	(50)	0	(0)	6	(13)	4	(9)	1	(2)	0	(0)	46	(0.6)
	H	1	(1)	0	(0)	0	(0)	8	(6)	17	(12)	5	(3)	0	(0)	1	(1)	41	(29)	2	(1)	33	(23)	14	(10)	20	(14)	1	(1)	143	(1.9)
	I	3	(1)	0	(0)	55	(14)	16	(4)	5	(1)	43	(11)	0	(0)	0	(0)	58	(15)	8	(2)	131	(34)	29	(8)	34	(9)	0	(0)	382	(5.0)
	J	1	(2)	0	(0)	2	(4)	1	(2)	1	(2)	1	(2)	0	(0)	0	(0)	16	(33)	1	(2)	23	(48)	1	(2)	1	(2)	0	(0)	48	(0.6)
	K	6	(1)	18	(4)	84	(21)	12	(3)	47	(12)	32	(8)	0	(0)	2	(0)	53	(13)	8	(2)	107	(27)	15	(4)	17	(4)	0	(0)	401	(5.3)
	L	3	(1)	3	(1)	5	(2)	7	(3)	3	(1)	15	(7)	0	(0)	2	(1)	55	(27)	0	(0)	100	(49)	5	(2)	7	(3)	1	(0)	206	(2.7)
	M	3	(1)	0	(0)	4	(2)	9	(4)	7	(3)	41	(20)	0	(0)	2	(1)	39	(19)	5	(2)	68	(33)	16	(8)	10	(5)	0	(0)	204	(2.7)
	N	0	(0)	2	(1)	24	(17)	8	(6)	1	(1)	10	(7)	0	(0)	0	(0)	33	(23)	0	(0)	44	(31)	16	(11)	3	(2)	0	(0)	141	(1.9)
	O	0	(0)	1	(1)	90	(67)	0	(0)	1	(1)	3	(2)	0	(0)	1	(1)	2	(1)	0	(0)	24	(18)	0	(0)	3	(2)	10	(7)	135	(1.8)
	P	2	(0)	11	(2)	95	(19)	14	(3)	12	(2)	43	(9)	2	(0)	1	(0)	76	(15)	14	(3)	158	(32)	42	(9)	18	(4)	3	(1)	491	(6.4)
	Q	4	(1)	17	(4)	8	(2)	21	(5)	26	(7)	33	(9)	0	(0)	5	(1)	64	(17)	16	(4)	149	(39)	23	(6)	15	(4)	2	(1)	383	(5.0)
	R	1	(0)	2	(1)	48	(14)	3	(1)	36	(11)	21	(6)	0	(0)	0	(0)	72	(21)	8	(2)	113	(33)	22	(7)	12	(4)	0	(0)	338	(4.4)
	S	0	(0)	0	(0)	4	(3)	13	(10)	1	(1)	2	(2)	0	(0)	0	(0)	17	(14)	0	(0)	76	(61)	8	(6)	4	(3)	0	(0)	125	(1.6)
	T	3	(1)	0	(0)	6	(3)	7	(3)	9	(4)	9	(4)	0	(0)	0	(0)	47	(22)	20	(9)	97	(46)	13	(6)	2	(1)	0	(0)	213	(2.8)
	U	10	(3)	0	(0)	11	(3)	13	(3)	4	(1)	43	(11)	0	(0)	0	(0)	84	(22)	0	(0)	195	(51)	3	(1)	16	(4)	0	(0)	379	(5.0)
	V	2	(0)	15	(3)	86	(18)	27	(6)	49	(10)	9	(2)	2	(0)	2	(0)	46	(10)	9	(2)	109	(23)	58	(12)	18	(4)	47	(10)	479	(6.3)
	W	2	(0)	0	(0)	82	(20)	11	(3)	8	(2)	34	(8)	0	(0)	2	(0)	85	(21)	8	(2)	155	(38)	4	(1)	12	(3)	3	(1)	406	(5.3)
	X	6	(1)	13	(3)	119	(24)	9	(2)	22	(4)	33	(7)	4	(1)	1	(0)	57	(12)	13	(3)	170	(34)	25	(5)	18	(4)	3	(1)	493	(6.5)
	Y	0	(0)	3	(2)	13	(7)	7	(4)	5	(3)	21	(11)	0	(0)	0	(0)	39	(20)	4	(2)	67	(34)	20	(10)	16	(8)	0	(0)	195	(2.6)
2005 Total		72	(0.9)	123	(1.6)	1096	(14.4)	266	(3.5)	345	(4.5)	589	(7.7)	14	(0.2)	34	(0.4)	1350	(17.7)	164	(2.2)	2669	(35.0)	485	(6.4)	326	(4.3)	82	(1.1)	7615	
Total		127	(0.8)	258	(1.7)	2163	(14.3)	491	(3.3)	683	(4.5)	1097	(7.3)	24	(0.2)	62	(0.4)	2607	(17.3)	290	(1.9)	5572	(36.9)	953	(6.3)	660	(4.4)	95	(0.6)	15082	

Table 6.6.8 Most commonly returned Read Codes for primary reason for admission

Primary diagnosis	Sex									
	Male		Female		Ambiguous		Unknown		Total	
	n	%	n	%	n	%	n	%	n	%
Ventricular septal defect (P54..)	424	(52)	387	(48)	0	(0)	2	(0)	**813**	**(2.9)**
Tetralogy of Fallot (P52..)	347	(54)	285	(45)	0	(0)	7	(1)	**639**	**(2.3)**
Discordant ventriculoarterial connection (P51..)	393	(67)	192	(33)	0	(0)	1	(0)	**586**	**(2.1)**
Acute bronchiolitis due to respiratory syncytial virus (H0615)	335	(60)	222	(40)	0	(0)	0	(0)	**557**	**(2.0)**
Respiratory distress (XM07z)	339	(63)	197	(37)	0	(0)	0	(0)	**536**	**(1.9)**
Status epilepticus (X007B)	288	(55)	236	(45)	0	(0)	1	(0)	**525**	**(1.9)**
Respiratory failure (XM09V)	281	(59)	196	(41)	0	(0)	0	(0)	**477**	**(1.7)**
Sepsis (X70VZ)	252	(55)	206	(45)	0	(0)	0	(0)	**458**	**(1.6)**
Patent ductus arteriosus (P70..)	213	(47)	239	(53)	1	(0)	1	(0)	**454**	**(1.6)**
Meningococcal septicaemia (A362.)	230	(55)	189	(45)	0	(0)	0	(0)	**419**	**(1.5)**
Hypoplastic left heart syndrome (P67..)	269	(65)	142	(34)	0	(0)	1	(0)	**412**	**(1.5)**
Pneumonia (X100E)	206	(51)	195	(49)	1	(0)	0	(0)	**402**	**(1.4)**
Atrioventricular septal defect & common atriovent junction (X77wc)	191	(48)	205	(52)	0	(0)	2	(1)	**398**	**(1.4)**
Aortic coarctation (P71..)	256	(66)	132	(34)	0	(0)	1	(0)	**389**	**(1.4)**
Atrial septal defect (X77vY)	160	(41)	228	(59)	0	(0)	1	(0)	**389**	**(1.4)**
Acute bronchiolitis (H061.)	221	(60)	146	(40)	0	(0)	0	(0)	**367**	**(1.3)**
Injury of head region (XA003)	227	(66)	115	(34)	0	(0)	0	(0)	**342**	**(1.2)**
Bronchiolitis (XSDOK)	185	(58)	135	(42)	0	(0)	0	(0)	**320**	**(1.1)**
Congenital heart disease (X77tW)	149	(52)	136	(48)	0	(0)	0	(0)	**285**	**(1.0)**
Head injury NOS (XA004)	184	(68)	86	(32)	0	(0)	0	(0)	**270**	**(1.0)**
Respiratory obstruction (XM05Q)	158	(61)	99	(39)	0	(0)	0	(0)	**257**	**(0.9)**
Seizure (XaEHz)	135	(53)	119	(47)	0	(0)	0	(0)	**254**	**(0.9)**
Neonatal necrotising enterocolitis (Q464.)	144	(58)	102	(41)	0	(0)	2	(1)	**248**	**(0.9)**
Kyphoscoliosis or scoliosis NOS (N373z)	94	(40)	143	(60)	0	(0)	0	(0)	**237**	**(0.9)**
Acute respiratory failure (H590.)	122	(58)	87	(42)	0	(0)	0	(0)	**209**	**(0.8)**
Total	**5803**	**(56.7)**	**4419**	**(43.1)**	**2**	**(0.0)**	**19**	**(0.2)**	**10243**	**(36.8)**

Note: The percentages in the total column are a percentage of the total number of admissions.

Table 6.6.9 Most commonly returned Read Codes for primary reason for 'unplanned - other' admissions

Primary diagnosis	Sex									
	Male		Female		Ambiguous		Unknown		Total	
	n	%	n	%	n	%	n	%	n	%
Acute bronchiolitis due to respiratory syncytial virus (H0615)	317	(60)	213	(40)	0	(0)	0	(0)	**530**	**(3.5)**
Status epilepticus (X007B)	277	(54)	231	(45)	0	(0)	1	(0)	**509**	**(3.4)**
Respiratory distress (XM07z)	310	(64)	171	(36)	0	(0)	0	(0)	**481**	**(3.2)**
Respiratory failure (XM09V)	258	(59)	180	(41)	0	(0)	0	(0)	**438**	**(2.9)**
Sepsis (X70VZ)	226	(56)	180	(44)	0	(0)	0	(0)	**406**	**(2.7)**
Meningococcal septicaemia (A362.)	226	(56)	179	(44)	0	(0)	0	(0)	**405**	**(2.7)**
Pneumonia (X100E)	194	(52)	180	(48)	0	(0)	0	(0)	**374**	**(2.5)**
Acute bronchiolitis (H061.)	214	(60)	142	(40)	0	(0)	0	(0)	**356**	**(2.4)**
Injury of head region (XA003)	215	(67)	105	(33)	0	(0)	0	(0)	**320**	**(2.1)**
Bronchiolitis (XSDOK)	182	(58)	131	(42)	0	(0)	0	(0)	**313**	**(2.1)**
Seizure (XaEHz)	126	(53)	112	(47)	0	(0)	0	(0)	**238**	**(1.6)**
Head injury NOS (XA004)	159	(67)	79	(33)	0	(0)	0	(0)	**238**	**(1.6)**
Status asthmaticus (X102D)	118	(61)	77	(39)	0	(0)	0	(0)	**195**	**(1.3)**
Acute respiratory failure (H590.)	111	(58)	80	(42)	0	(0)	0	(0)	**191**	**(1.3)**
Discordant ventriculoarterial connection (P51..)	126	(69)	56	(31)	0	(0)	0	(0)	**182**	**(1.2)**
Febrile convulsion (XM03l)	116	(64)	65	(36)	0	(0)	0	(0)	**181**	**(1.2)**
Acute laryngotracheobronchitis (Xa0lW)	133	(73)	48	(27)	0	(0)	0	(0)	**181**	**(1.2)**
Acute lower respiratory tract infection (XE0Xt)	95	(54)	82	(46)	0	(0)	0	(0)	**177**	**(1.2)**
Neonatal necrotising enterocolitis (Q464.)	106	(61)	68	(39)	0	(0)	0	(0)	**174**	**(1.2)**
Asthma (H33..)	98	(59)	68	(41)	0	(0)	0	(0)	**166**	**(1.1)**
Fits - convulsions (XaEI2)	85	(57)	64	(43)	0	(0)	0	(0)	**149**	**(1.0)**
Epileptic seizures - clonic (F2512)	75	(53)	67	(47)	0	(0)	0	(0)	**142**	**(0.9)**
Aspiration pneumonitis (H47..)	82	(60)	54	(40)	0	(0)	0	(0)	**136**	**(0.9)**
Diabetic ketoacidosis (C101.)	56	(42)	76	(57)	1	(1)	0	(0)	**133**	**(0.9)**
Hypoplastic left heart syndrome (P67..)	90	(71)	37	(29)	0	(0)	0	(0)	**127**	**(0.8)**
Total	**3995**	**(59.3)**	**2745**	**(40.7)**	**1**	**(0.0)**	**1**	**(0.0)**	**6742**	**(44.7)**

Note: The percentages in the total column are a percentage of the total number of 'unplanned - other' admissions.

Table 6.6.10 Most commonly returned Read Codes for primary reason for 'unplanned - following surgery' admissions

Primary diagnosis	Sex								Total	
	Male		Female		Ambiguous		Unknown			
	n	%	n	%	n	%	n	%	n	%
Patent ductus arteriosus (P70..)	20	(44)	25	(56)	0	(0)	0	(0)	**45**	**(3.0)**
Respiratory obstruction (XM05Q)	28	(64)	16	(36)	0	(0)	0	(0)	**44**	**(2.9)**
Empyema (XaE01)	17	(57)	13	(43)	0	(0)	0	(0)	**30**	**(2.0)**
Respiratory distress (XM07z)	16	(57)	12	(43)	0	(0)	0	(0)	**28**	**(1.9)**
Sepsis (X70VZ)	16	(59)	11	(41)	0	(0)	0	(0)	**27**	**(1.8)**
Intussusception (J500.)	9	(33)	18	(67)	0	(0)	0	(0)	**27**	**(1.8)**
Stridor (XM082)	12	(55)	10	(45)	0	(0)	0	(0)	**22**	**(1.5)**
Ventricular septal defect (P54..)	12	(67)	6	(33)	0	(0)	0	(0)	**18**	**(1.2)**
Hypoplastic left heart syndrome (P67..)	13	(72)	5	(28)	0	(0)	0	(0)	**18**	**(1.2)**
Hydrocephalus (X00EG)	8	(44)	10	(56)	0	(0)	0	(0)	**18**	**(1.2)**
Bleeding from tonsillar bed (X76bB)	8	(47)	9	(53)	0	(0)	0	(0)	**17**	**(1.1)**
Neonatal necrotising enterocolitis (Q464.)	9	(53)	7	(41)	0	(0)	1	(6)	**17**	**(1.1)**
Apnoea (X76Gw)	11	(73)	4	(27)	0	(0)	0	(0)	**15**	**(1.0)**
Respiratory failure (XM09V)	9	(64)	5	(36)	0	(0)	0	(0)	**14**	**(0.9)**
Perforation of appendix (XA08f)	7	(50)	7	(50)	0	(0)	0	(0)	**14**	**(0.9)**
Chronic hepatic failure (X307C)	5	(38)	8	(62)	0	(0)	0	(0)	**13**	**(0.9)**
Appendicitis (Xa9C4)	7	(54)	6	(46)	0	(0)	0	(0)	**13**	**(0.9)**
Peritonitis (J55..)	8	(62)	5	(38)	0	(0)	0	(0)	**13**	**(0.9)**
Discordant ventriculoarterial connection (P51..)	10	(83)	2	(17)	0	(0)	0	(0)	**12**	**(0.8)**
Congenital heart disease (X77tW)	8	(67)	4	(33)	0	(0)	0	(0)	**12**	**(0.8)**
Head injury NOS (XA004)	10	(91)	1	(9)	0	(0)	0	(0)	**11**	**(0.7)**
Cardiac arrest (XE0V5)	6	(55)	5	(45)	0	(0)	0	(0)	**11**	**(0.7)**
Extradural haematoma (Xa0AC)	7	(64)	4	(36)	0	(0)	0	(0)	**11**	**(0.7)**
Obstruction of intestine (X305B)	4	(36)	7	(64)	0	(0)	0	(0)	**11**	**(0.7)**
Hirschsprung's disease (PB30.)	7	(64)	4	(36)	0	(0)	0	(0)	**11**	**(0.7)**
Gastro-oesophageal reflux disease (X3003)	5	(45)	6	(55)	0	(0)	0	(0)	**11**	**(0.7)**
Total	**272**	**(56.3)**	**210**	**(43.5)**	**0**	**(0.0)**	**1**	**(0.2)**	**483**	**(32.2)**

Note: The percentages in the total column are a percentage of the total number of 'unplanned - following surgery' admissions.

The most common Read Codes returned to PICANet for primary reason for admission are presented in table 6.6.8 without any attempt to group them further. These 20 diagnoses represent 10,243 (37%) of the admission diagnoses.

PICANet has not imposed an arbitrary grouping of codes but present the raw data for the top 20 codes. The level of precision in the coding method makes interpretation of these data difficult without some form of aggregation. However, PICANet has allowed the flexibility to code very specifically to enable prospective audit to focus on particular conditions; for example, respiratory syncytial virus (RSV) positive bronchiolitis. Some units have chosen to code diagnoses in more detail to allow them to use this information locally, others have coded a single diagnosis at a general level. For most reporting purposes, the broad diagnostic groups used in this report are sufficient. Further disaggregation needs to be carefully considered due to the variation in coding practice between individual units.

6.7 Summary

- Over the two year period covered by this report there were 27,859 PICU admissions aged 0 - 15 years.
- Just over half (57%) of all admissions were male.
- Almost half (48%) of admissions were aged under one year.

- Of those under one year, 35% were less than a month old. A predominance of male admissions was also seen on this sub group.
- Admission rates remained constant over the 24-month period for children aged 1 - 15 years; however for the under one age group, seasonal variation was seen, with admission rates increasing during the winter, peaking in December. This was accounted for in the main by respiratory conditions, in particular bronchiolitis.
- Around three quarters of admissions fell into four main diagnostic groups: cardiovascular (30%), respiratory (26%), neurological (12%) and gastrointestinal (7%).
- A slight variation was seen for those aged 16 years and above. Here, the most common diagnostic groups were cardiovascular (26%), musculoskeletal (21%), respiratory (18%) and neurological (8%).
- Admission rates were relatively constant for neurological and gastrointestinal admissions. Respiratory admissions peaked in December, whilst the number of cardiovascular admissions fell slightly in this month.
- Over half of admissions (52%) had an expected probability of mortality of 1 - <5 %. Less than 7% had a probability of mortality more than 15%.
- 60% of all admissions were unplanned.
- The most common admission type was ‘unplanned other’ (54%). Of these, 58% came from ‘other hospital’ and 41% from ‘same hospital’. Most of these admissions came directly from either a ward area (36%) or A&E (26%), although 17% came from another intensive care area (ICU/PICU/NICU).
- The second most frequent admission type was ‘planned - following surgery’ (33%).

References

1 Shann F, Pearson G, Slater A, Wilkinson K, Paediatric index of mortality (PIM): am mortality prediction model for children in intensive care. Intensive Care Med 1997; 23:201-207

2 Australian New Zealand Intensive Care Society. Report of the Australian and New Zealand Paediatric Intensive Care Registry – 2004.

7 RETRIEVAL DATA

7.1 Retrievals by team type

Data are collected on whether or not a child was retrieved / transferred into the PICU. We have used the following definitions:

- 'Own team' identifies that your own team collected the child from the referring hospital.
- 'Other specialist team (PICU)' identifies that another PICU retrieval team transferred the child to your unit.
- 'Other specialist team (non PICU)' identifies that another transport team, not a PICU team (e.g. Accident and Emergency Department (A&E), theatre teams or neonatal teams), transferred the child to your unit.
- 'Non-specialist team' identifies that a non-PICU, non-specialist team transported the child to your unit (e.g. ward staff).

In the majority of PICUs, doctors and nurses who work on the unit undertake retrieval of critically ill children. Within London there are two specific transport teams, the Children's Acute Transfer Service (CATS) and the South Thames retrieval team. CATS is based at Great Ormond Street Hospital (GOSH), and is staffed separately from the intensive care units at GOSH. For PICANet, any child retrieved by CATS into a PICU at GOSH is recorded as 'other specialist team (PICU)'. The South Thames retrieval team is based at Evelina Children's Hospital and is staffed by doctors and nurses from within the PICU. For PICANet, any child retrieved by the South Thames team into the PICU at Evelina Children's Hospital is classed as 'own team'.

Figure 7.1.1 Retrievals by team type

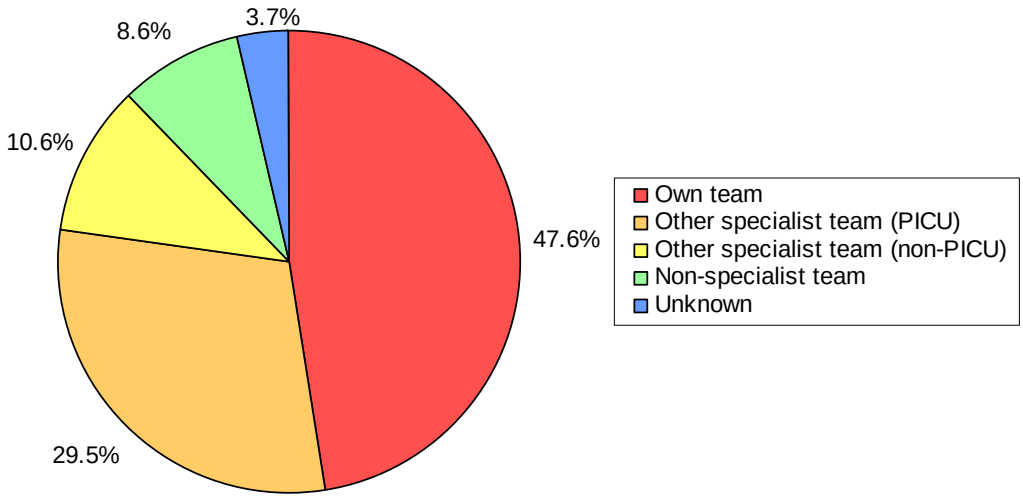


Table 7.1.1 Retrievals by team type and age

Retrieval team	Age group (years) <1 n	%	1-4 n	%	5-10 n	%	11-15 n	%	Total n	%
Own team	2383	(51)	1239	(26)	619	(13)	440	(9)	**4681**	**(47.6)**
Other specialist team (PICU)	1672	(58)	644	(22)	318	(11)	267	(9)	**2901**	**(29.5)**
Other specialist team (non-PICU)	679	(65)	117	(11)	108	(10)	141	(13)	**1045**	**(10.6)**
Non-specialist team	468	(55)	135	(16)	99	(12)	143	(17)	**845**	**(8.6)**
Unknown	187	(52)	100	(28)	45	(12)	29	(8)	**361**	**(3.7)**
Total	**5389**	**(54.8)**	**2235**	**(22.7)**	**1189**	**(12.1)**	**1020**	**(10.4)**	**9833**	

Table 7.1.2 'Non-specialist team' retrievals by primary diagnostic group and age

Diagnostic group	Age group (years) <1 n	%	1-4 n	%	5-10 n	%	11-15 n	%	Total n	%
Blood / lymphatic	3	(33)	3	(33)	1	(11)	2	(22)	**9**	**(1.1)**
Body wall and cavities	25	(93)	0	(0)	0	(0)	2	(7)	**27**	**(3.2)**
Cardiovascular	144	(76)	19	(10)	10	(5)	17	(9)	**190**	**(22.5)**
Endocrine / metabolic	5	(38)	3	(23)	4	(31)	1	(8)	**13**	**(1.5)**
Gastrointestinal	76	(87)	4	(5)	4	(5)	3	(3)	**87**	**(10.3)**
Infection	7	(35)	5	(25)	4	(20)	4	(20)	**20**	**(2.4)**
Multisystem	2	(67)	1	(33)	0	(0)	0	(0)	**3**	**(0.4)**
Musculoskeletal	2	(40)	1	(20)	1	(20)	1	(20)	**5**	**(0.6)**
Neurological	36	(36)	23	(23)	20	(20)	21	(21)	**100**	**(11.8)**
Oncology	4	(20)	9	(45)	4	(20)	3	(15)	**20**	**(2.4)**
Respiratory	126	(66)	34	(18)	15	(8)	15	(8)	**190**	**(22.5)**
Trauma	2	(2)	31	(23)	33	(25)	66	(50)	**132**	**(15.6)**
Other	34	(74)	2	(4)	2	(4)	8	(17)	**46**	**(5.4)**
Unknown	2	(67)	0	(0)	1	(33)	0	(0)	**3**	**(0.4)**
Total	**468**	**(55.4)**	**135**	**(16.0)**	**99**	**(11.7)**	**143**	**(16.9)**	**845**	

Table 7.1.3 Admissions by retrieval type and NHS trust

Year	NHS trust	Retrieval team: Own team n	%	Other specialist team (PICU) n	%	Other specialist team (non-PICU) n	%	Non-specialist team n	%	Unknown n	%	Total n	%
2004	**A**	24	(21)	26	(23)	62	(55)	0	(0)	1	(1)	**113**	**(2.4)**
	B	1	(5)	12	(57)	7	(33)	1	(5)	0	(0)	**21**	**(0.4)**
	C	98	(86)	9	(8)	2	(2)	5	(4)	0	(0)	**114**	**(2.4)**
	D	247	(72)	22	(6)	55	(16)	21	(6)	0	(0)	**345**	**(7.2)**
	E	7	(1)	570	(70)	5	(1)	228	(28)	2	(0)	**812**	**(16.9)**
	F	451	(70)	189	(30)	0	(0)	0	(0)	0	(0)	**640**	**(13.4)**
	G	0	-	0	-	0	-	0	-	0	-	**0**	**(0.0)**
	H	8	(7)	90	(75)	11	(9)	7	(6)	4	(3)	**120**	**(2.5)**
	I	167	(77)	11	(5)	21	(10)	19	(9)	0	(0)	**218**	**(4.5)**
	J	1	(10)	9	(90)	0	(0)	0	(0)	0	(0)	**10**	**(0.2)**
	K	100	(38)	33	(12)	104	(39)	28	(11)	0	(0)	**265**	**(5.5)**
	L	94	(94)	2	(2)	4	(4)	0	(0)	0	(0)	**100**	**(2.1)**
	M	43	(48)	28	(31)	8	(9)	10	(11)	0	(0)	**89**	**(1.9)**
	N	65	(66)	5	(5)	12	(12)	16	(16)	0	(0)	**98**	**(2.0)**
	O	1	(1)	17	(21)	2	(2)	0	(0)	61	(75)	**81**	**(1.7)**
	P	174	(67)	20	(8)	43	(16)	23	(9)	1	(0)	**261**	**(5.4)**
	Q	109	(64)	12	(7)	27	(16)	19	(11)	3	(2)	**170**	**(3.5)**
	R	172	(78)	2	(1)	31	(14)	15	(7)	0	(0)	**220**	**(4.6)**
	S	2	(8)	4	(17)	16	(67)	2	(8)	0	(0)	**24**	**(0.5)**
	T	0	(0)	98	(82)	1	(1)	18	(15)	3	(3)	**120**	**(2.5)**
	U	95	(33)	161	(57)	6	(2)	2	(1)	20	(7)	**284**	**(5.9)**
	V	132	(53)	20	(8)	71	(28)	26	(10)	2	(1)	**251**	**(5.2)**
	W	172	(100)	0	(0)	0	(0)	0	(0)	0	(0)	**172**	**(3.6)**
	X	178	(70)	62	(25)	5	(2)	3	(1)	5	(2)	**253**	**(5.3)**
	Y	12	(92)	0	(0)	1	(8)	0	(0)	0	(0)	**13**	**(0.3)**
2004 Total		**2353**	**(49.1)**	**1402**	**(29.2)**	**494**	**(10.3)**	**443**	**(9.2)**	**102**	**(2.1)**	**4794**	
2005	**A**	29	(23)	55	(43)	44	(34)	0	(0)	0	(0)	**128**	**(2.5)**
	B	1	(10)	1	(10)	4	(40)	4	(40)	0	(0)	**10**	**(0.2)**
	C	97	(90)	5	(5)	2	(2)	4	(4)	0	(0)	**108**	**(2.1)**
	D	227	(70)	28	(9)	55	(17)	13	(4)	3	(1)	**326**	**(6.5)**
	E	0	(0)	572	(80)	2	(0)	137	(19)	1	(0)	**712**	**(14.1)**
	F	433	(71)	174	(29)	0	(0)	0	(0)	0	(0)	**607**	**(12.0)**
	G	0	(0)	0	(0)	0	(0)	1	(50)	1	(50)	**2**	**(0.0)**
	H	8	(6)	84	(63)	31	(23)	8	(6)	3	(2)	**134**	**(2.7)**
	I	150	(67)	15	(7)	48	(21)	11	(5)	0	(0)	**224**	**(4.4)**
	J	3	(38)	2	(25)	0	(0)	2	(25)	1	(13)	**8**	**(0.2)**
	K	111	(35)	47	(15)	118	(37)	39	(12)	5	(2)	**320**	**(6.4)**
	L	116	(89)	5	(4)	9	(7)	1	(1)	0	(0)	**131**	**(2.6)**
	M	75	(66)	21	(18)	13	(11)	5	(4)	0	(0)	**114**	**(2.3)**
	N	51	(59)	7	(8)	5	(6)	23	(27)	0	(0)	**86**	**(1.7)**
	O	5	(5)	43	(43)	5	(5)	1	(1)	47	(47)	**101**	**(2.0)**
	P	160	(58)	9	(3)	65	(23)	44	(16)	0	(0)	**278**	**(5.5)**
	Q	126	(67)	14	(7)	27	(14)	21	(11)	1	(1)	**189**	**(3.8)**
	R	200	(71)	11	(4)	51	(18)	19	(7)	0	(0)	**281**	**(5.6)**
	S	0	(0)	9	(36)	14	(56)	2	(8)	0	(0)	**25**	**(0.5)**
	T	1	(1)	83	(69)	3	(2)	19	(16)	15	(12)	**121**	**(2.4)**
	U	0	(0)	147	(47)	7	(2)	0	(0)	156	(50)	**310**	**(6.2)**
	V	88	(41)	76	(35)	20	(9)	25	(12)	6	(3)	**215**	**(4.3)**
	W	185	(91)	2	(1)	1	(0)	9	(4)	6	(3)	**203**	**(4.0)**
	X	148	(56)	75	(29)	16	(6)	10	(4)	14	(5)	**263**	**(5.2)**
	Y	114	(80)	14	(10)	11	(8)	4	(3)	0	(0)	**143**	**(2.8)**
2005 Total		**2328**	**(46.2)**	**1499**	**(29.7)**	**551**	**(10.9)**	**402**	**(8.0)**	**259**	**(5.1)**	**5039**	
Total		**4681**	**(47.6)**	**2901**	**(29.5)**	**1045**	**(10.6)**	**845**	**(8.6)**	**361**	**(3.7)**	**9833**	

7.2 Summary

- The majority of retrievals (77.1%) were performed by appropriately trained paediatric intensive care teams.
- Reflecting all admission data, over half of retrievals were for children under one year of age.
- Less than 10% of children retrieved were transported into a PICU by a non-specialist team.
- Almost half of the retrievals by non-specialist teams were within the cardiac and respiratory primary diagnostic groups.
- The most common reason for transport by a non-specialist team in the 11 - 15 year age group was ‘trauma’.

8 INTERVENTION DATA

In this section we present a summary of data relating to interventions that may be performed during a child's admission to PICU. Most of the interventions described are available in all PICUs, although a few specialist interventions (such as extra corporeal membrane oxygenation (ECMO) or left ventricular assist device to support cardiac function (LVAD)) are only available in a PICU where invasive cardiac procedures are routinely performed.

Length of ventilation was calculated in days. Any ventilation during the period midnight to midnight was counted as one complete day of ventilation (e.g. a child intubated and ventilated at 23.45 on 7 March and extubated at 02.30 on 8 March would count as two days of ventilation). Accurate times of intubation and extubation would need to be recorded for each child in order to obtain a more exact length of ventilation.

8.1 Interventions performed

Table 8.1.1 Interventions performed by NHS trust

Year	NHS trust	Admissions	Intervention															
			Invasive ventilation		Non-invasive ventilation		Tracheostomy		ECMO		IV vasoactive drugs		LVAD		ICP device		Renal support	
			n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
2004	A	442	201	(45)	72	(16)	2	(0)	0	(0)	62	(14)	0	(0)	47	(11)	0	(0)
	B	285	58	(20)	32	(11)	3	(1)	0	(0)	16	(6)	0	(0)	0	(0)	0	(0)
	C	265	234	(88)	15	(6)	16	(6)	0	(0)	40	(15)	0	(0)	7	(3)	4	(2)
	D	584	448	(77)	44	(8)	14	(2)	0	(0)	106	(18)	0	(0)	28	(5)	14	(2)
	E	1776	1402	(79)	351	(20)	65	(4)	52	(3)	812	(46)	1	(0)	41	(2)	60	(3)
	F	1165	927	(80)	128	(11)	14	(1)	1	(0)	360	(31)	0	(0)	2	(0)	26	(2)
	G	44	40	(91)	5	(11)	0	(0)	0	(0)	26	(59)	0	(0)	4	(9)	0	(0)
	H	307	220	(72)	18	(6)	4	(1)	1	(0)	52	(17)	1	(0)	20	(7)	17	(6)
	I	859	583	(68)	52	(6)	30	(3)	2	(0)	318	(37)	0	(0)	26	(3)	60	(7)
	J	82	12	(15)	3	(4)	0	(0)	1	(1)	2	(2)	0	(0)	0	(0)	2	(2)
	K	883	542	(61)	63	(7)	35	(4)	24	(3)	285	(32)	1	(0)	29	(3)	37	(4)
	L	226	140	(62)	62	(27)	12	(5)	0	(0)	39	(17)	0	(0)	2	(1)	0	(0)
	M	373	204	(55)	46	(12)	23	(6)	0	(0)	46	(12)	0	(0)	22	(6)	6	(2)
	N	337	240	(71)	66	(20)	6	(2)	0	(0)	73	(22)	0	(0)	12	(4)	6	(2)
	O	552	387	(70)	73	(13)	9	(2)	5	(1)	314	(57)	0	(0)	1	(0)	4	(1)
	P	982	820	(84)	14	(1)	2	(0)	2	(0)	277	(28)	4	(0)	2	(0)	11	(1)
	Q	549	227	(41)	109	(20)	9	(2)	0	(0)	83	(15)	0	(0)	20	(4)	13	(2)
	R	585	479	(82)	68	(12)	8	(1)	2	(0)	197	(34)	0	(0)	17	(3)	10	(2)
	S	167	59	(35)	36	(22)	2	(1)	0	(0)	16	(10)	0	(0)	7	(4)	1	(1)
	T	366	119	(33)	58	(16)	5	(1)	0	(0)	35	(10)	0	(0)	9	(2)	1	(0)
	U	392	261	(67)	109	(28)	12	(3)	0	(0)	107	(27)	0	(0)	0	(0)	6	(2)
	V	983	936	(95)	166	(17)	35	(4)	4	(0)	550	(56)	4	(0)	47	(5)	39	(4)
	W	648	519	(80)	71	(11)	12	(2)	2	(0)	314	(48)	0	(0)	13	(2)	42	(6)
	X	965	500	(52)	123	(13)	27	(3)	44	(5)	235	(24)	0	(0)	0	(0)	18	(2)
	Y	20	14	(70)	3	(15)	1	(5)	0	(0)	1	(5)	0	(0)	0	(0)	0	(0)
2004 Total		13837	9572	(69.2)	1787	(12.9)	346	(2.5)	140	(1.0)	4366	(31.6)	11	(0.1)	356	(2.6)	377	(2.7)
2005	A	414	166	(40)	38	(9)	6	(1)	0	(0)	53	(13)	0	(0)	21	(5)	0	(0)
	B	233	29	(12)	18	(8)	10	(4)	0	(0)	8	(3)	0	(0)	0	(0)	0	(0)
	C	254	191	(75)	25	(10)	7	(3)	0	(0)	29	(11)	0	(0)	5	(2)	5	(2)
	D	580	438	(76)	61	(11)	13	(2)	0	(0)	137	(24)	0	(0)	45	(8)	18	(3)
	E	1510	1305	(86)	173	(11)	42	(3)	44	(3)	744	(49)	2	(0)	57	(4)	63	(4)
	F	1122	910	(81)	119	(11)	11	(1)	0	(0)	332	(30)	0	(0)	0	(0)	32	(3)
	G	50	41	(82)	5	(10)	1	(2)	0	(0)	32	(64)	0	(0)	6	(12)	0	(0)
	H	336	234	(70)	22	(7)	5	(1)	1	(0)	49	(15)	0	(0)	22	(7)	17	(5)
	I	853	599	(70)	66	(8)	30	(4)	2	(0)	325	(38)	1	(0)	22	(3)	58	(7)
	J	96	29	(30)	10	(10)	0	(0)	0	(0)	2	(2)	0	(0)	1	(1)	1	(1)
	K	883	532	(60)	81	(9)	31	(4)	18	(2)	269	(30)	1	(0)	16	(2)	49	(6)
	L	274	162	(59)	66	(24)	17	(6)	0	(0)	60	(22)	0	(0)	3	(1)	2	(1)
	M	355	212	(60)	50	(14)	19	(5)	1	(0)	59	(17)	1	(0)	18	(5)	10	(3)
	N	295	245	(83)	44	(15)	13	(4)	0	(0)	102	(35)	0	(0)	16	(5)	9	(3)
	O	611	428	(70)	124	(20)	9	(1)	3	(0)	366	(60)	0	(0)	0	(0)	1	(0)
	P	1017	865	(85)	49	(5)	12	(1)	5	(0)	341	(34)	0	(0)	16	(2)	21	(2)
	Q	581	246	(42)	91	(16)	18	(3)	0	(0)	81	(14)	0	(0)	13	(2)	9	(2)
	R	665	519	(78)	85	(13)	6	(1)	0	(0)	218	(33)	1	(0)	15	(2)	16	(2)
	S	180	71	(39)	16	(9)	2	(1)	0	(0)	12	(7)	0	(0)	2	(1)	2	(1)
	T	413	138	(33)	92	(22)	2	(0)	0	(0)	29	(7)	0	(0)	4	(1)	4	(1)
	U	408	285	(70)	93	(23)	11	(3)	0	(0)	111	(27)	0	(0)	2	(0)	6	(1)
	V	909	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)
	W	701	519	(74)	126	(18)	14	(2)	1	(0)	313	(45)	0	(0)	13	(2)	48	(7)
	X	891	449	(50)	60	(7)	10	(1)	47	(5)	215	(24)	0	(0)	0	(0)	32	(4)
	Y	391	199	(51)	17	(4)	7	(2)	0	(0)	26	(7)	0	(0)	6	(2)	1	(0)
2005 Total		14022	8812	(62.8)	1531	(10.9)	296	(2.1)	122	(0.9)	3913	(27.9)	6	(0.0)	303	(2.2)	404	(2.9)
Total		27859	18384	(66.0)	3318	(11.9)	642	(2.3)	262	(0.9)	8279	(29.7)	17	(0.1)	659	(2.4)	781	(2.8)

Note: Birmingham Children's Hospital did not supply intervention data for 2005.

8.2 Ventilation status

Table 8.2.1 Admissions by ventilation status and age

Ventilation status	Age group (years) <1		1-4		5-10		11-15		Total	
	n	%	n	%	n	%	n	%	n	%
Invasive only	8005	(50)	4108	(25)	2088	(13)	1920	(12)	**16121**	**(57.9)**
Non-invasive only	526	(50)	226	(21)	158	(15)	145	(14)	**1055**	**(3.8)**
Both	1531	(68)	345	(15)	218	(10)	169	(7)	**2263**	**(8.1)**
Neither	2729	(37)	1984	(27)	1290	(18)	1290	(18)	**7293**	**(26.2)**
Unknown	595	(53)	250	(22)	161	(14)	121	(11)	**1127**	**(4.0)**
Total	**13386**	**(48.0)**	**6913**	**(24.8)**	**3915**	**(14.1)**	**3645**	**(13.1)**	**27859**	

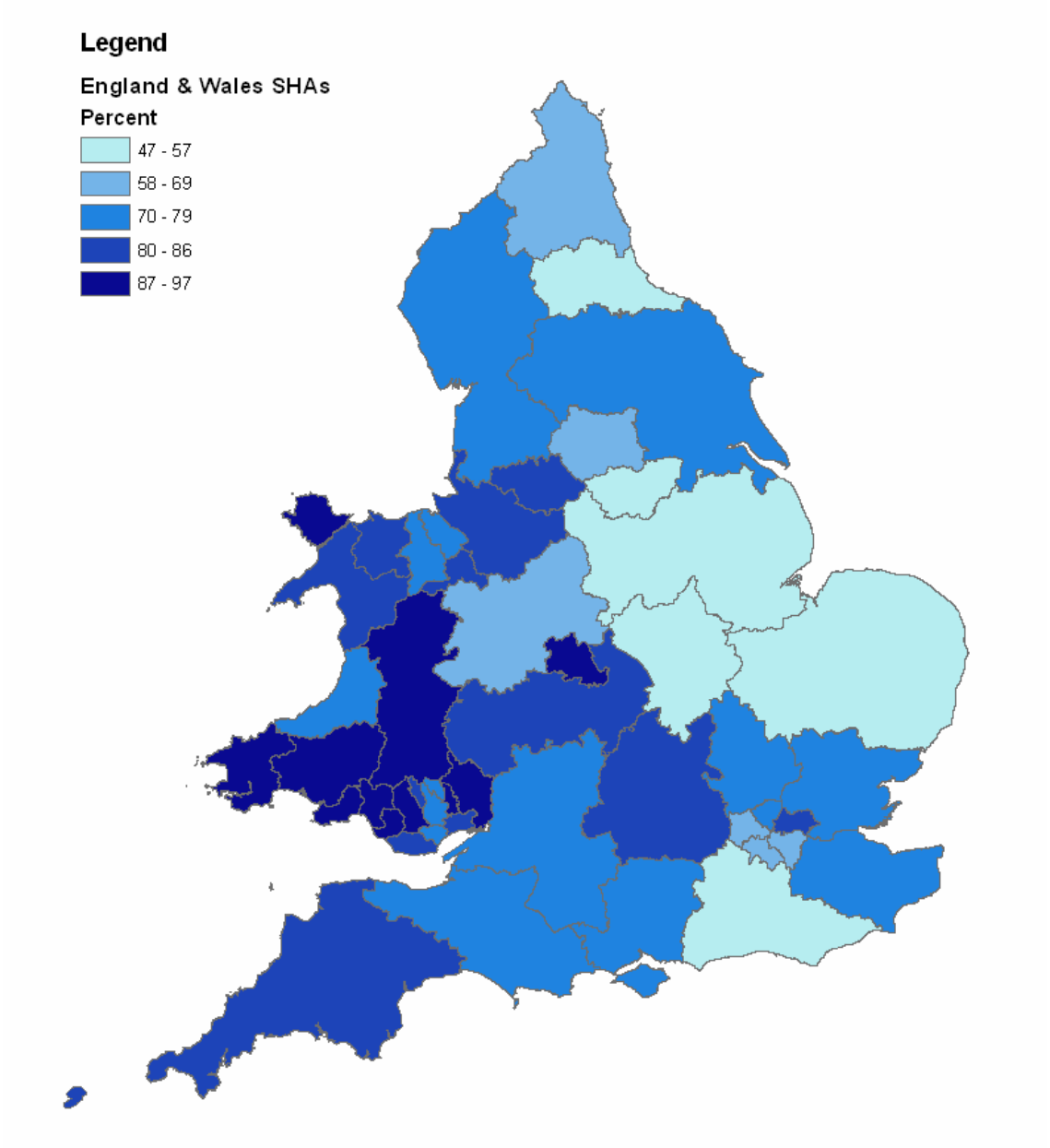
Note: To calculate the percentage of admissions receiving invasive ventilation, 'invasive only' should be added to 'both'. Likewise, to calculate the percentage of admissions receiving non-invasive ventilation, 'non-invasive only' should be added to 'both.'

Table 8.2.2 Admissions by ventilation status and NHS trust

Year	NHS trust	Ventilation status: Invasive only n	%	Non-invasive only n	%	Both n	%	Neither n	%	Unknown n	%	Total n	%
2004	**A**	159	(36)	30	(7)	42	(10)	211	(48)	0	(0)	**442**	**(3.2)**
	B	51	(18)	25	(9)	7	(2)	202	(71)	0	(0)	**285**	**(2.1)**
	C	221	(83)	2	(1)	13	(5)	29	(11)	0	(0)	**265**	**(1.9)**
	D	421	(72)	17	(3)	27	(5)	116	(20)	3	(1)	**584**	**(4.2)**
	E	1145	(64)	94	(5)	257	(14)	280	(16)	0	(0)	**1776**	**(12.8)**
	F	837	(72)	38	(3)	90	(8)	200	(17)	0	(0)	**1165**	**(8.4)**
	G	36	(82)	1	(2)	4	(9)	3	(7)	0	(0)	**44**	**(0.3)**
	H	209	(68)	7	(2)	11	(4)	67	(22)	13	(4)	**307**	**(2.2)**
	I	545	(63)	14	(2)	38	(4)	239	(28)	23	(3)	**859**	**(6.2)**
	J	12	(15)	3	(4)	0	(0)	67	(82)	0	(0)	**82**	**(0.6)**
	K	502	(57)	23	(3)	40	(5)	314	(36)	4	(0)	**883**	**(6.4)**
	L	116	(51)	38	(17)	24	(11)	48	(21)	0	(0)	**226**	**(1.6)**
	M	175	(47)	17	(5)	29	(8)	151	(40)	1	(0)	**373**	**(2.7)**
	N	197	(58)	23	(7)	43	(13)	74	(22)	0	(0)	**337**	**(2.4)**
	O	337	(61)	23	(4)	50	(9)	142	(26)	0	(0)	**552**	**(4.0)**
	P	812	(83)	6	(1)	8	(1)	151	(15)	5	(1)	**982**	**(7.1)**
	Q	174	(32)	56	(10)	53	(10)	265	(48)	1	(0)	**549**	**(4.0)**
	R	422	(72)	11	(2)	57	(10)	95	(16)	0	(0)	**585**	**(4.2)**
	S	43	(26)	20	(12)	16	(10)	88	(53)	0	(0)	**167**	**(1.2)**
	T	91	(25)	30	(8)	28	(8)	217	(59)	0	(0)	**366**	**(2.6)**
	U	187	(48)	35	(9)	74	(19)	96	(24)	0	(0)	**392**	**(2.8)**
	V	772	(79)	2	(0)	164	(17)	37	(4)	8	(1)	**983**	**(7.1)**
	W	463	(71)	15	(2)	56	(9)	113	(17)	1	(0)	**648**	**(4.7)**
	X	405	(42)	28	(3)	95	(10)	428	(44)	9	(1)	**965**	**(7.0)**
	Y	13	(65)	2	(10)	1	(5)	4	(20)	0	(0)	**20**	**(0.1)**
2004 Total		**8345**	**(60.3)**	**560**	**(4.0)**	**1227**	**(8.9)**	**3637**	**(26.3)**	**68**	**(0.5)**	**13837**	
2005	**A**	146	(35)	18	(4)	20	(5)	230	(56)	0	(0)	**414**	**(3.0)**
	B	25	(11)	14	(6)	4	(2)	189	(81)	1	(0)	**233**	**(1.7)**
	C	176	(69)	10	(4)	15	(6)	36	(14)	17	(7)	**254**	**(1.8)**
	D	400	(69)	23	(4)	38	(7)	115	(20)	4	(1)	**580**	**(4.1)**
	E	1173	(78)	41	(3)	132	(9)	164	(11)	0	(0)	**1510**	**(10.8)**
	F	821	(73)	30	(3)	89	(8)	182	(16)	0	(0)	**1122**	**(8.0)**
	G	38	(76)	2	(4)	3	(6)	7	(14)	0	(0)	**50**	**(0.4)**
	H	221	(66)	9	(3)	13	(4)	70	(21)	23	(7)	**336**	**(2.4)**
	I	559	(66)	26	(3)	40	(5)	218	(26)	10	(1)	**853**	**(6.1)**
	J	27	(28)	8	(8)	2	(2)	58	(60)	1	(1)	**96**	**(0.7)**
	K	474	(54)	23	(3)	58	(7)	324	(37)	4	(0)	**883**	**(6.3)**
	L	129	(47)	33	(12)	33	(12)	79	(29)	0	(0)	**274**	**(2.0)**
	M	178	(50)	16	(5)	34	(10)	126	(35)	1	(0)	**355**	**(2.5)**
	N	208	(71)	7	(2)	37	(13)	43	(15)	0	(0)	**295**	**(2.1)**
	O	332	(54)	28	(5)	96	(16)	155	(25)	0	(0)	**611**	**(4.4)**
	P	829	(82)	13	(1)	36	(4)	134	(13)	5	(0)	**1017**	**(7.3)**
	Q	196	(34)	41	(7)	50	(9)	294	(51)	0	(0)	**581**	**(4.1)**
	R	444	(67)	10	(2)	75	(11)	136	(20)	0	(0)	**665**	**(4.7)**
	S	61	(34)	6	(3)	10	(6)	103	(57)	0	(0)	**180**	**(1.3)**
	T	105	(25)	59	(14)	33	(8)	216	(52)	0	(0)	**413**	**(2.9)**
	U	219	(54)	27	(7)	66	(16)	96	(24)	0	(0)	**408**	**(2.9)**
	V	0	(0)	0	(0)	0	(0)	0	(0)	909	(100)	**909**	**(6.5)**
	W	425	(61)	32	(5)	94	(13)	150	(21)	0	(0)	**701**	**(5.0)**
	X	404	(45)	15	(2)	45	(5)	343	(38)	84	(9)	**891**	**(6.4)**
	Y	186	(48)	4	(1)	13	(3)	188	(48)	0	(0)	**391**	**(2.8)**
2005 Total		**7776**	**(55.5)**	**495**	**(3.5)**	**1036**	**(7.4)**	**3656**	**(26.1)**	**1059**	**(7.6)**	**14022**	
Total		**16121**	**(57.9)**	**1055**	**(3.8)**	**2263**	**(8.1)**	**7293**	**(26.2)**	**1127**	**(4.0)**	**27859**	

Note: Birmingham Children's Hospital did not supply intervention data for 2005.

Figure 8.2.1 Map showing the proportion of children receiving invasive ventilation by SHA / HB



Note: The proportion of children invasively ventilated at any time during their stay on PICU has been calculated and then mapped by SHA. This measure is used as a crude proxy for level of care. Children were allocated to the SHA in which they were living based on their address at admission.

8.3 Summary

- Two thirds of all admissions to paediatric intensive care in 2004 - 2005 received invasive ventilation. However, there was wide variation across the NHS trusts from 12% - 95%.

- Geographical variations (by children's usual address) in the rate of invasive ventilation were also seen across England and Wales, with low rates in central and eastern areas of England. The highest rates were seen mainly in Wales.

9 BED ACTIVITY

9.1 Total number of bed days delivered

Bed activity is described in terms of the total number of bed days delivered using summary statistics (median and interquartile range (IQR)) on the number of children occupying a bed on any day, aggregated by year and month or trust and length of stay.

A bed is counted as occupied if a child was present on a unit for any part of a day. The total number of bed days delivered is calculated as the sum of children receiving intensive care in a PICU each day.

Median daily bed activity by month and year, and by NHS trust, is plotted using a box and whisker graph. This type of graph indicates the median by a line within the coloured box, the ends of which give the IQR. The 'whiskers' indicate values beyond the IQRs, although extreme outside values are not plotted. Children admitted prior to the report period, but discharged during it, are counted from 1 January 2004 until their discharge (or until 31 December 2005 if not discharged). Children admitted during the report period but discharged in 2006 (or who are still on the PICU) are counted from their admission date until 31 December 2005.

The maximum number of beds in each NHS trust is based on a survey carried out in 2005 and reconfirmed with PICU lead clinicians in 2006. These figures provide a very crude denominator to estimate overall 'occupancy' by comparing bed activity with available beds; they do not take account of periods when individual beds (or even units) are closed.

Figure 9.1.1 Total number of bed days delivered by age and sex

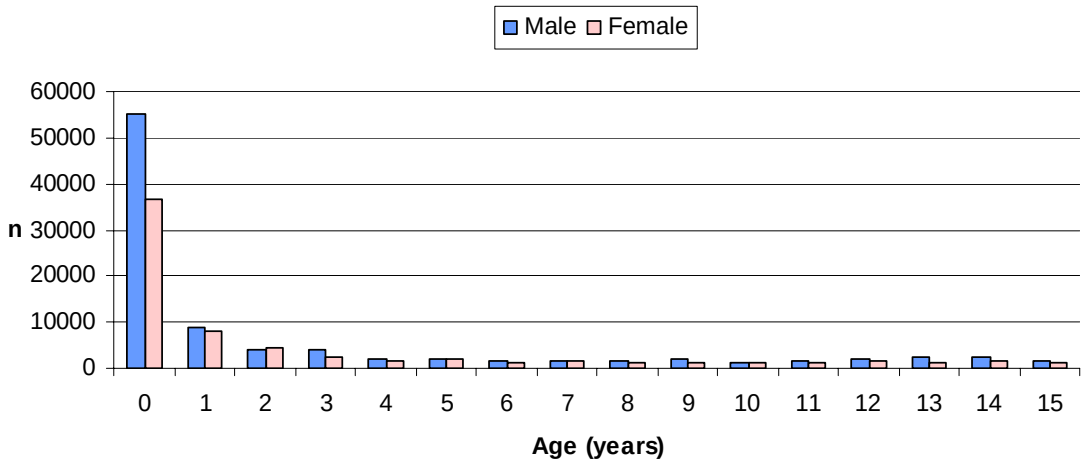


Table 9.1.1 Total number of bed days delivered by age and sex

Age (years)	Sex									
	Male		Female		Ambiguous		Unknown		Total	
	n	%	n	%	n	%	n	%	n	%
0	55222	(60)	36801	(40)	39	(0)	151	(0)	**92213**	**(56.4)**
1	8847	(53)	7964	(47)	5	(0)	17	(0)	**16833**	**(10.3)**
2	4071	(47)	4585	(53)	0	(0)	6	(0)	**8662**	**(5.3)**
3	3977	(61)	2461	(38)	35	(1)	3	(0)	**6476**	**(4.0)**
4	2133	(55)	1714	(45)	0	(0)	4	(0)	**3851**	**(2.4)**
5	1952	(50)	1930	(50)	0	(0)	12	(0)	**3894**	**(2.4)**
6	1750	(58)	1267	(42)	0	(0)	3	(0)	**3020**	**(1.8)**
7	1441	(45)	1746	(55)	0	(0)	0	(0)	**3187**	**(2.0)**
8	1520	(57)	1149	(43)	0	(0)	0	(0)	**2669**	**(1.6)**
9	2047	(67)	1020	(33)	0	(0)	0	(0)	**3067**	**(1.9)**
10	1403	(55)	1146	(45)	0	(0)	0	(0)	**2549**	**(1.6)**
11	1512	(55)	1218	(45)	0	(0)	0	(0)	**2730**	**(1.7)**
12	2003	(58)	1432	(42)	0	(0)	0	(0)	**3435**	**(2.1)**
13	2297	(63)	1343	(37)	0	(0)	4	(0)	**3644**	**(2.2)**
14	2474	(59)	1706	(41)	0	(0)	0	(0)	**4180**	**(2.6)**
15	1603	(54)	1375	(46)	0	(0)	0	(0)	**2978**	**(1.8)**
Total	**94252**	**(57.7)**	**68857**	**(42.1)**	**79**	**(0.0)**	**200**	**(0.1)**	**163388**	

Table 9.1.2 Total number of bed days delivered by age and NHS trust

Year	NHS trust	Age group (years) <1 n	<1 %	1-4 n	1-4 %	5-10 n	5-10 %	11-15 n	11-15 %	Total n	Total %
2004	**A**	1004	(40)	556	(22)	606	(24)	327	(13)	**2493**	**(3.0)**
	B	233	(43)	154	(29)	80	(15)	72	(13)	**539**	**(0.7)**
	C	784	(54)	308	(21)	166	(11)	201	(14)	**1459**	**(1.8)**
	D	2153	(57)	781	(21)	356	(9)	507	(13)	**3797**	**(4.6)**
	E	7884	(61)	2499	(19)	965	(8)	1479	(12)	**12827**	**(15.7)**
	F	3403	(67)	945	(19)	426	(8)	308	(6)	**5082**	**(6.2)**
	G	43	(25)	53	(31)	44	(26)	32	(19)	**172**	**(0.2)**
	H	625	(35)	601	(34)	338	(19)	221	(12)	**1785**	**(2.2)**
	I	2817	(57)	1080	(22)	552	(11)	478	(10)	**4927**	**(6.0)**
	J	99	(53)	47	(25)	24	(13)	18	(10)	**188**	**(0.2)**
	K	3721	(69)	624	(11)	594	(11)	489	(9)	**5428**	**(6.6)**
	L	574	(43)	444	(33)	145	(11)	164	(12)	**1327**	**(1.6)**
	M	678	(41)	403	(25)	284	(17)	272	(17)	**1637**	**(2.0)**
	N	1080	(57)	472	(25)	104	(5)	253	(13)	**1909**	**(2.3)**
	O	2197	(62)	844	(24)	338	(10)	177	(5)	**3556**	**(4.3)**
	P	4039	(63)	1469	(23)	396	(6)	483	(8)	**6387**	**(7.8)**
	Q	1936	(56)	900	(26)	286	(8)	344	(10)	**3466**	**(4.2)**
	R	1777	(54)	619	(19)	285	(9)	583	(18)	**3264**	**(4.0)**
	S	287	(27)	155	(15)	90	(9)	513	(49)	**1045**	**(1.3)**
	T	648	(38)	539	(31)	200	(12)	327	(19)	**1714**	**(2.1)**
	U	1509	(50)	849	(28)	442	(15)	209	(7)	**3009**	**(3.7)**
	V	3420	(57)	1370	(23)	668	(11)	577	(10)	**6035**	**(7.4)**
	W	3106	(67)	680	(15)	536	(12)	293	(6)	**4615**	**(5.6)**
	X	2637	(52)	1293	(25)	667	(13)	522	(10)	**5119**	**(6.3)**
	Y	33	(52)	15	(23)	7	(11)	9	(14)	**64**	**(0.1)**
2004 Total		**46687**	**(57.0)**	**17700**	**(21.6)**	**8599**	**(10.5)**	**8858**	**(10.8)**	**81844**	
2005	**A**	646	(39)	378	(23)	420	(25)	207	(13)	**1651**	**(2.0)**
	B	219	(38)	144	(25)	52	(9)	163	(28)	**578**	**(0.7)**
	C	668	(49)	358	(26)	160	(12)	171	(13)	**1357**	**(1.7)**
	D	1696	(45)	875	(23)	574	(15)	600	(16)	**3745**	**(4.6)**
	E	6414	(60)	2140	(20)	1239	(12)	814	(8)	**10607**	**(13.0)**
	F	3225	(62)	1215	(23)	448	(9)	298	(6)	**5186**	**(6.4)**
	G	61	(30)	69	(34)	28	(14)	44	(22)	**202**	**(0.2)**
	H	1242	(50)	744	(30)	185	(7)	317	(13)	**2488**	**(3.1)**
	I	2550	(54)	1204	(26)	474	(10)	489	(10)	**4717**	**(5.8)**
	J	101	(52)	50	(26)	23	(12)	22	(11)	**196**	**(0.2)**
	K	3766	(67)	1050	(19)	390	(7)	407	(7)	**5613**	**(6.9)**
	L	735	(51)	271	(19)	196	(14)	229	(16)	**1431**	**(1.8)**
	M	815	(37)	749	(34)	325	(15)	328	(15)	**2217**	**(2.7)**
	N	845	(52)	373	(23)	174	(11)	219	(14)	**1611**	**(2.0)**
	O	3174	(75)	634	(15)	249	(6)	166	(4)	**4223**	**(5.2)**
	P	4031	(63)	1457	(23)	418	(7)	483	(8)	**6389**	**(7.8)**
	Q	1842	(51)	724	(20)	623	(17)	436	(12)	**3625**	**(4.4)**
	R	1730	(54)	511	(16)	458	(14)	483	(15)	**3182**	**(3.9)**
	S	466	(45)	170	(16)	88	(8)	319	(31)	**1043**	**(1.3)**
	T	441	(26)	602	(35)	354	(21)	299	(18)	**1696**	**(2.1)**
	U	1260	(48)	853	(32)	390	(15)	131	(5)	**2634**	**(3.2)**
	V	3500	(58)	1408	(23)	563	(9)	573	(9)	**6044**	**(7.4)**
	W	2081	(49)	993	(24)	848	(20)	303	(7)	**4225**	**(5.2)**
	X	3025	(63)	726	(15)	752	(16)	290	(6)	**4793**	**(5.9)**
	Y	993	(47)	424	(20)	356	(17)	318	(15)	**2091**	**(2.6)**
2005 Total		**45526**	**(55.8)**	**18122**	**(22.2)**	**9787**	**(12.0)**	**8109**	**(9.9)**	**81544**	
Total		**92213**	**(56.4)**	**35822**	**(21.9)**	**18386**	**(11.3)**	**16967**	**(10.4)**	**163388**	

9.2 Bed activity

Figure 9.2.1 Bed activity by month

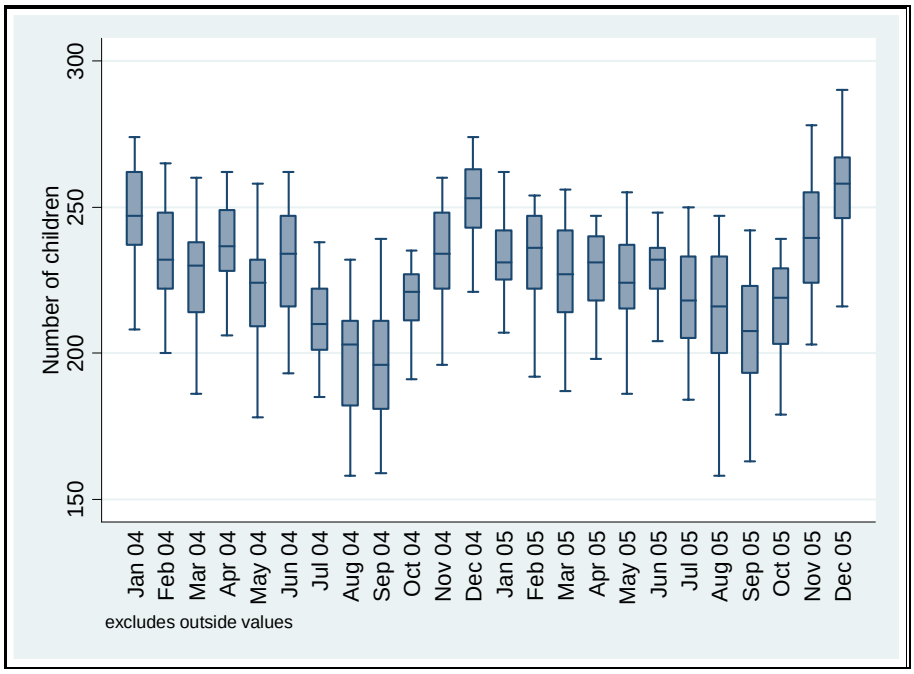


Table 9.2.1 Bed activity by month

Year	Month	Bed activity (days) Median	(IQR)
2004	**1**	247	(237-262)
	2	232	(222-248)
	3	230	(214-238)
	4	236.5	(228-249)
	5	224	(209-232)
	6	234	(216-247)
	7	210	(201-222)
	8	203	(182-211)
	9	196	(181-211)
	10	221	(211-227)
	11	234	(222-248)
	12	253	(243-263)
2005	**1**	231	(225-242)
	2	236	(222-247)
	3	227	(214-242)
	4	231	(218-240)
	5	224	(215-237)
	6	232	(222-236)
	7	218	(205-233)
	8	216	(200-233)
	9	207.5	(193-223)
	10	219	(203-229)
	11	239.5	(224-255)
	12	258	(246-267)

Figure 9.2.2 Bed activity by NHS trust (2004)

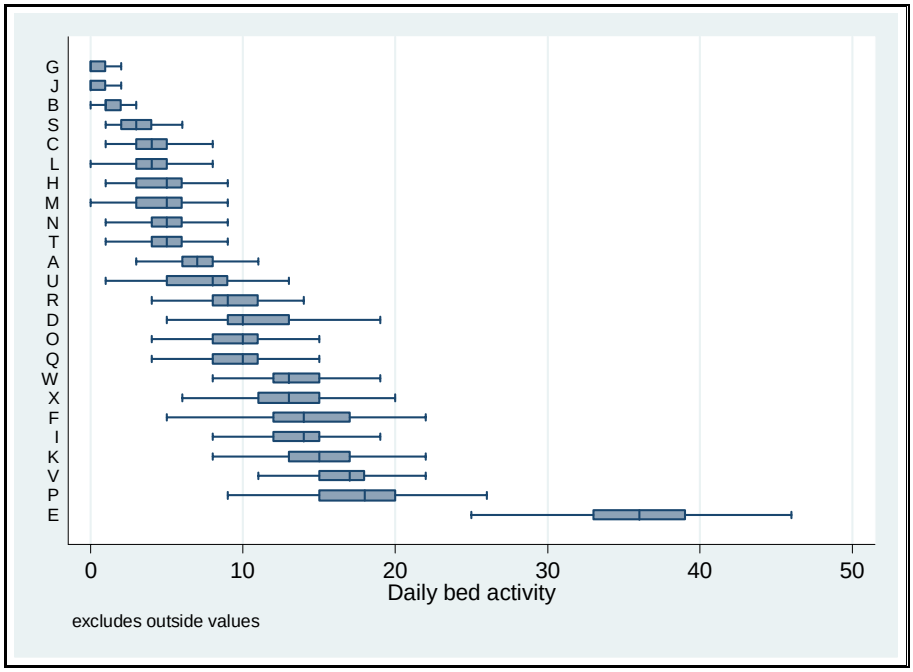


Figure 9.2.3 Bed activity by NHS trust (2005)

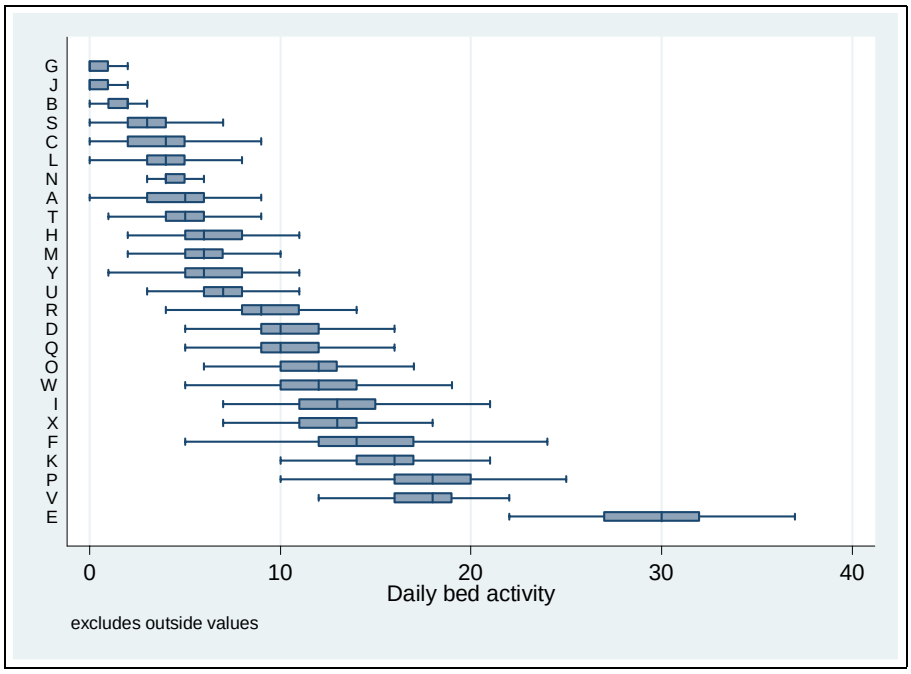


Figure 9.2.4 Bed activity by NHS trust (2004 - 2005) with maximum number of available beds

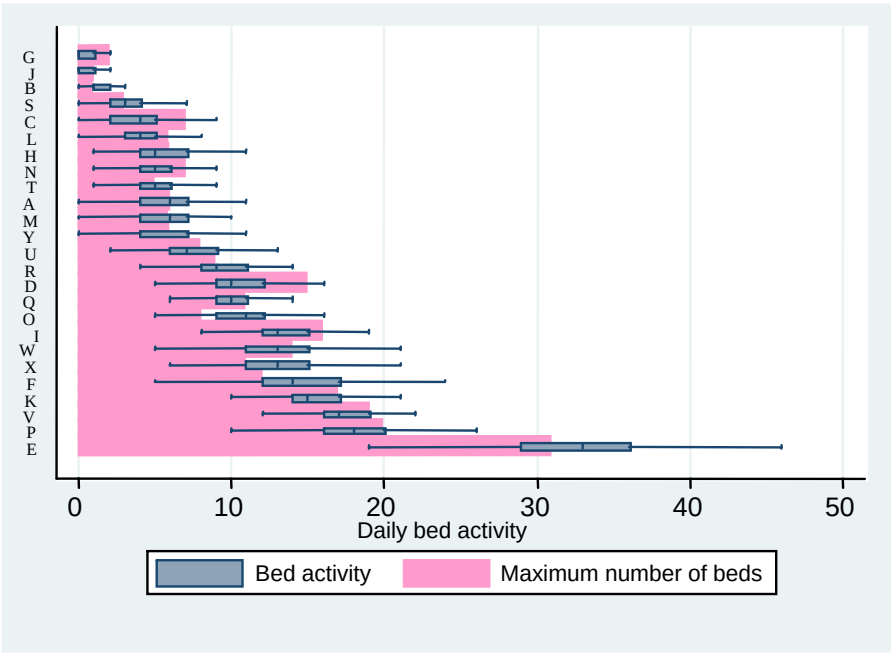


Table 9.2.2 Bed activity by NHS trust (2004 - 2005)

NHS trust	Bed activity (days)			
	2004		2005	
	Median	(IQR)	Median	(IQR)
A	7	(6-8)	5	(3-6)
B	1	(1-2)	2	(1-2)
C	4	(3-5)	4	(2-5)
D	10	(9-13)	10	(9-12)
E	36	(33-39)	30	(27-32)
F	14	(12-17)	14	(12-17)
G	0	(0-1)	0	(0-1)
H	5	(3-6)	6	(5-8)
I	14	(12-15)	13	(11-15)
J	0	(0-1)	0	(0-1)
K	15	(13-17)	16	(14-17)
L	4	(3-5)	4	(3-5)
M	5	(3-6)	6	(5-7)
N	5	(4-6)	4	(4-5)
O	10	(8-11)	12	(10-13)
P	18	(15-20)	18	(16-20)
Q	10	(8-11)	10	(9-12)
R	9	(8-11)	9	(8-11)
S	3	(2-4)	3	(2-4)
T	5	(4-6)	5	(4-6)
U	8	(5-9)	7	(6-8)
V	17	(15-18)	18	(16-19)
W	13	(12-15)	12	(10-14)
X	13	(11-15)	13	(11-14)
Y	-	-	6	(5-8)

Table 9.2.3 Length of stay by age and NHS trust

NHS trust	Age group (years)							
	< 1		1-4		5-10		11-15	
	Median	(IQR)	Median	(IQR)	Median	(IQR)	Median	(IQR)
A	3	(2-6)	2	(2-5)	2	(2-4)	2	(2-3)
B	2	(1-2)	2	(1-3)	2	(1-2)	2	(1-3)
C	4	(2-7)	3	(2-7)	2	(2-5)	2	(2-3.5)
D	4	(2-7)	3	(2-7)	2	(2-5)	3	(2-6)
E	5	(3-8)	3	(2-6)	3	(2-5)	3	(2-6)
F	4	(2-6)	3	(2-4)	3	(2-5)	2	(2-3)
G	2	(1-6)	4	(2-8)	3	(2-4)	3	(2-4)
H	3	(2-6)	2	(2-5)	3	(2-5)	3	(2-5)
I	4	(2-7)	2	(2-4)	2	(2-3)	3	(2-4)
J	2	(2-3)	2	(1-2)	2	(1-2)	2	(1-2)
K	4	(2-8)	2	(2-5)	2	(2-3)	2	(2-4)
L	4	(2-7)	2	(2-5)	2	(2-4)	2	(2-3)
M	4	(2-6)	2	(2-5)	3	(2-4.5)	2	(2-4)
N	4	(2-7)	2	(2-5)	2	(2-3)	2	(2-6)
O	4.5	(2-8)	3	(2-5)	2	(2-3)	2	(2-3)
P	4	(2-7)	2	(2-6)	2	(2-4)	2	(2-4)
Q	4	(2-7)	3	(2-6)	2	(2-5)	2	(2-3)
R	3	(2-5)	2	(2-4)	2	(2-5)	2	(2-4)
S	3	(2-7)	2	(1-3)	2	(2-3)	2	(2-4)
T	2	(2-5)	2	(2-4)	2	(2-4)	3	(2-4)
U	5	(3-8)	3	(2-6)	3	(2-5)	2	(2-5)
V	4	(2-8)	2	(2-4)	2	(2-5)	3	(2-5)
W	4	(3-8)	3	(2-5)	3	(2-5)	3	(2-4)
X	3	(1-7)	2	(1-3)	1	(1-2)	2	(1-3)
Y	4	(3-6)	3	(2-6)	3	(2-4.5)	3	(2-4)

Table 9.2.4 Length of stay by primary diagnostic group and NHS trust

NHS trust	Diagnostic group																							
	Blood / lymphatic		Body wall and cavities		Cardiovascular		Endocrine / metabolic		Gastrointestinal		Infection		Multisystem		Musculoskeletal		Neurological		Oncology		Respiratory		Trauma		**Other**	
	Median	(IQR)	Median	(IQR)	Median	(IQR)	Median	(IQR)	Median	(IQR)	Median	(IQR)	Median	(IQR)	Median	(IQR)	Median	(IQR)	Median	(IQR)	Median	(IQR)	Median	(IQR)	Median	(IQR)
A	2	(1-5)	2	(1-4)	3	(2-5)	2	(2-3)	2	(2-3)	4	(2-7)	2.5	(2-10)	2	(2-3)	3	(2-4)	3	(2-4)	3	(2-7)	3	(2-6)	2	(2-4)
B	2.5	(2-3)	1	(1-1)	1	(1-1)	2	(1-3)	2	(1-3)	2	(1-2)	-	(---)	2	(1-2)	2	(1-2.5)	1	(1-1)	2	(1-3)	1	(1-2)	2	(1-2)
C	4	(2-7)	2	(2-5)	3	(2-6)	2.5	(1-6)	3	(2-5)	5	(2.5-7)	4	(2-20)	2	(2-3)	2	(2-4)	2	(2-3)	5	(3-8)	2	(2-8)	2	(2-3)
D	6.5	(2.5-14)	2	(1-3)	3	(2-7)	5	(2-8)	2	(2-4)	4	(2-7)	4	(2-5)	2	(2-3)	2	(2-5)	2	(2-3)	5	(3-9)	3	(2-6)	2	(2-3)
E	3	(2-7)	6	(4-13)	4	(2-7)	3	(2-7.5)	5	(2-10)	4	(2-7)	4	(1-8)	2	(2-2)	3	(2-5)	3	(2-6)	5	(3-8)	3	(2-6)	3	(2-6)
F	3	(2-3)	2	(1-3)	3	(2-5)	2	(2-3)	3	(2-4)	3	(2-5)	8	(4-12)	2	(2-2)	2	(2-3)	2	(2-17)	4	(3-7)	2.5	(2-4)	2	(2-4)
G	-	(---)	-	(---)	1.5	(1-3.5)	1.5	(1-2)	1	(1-2)	2	(1-6)	-	(---)	-	(---)	4	(2-7)	2	(2-2)	3	(1-7)	3	(2-5)	2.5	(2-4)
H	2.5	(1-4)	2	(1-4)	3	(2-5.5)	3	(2-5)	2	(2-5)	4	(2-7)	-	(---)	2	(2-2)	3	(2-5)	3	(2-5)	4	(2-8)	3	(2-5)	2	(2-4)
I	2	(1-5)	3	(2-14.5)	3	(2-5)	3	(2-6)	3	(2-4)	4	(2-6)	2	(2-2)	2	(2-2)	2	(2-3)	2	(2-3)	4	(2-8)	3	(2-4)	3	(2-5)
J	1.5	(1-3.5)	2	(2-3)	1	(1-1)	2	(1-3)	2	(2-3)	2.5	(2-3.5)	-	(---)	-	(---)	1.5	(1-2)	2	(2-2)	2	(1-3)	2	(2-2)	2	(1-2)
K	5	(3-17)	6	(2-14)	3	(2-7)	2	(2-6)	3	(2-6)	3	(2-5)	4	(2-9)	2	(2-3.5)	2	(2-3)	2	(2-3)	4	(2-8)	2	(2-3)	2	(2-5)
L	4	(2.5-4)	3	(2.5-3.5)	2	(2-6)	3	(2-6)	2	(1-2)	5	(3-6)	-	(---)	2	(2-3)	2	(2-4)	2	(2-2)	3	(2-7)	2.5	(1-3)	2	(2-3)
M	6.5	(4-9)	3	(2-5)	3	(2-5)	2	(1-2)	3	(2-4)	4	(2-6)	2	(2-2)	2	(2-3)	2	(2-4)	2	(2-3)	3	(2-7)	3	(2-7)	2	(2-4)
N	-	(---)	5	(2-8)	3	(2-5)	3.5	(3-10)	3	(2-7)	2	(2-6)	2	(1-3)	2	(2-2)	2	(2-3)	2	(2-3)	5	(2-7)	3	(2-6)	2	(2-4)
O	-	(---)	3	(2-12)	3	(2-6)	4	(4-4)	3	(2-10.5)	2.5	(2-9)	-	(---)	2	(2-6.5)	6.5	(2-9)	2	(2-2)	3	(2-7)	2	(2-2)	3	(2-9)
P	5	(1-23)	5	(2-9)	3	(2-6)	4.5	(2-7.5)	3	(2-5)	4	(2-7)	2	(1-4)	2	(2-2)	2	(2-5)	2	(2-5)	5	(3-9)	2	(2-7)	2.5	(2-7)
Q	2	(2-6)	6	(4-10)	3	(2-7)	2	(2-4)	3	(2-5)	4	(2-6)	-	(---)	2	(2-2)	3	(2-5)	2	(2-3)	4	(2-7)	3	(2-6)	2	(2-4)
R	1	(1-2.5)	2	(1-3)	2	(2-5)	2.5	(2-4)	2	(1-3)	3	(2-5)	1	(1-1)	2	(2-2)	2	(2-4)	2	(1-3)	4	(2-7)	3	(2-9)	2	(1-4)
S	-	(---)	-	(---)	2	(1-3)	2	(2-3)	2	(1-3)	2	(2-4)	-	(---)	2	(2-3)	2	(2-3)	-	(---)	3	(2-7)	3.5	(2-8)	2.5	(2-3.5)
T	2	(2-2)	2	(1-3)	2	(2-3)	3	(2-5)	2	(2-3)	3	(2-4.5)	2	(2-2.5)	2.5	(2-4)	2	(1-3)	2	(2-3)	3	(2-7)	3	(2-6)	2	(2-3)
U	3	(2-5)	5.5	(3-8)	3	(1.5-5.5)	2.5	(2-5)	3	(2-7)	6	(4-11)	-	(---)	2	(2-4)	3	(2-4)	1	(1-1)	4	(2-8)	2	(2-2)	2	(1-4)
V	4	(2-6)	4	(2-5)	3	(2-6)	3	(2-5)	3	(2-8)	3	(2-5)	3	(2-3)	2	(2-4)	2	(2-5)	3	(2-5)	5	(3-9)	3	(2-9)	2	(2-4)
W	4	(3-8)	3	(2-4)	3	(2-5)	3	(2-3)	3	(2-7)	3	(2-6)	-	(---)	1.5	(1-2)	3	(2-6)	2	(2-4)	5	(2-8)	3.5	(2-7)	3	(2-4)
X	2	(1-3)	6	(2-8)	2	(1-3)	2	(1-3.5)	3	(2-4)	2	(2-5)	9.5	(3.5-21.5)	2.5	(2-3)	2	(1-4)	3	(2-4)	5	(2-8)	2	(1-2)	2	(1-3)
Y	-	(---)	5	(3-8)	4	(2-8)	2	(2-4)	3.5	(2-5)	4	(2-7.5)	3	(2-3)	2	(1-3)	3	(2-5)	2	(2-4)	5	(2-8)	3	(2-4.5)	3	(2-5)

9.3 Summary

- A total of 163,388 bed days were provided for children under 16 years of age in PICUs in the period 2004 - 2005.
- More than 50% of these bed days were for children aged under 12 months.
- The median number of occupied beds peaks in the winter months.
- The comparison of bed activity with the reported maximum available number of beds indicates that most trusts have periods when they apparently exceed their capacity. In part, this is an artefact as a bed may be ‘occupied’ by more than one child as a bed is counted as occupied for the whole day even if a child is discharged in the morning. It does, however, reflect overall workload.

10 OUTCOME DATA

10.1 Outcome at PICU discharge

PICU mortality data are described in terms of crude mortality by age and sex for England, Wales and Edinburgh combined, and by trust using unadjusted and risk-adjusted standardized mortality ratios (SMRs). Unadjusted SMRs are calculated by dividing the expected number of deaths based on the national data by the observed number of deaths in each trust. In addition, risk-adjusted SMRs are calculated by dividing the expected number of deaths predicted by PIM[1] by the observed number of deaths in each trust. We have used the original version of PIM with revised coefficients supplied by the UK PICOS that give a better calibration as they are based on a more recent data set.

PICU mortality funnel plots are presented for 2004, 2005 and combined years to provide a visual means of comparing unadjusted and adjusted SMRs between trusts without imposing the ranking observed in league tables. The SMRs are plotted on the y-axis against the number of admissions to the trust on the x-axis. Higher mortality rates are represented by points plotted above the line of unity with those appearing outside the upper control limit indicating an unusual excess mortality. Lower mortality rates are represented by points plotted below the line of unity and those falling below the lower control limit indicate unusually low mortality. In order to satisfy the condition that if the overall distribution of the mortality ratios is random there exists an approximately 5% chance of a unit falling outside the control limits, then the upper and lower control limits constructed at an individual unit level must represent not 95% confidence intervals, but 99.9% confidence intervals around a mortality ratio of one by number of admissions.[2] This is analogous to increasing the confidence interval (or significance level) when correcting for multiple comparisons in data containing numerous groups. This means that the funnel plots are drawn in such a way that there is an approximately 5% chance of a unit falling outside the control limits if the distribution of SMRs is random.

Risk-adjusted SMRs by SHA have been produced by allocating children to the SHA in which they were living based on their address at admission. These ratios have then been expressed as a percentage and mapped to illustrate the range of variability in SMRs between SHAs. It should be noted that these ratios have not been subject to any spatial smoothing and confidence intervals are relatively wide in areas of low population.

Table 10.1.1 Admissions by unit discharge status and age

Unit discharge status	Age group (years)								Total	
	<1		1-4		5-10		11-15			
	n	%	n	%	n	%	n	%	n	%
Alive	12651	(48)	6610	(25)	3747	(14)	3448	(13)	**26456**	**(95.0)**
Dead	725	(52)	297	(21)	167	(12)	196	(14)	**1385**	**(5.0)**
Unknown	10	(56)	6	(33)	1	(6)	1	(6)	**18**	**(0.1)**
Total	**13386**	**(48.0)**	**6913**	**(24.8)**	**3915**	**(14.1)**	**3645**	**(13.1)**	**27859**	

Table 10.1.2 Admissions by unit discharge status and age (age less than one year)

Unit discharge status	Age group (months)								Total	
	<1		1-2		3-5		6-11			
	n	%	n	%	n	%	n	%	n	%
Alive	4381	(35)	3012	(24)	2573	(20)	2685	(21)	**12651**	**(94.5)**
Dead	333	(46)	143	(20)	118	(16)	131	(18)	**725**	**(5.4)**
Unknown	2	(20)	3	(30)	1	(10)	4	(40)	**10**	**(0.1)**
Total	**4716**	**(35.2)**	**3158**	**(23.6)**	**2692**	**(20.1)**	**2820**	**(21.1)**	**13386**	

Table 10.1.3 Admissions by unit discharge status and sex

Unit discharge status	Sex								Total	
	Male		Female		Ambiguous		Unknown			
	n	%	n	%	n	%	n	%	n	%
Alive	15157	(57)	11258	(43)	9	(0)	32	(0)	**26456**	**(95.0)**
Dead	760	(55)	621	(45)	1	(0)	3	(0)	**1385**	**(5.0)**
Unknown	11	(61)	7	(39)	0	(0)	0	(0)	**18**	**(0.1)**
Total	**15928**	**(57.2)**	**11886**	**(42.7)**	**10**	**(0.0)**	**35**	**(0.1)**	**27859**	

Table 10.1.4 Admissions by unit discharge status and sex (age less than one year)

Unit discharge status	Sex								Total	
	Male		Female		Ambiguous		Unknown			
	n	%	n	%	n	%	n	%	n	%
Alive	7541	(60)	5086	(40)	5	(0)	19	(0)	**12651**	**(94.5)**
Dead	408	(56)	313	(43)	1	(0)	3	(0)	**725**	**(5.4)**
Unknown	7	(70)	3	(30)	0	(0)	0	(0)	**10**	**(0.1)**
Total	**7956**	**(59.4)**	**5402**	**(40.4)**	**6**	**(0.0)**	**22**	**(0.2)**	**13386**	

Table 10.1.5 Admissions by unit discharge status and NHS trust

Year	NHS trust	Unit discharge status: Alive n	Alive %	Dead n	Dead %	Unknown n	Unknown %	Total n	Total %
2004	**A**	423	(96)	19	(4)	0	(0)	**442**	**(3.2)**
	B	283	(99)	2	(1)	0	(0)	**285**	**(2.1)**
	C	250	(94)	15	(6)	0	(0)	**265**	**(1.9)**
	D	547	(94)	37	(6)	0	(0)	**584**	**(4.2)**
	E	1651	(93)	125	(7)	0	(0)	**1776**	**(12.8)**
	F	1110	(95)	55	(5)	0	(0)	**1165**	**(8.4)**
	G	40	(91)	4	(9)	0	(0)	**44**	**(0.3)**
	H	282	(92)	25	(8)	0	(0)	**307**	**(2.2)**
	I	807	(94)	51	(6)	1	(0)	**859**	**(6.2)**
	J	82	(100)	0	(0)	0	(0)	**82**	**(0.6)**
	K	839	(95)	44	(5)	0	(0)	**883**	**(6.4)**
	L	216	(96)	10	(4)	0	(0)	**226**	**(1.6)**
	M	352	(94)	21	(6)	0	(0)	**373**	**(2.7)**
	N	325	(96)	12	(4)	0	(0)	**337**	**(2.4)**
	O	533	(97)	19	(3)	0	(0)	**552**	**(4.0)**
	P	931	(95)	51	(5)	0	(0)	**982**	**(7.1)**
	Q	534	(97)	15	(3)	0	(0)	**549**	**(4.0)**
	R	568	(97)	17	(3)	0	(0)	**585**	**(4.2)**
	S	164	(98)	3	(2)	0	(0)	**167**	**(1.2)**
	T	355	(97)	11	(3)	0	(0)	**366**	**(2.6)**
	U	372	(95)	20	(5)	0	(0)	**392**	**(2.8)**
	V	902	(92)	78	(8)	3	(0)	**983**	**(7.1)**
	W	616	(95)	32	(5)	0	(0)	**648**	**(4.7)**
	X	928	(96)	36	(4)	1	(0)	**965**	**(7.0)**
	Y	18	(90)	2	(10)	0	(0)	**20**	**(0.1)**
2004 Total		**13128**	**(94.9)**	**704**	**(5.1)**	**5**	**(0.0)**	**13837**	
2005	**A**	406	(98)	8	(2)	0	(0)	**414**	**(3.0)**
	B	232	(100)	1	(0)	0	(0)	**233**	**(1.7)**
	C	242	(95)	12	(5)	0	(0)	**254**	**(1.8)**
	D	541	(93)	39	(7)	0	(0)	**580**	**(4.1)**
	E	1406	(93)	104	(7)	0	(0)	**1510**	**(10.8)**
	F	1071	(95)	51	(5)	0	(0)	**1122**	**(8.0)**
	G	41	(82)	9	(18)	0	(0)	**50**	**(0.4)**
	H	314	(93)	19	(6)	3	(1)	**336**	**(2.4)**
	I	806	(94)	47	(6)	0	(0)	**853**	**(6.1)**
	J	95	(99)	1	(1)	0	(0)	**96**	**(0.7)**
	K	846	(96)	37	(4)	0	(0)	**883**	**(6.3)**
	L	261	(95)	11	(4)	2	(1)	**274**	**(2.0)**
	M	345	(97)	10	(3)	0	(0)	**355**	**(2.5)**
	N	280	(95)	15	(5)	0	(0)	**295**	**(2.1)**
	O	596	(98)	15	(2)	0	(0)	**611**	**(4.4)**
	P	947	(93)	68	(7)	2	(0)	**1017**	**(7.3)**
	Q	565	(97)	15	(3)	1	(0)	**581**	**(4.1)**
	R	645	(97)	20	(3)	0	(0)	**665**	**(4.7)**
	S	176	(98)	4	(2)	0	(0)	**180**	**(1.3)**
	T	398	(96)	15	(4)	0	(0)	**413**	**(2.9)**
	U	385	(94)	23	(6)	0	(0)	**408**	**(2.9)**
	V	825	(91)	82	(9)	2	(0)	**909**	**(6.5)**
	W	670	(96)	30	(4)	1	(0)	**701**	**(5.0)**
	X	855	(96)	35	(4)	1	(0)	**891**	**(6.4)**
	Y	380	(97)	10	(3)	1	(0)	**391**	**(2.8)**
2005 Total		**13328**	**(95.1)**	**681**	**(4.9)**	**13**	**(0.1)**	**14022**	
Total		**26456**	**(95.0)**	**1385**	**(5.0)**	**18**	**(0.1)**	**27859**	

Table 10.1.6 Admissions by unit discharge destination and age

Discharge destination	Age group (years)								Total	
	<1		1-4		5-10		11-15			
	n	%	n	%	n	%	n	%	n	%
Normal residence	123	(19)	251	(38)	171	(26)	110	(17)	**655**	**(2.5)**
Hospice	9	(29)	10	(32)	8	(26)	4	(13)	**31**	**(0.1)**
Same hospital	9973	(47)	5356	(25)	3101	(14)	2987	(14)	**21417**	**(81.0)**
Other hospital	2413	(59)	903	(22)	432	(11)	311	(8)	**4059**	**(15.3)**
Unknown	133	(45)	90	(31)	35	(12)	36	(12)	**294**	**(1.1)**
Total	**12651**	**(47.8)**	**6610**	**(25.0)**	**3747**	**(14.2)**	**3448**	**(13.0)**	**26456**	

Figure 10.1.1 PICU standardised mortality ratios by NHS trust with 99.9% control limits 2004: unadjusted

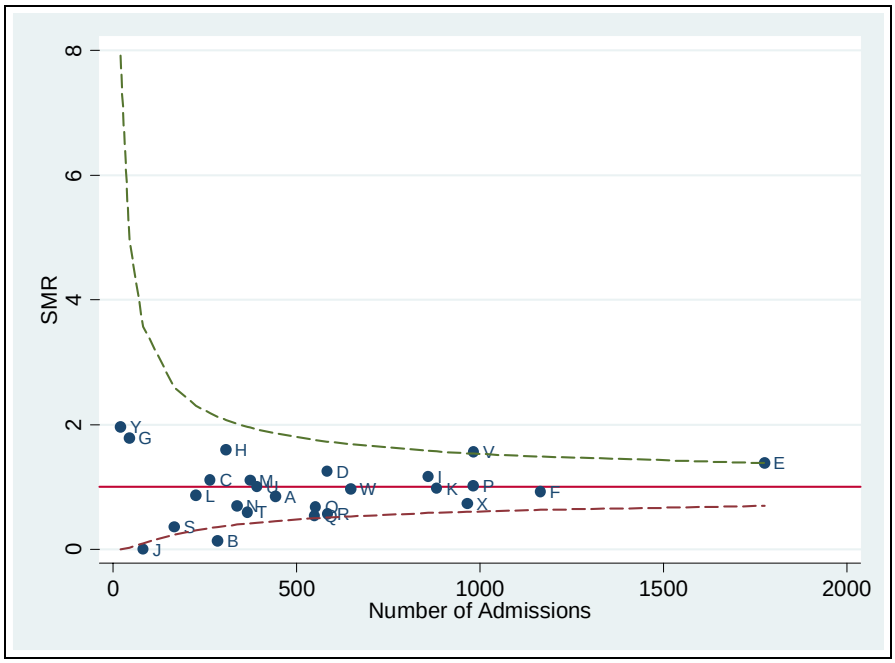


Figure 10.1.2 PICU standardised mortality ratios by NHS trust with 99.9% control limits 2004: risk adjusted (PIM)

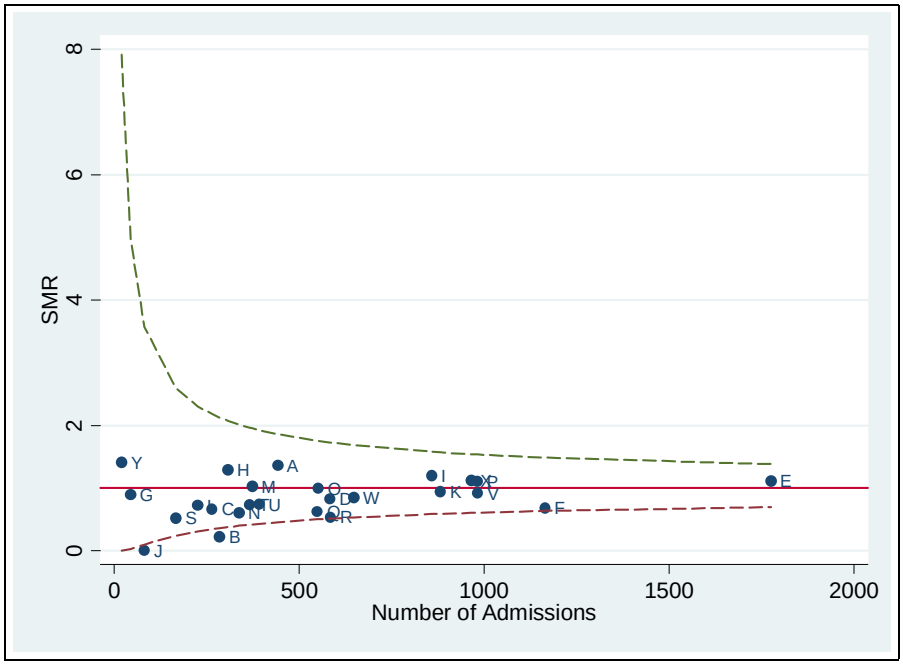


Figure 10.1.3 PICU standardised mortality ratios by NHS trust with 99.9% control limits 2005: unadjusted

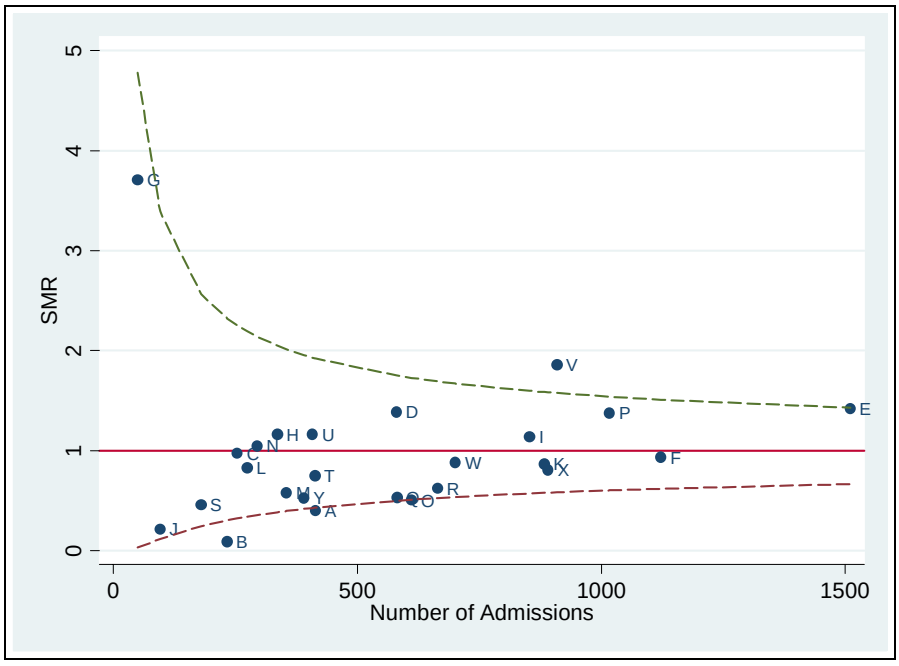


Figure 10.1.4 PICU standardised mortality ratios by NHS trust with 99.9% control limits 2005: risk adjusted (PIM)

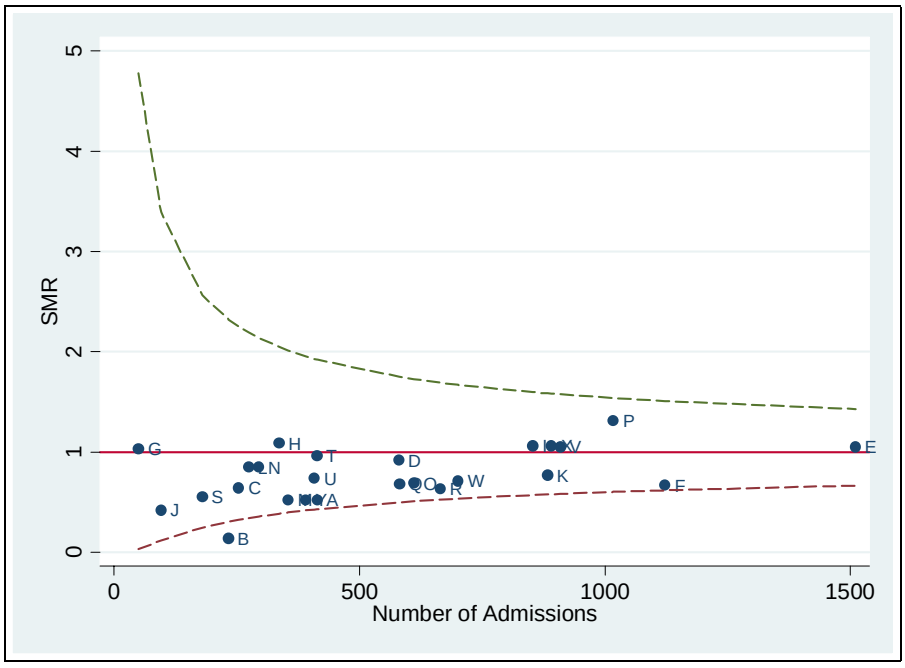


Figure 10.1.5 PICU standardised mortality ratios by NHS trust with 99.9% control limits 2004 - 2005 combined: unadjusted

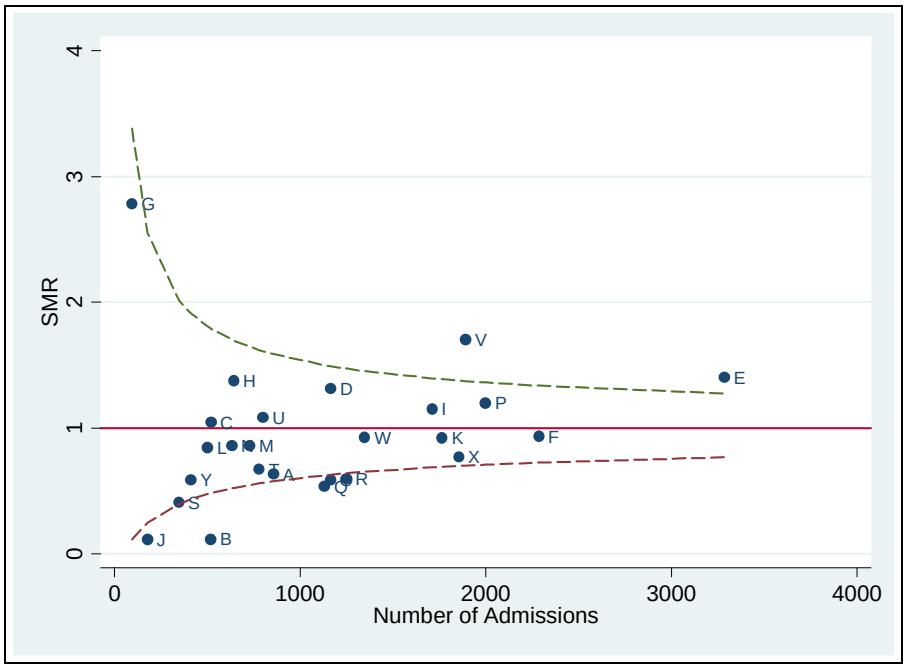


Figure 10.1.6 PICU standardised mortality ratios by NHS trust with 99.9% control limits 2004 - 2005 combined: risk adjusted (PIM)

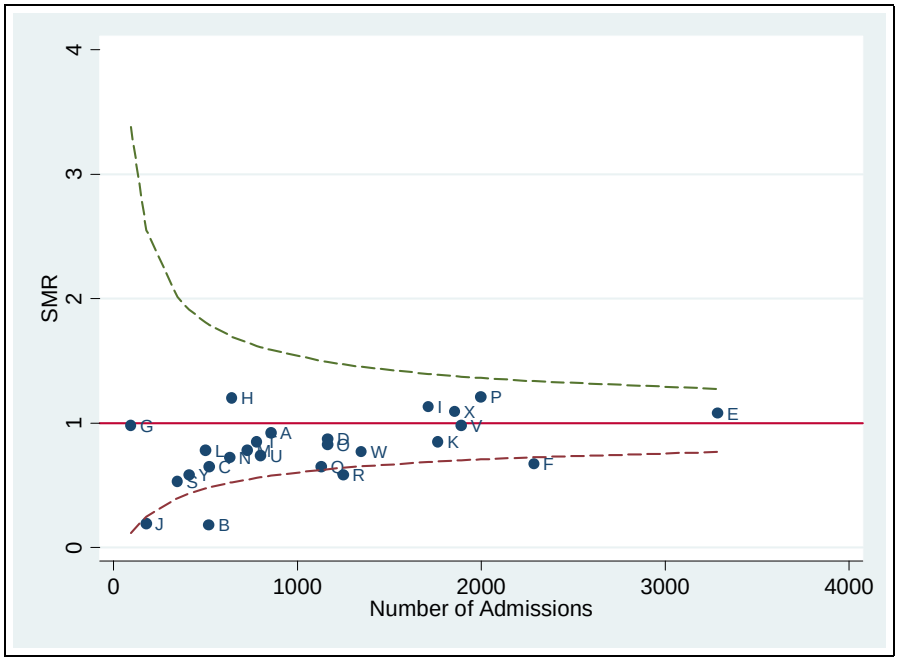


Table 10.1.7 PICU mortality by primary diagnostic group 2004 - 2005 combined: risk adjusted (PIM)

Diagnostic group	Number of admissions	Standardised Mortality Ratio					
		Unadjusted (95% CI)			Adjusted (95% CI)		
		SMR	Lower	Upper	SMR	Lower	Upper
Blood and lymphatic	204	**1.48**	0.84	2.38	**1.33**	0.75	2.14
Body wall and cavities	610	**0.86**	0.56	1.24	**0.91**	0.60	1.31
Cardiac	8308	**0.92**	0.84	1.02	**0.94**	0.85	1.04
Endocrine/metabolic	563	**2.29**	1.78	2.87	**1.27**	0.99	1.59
Gastrointestinal	1867	**1.08**	0.88	1.30	**1.22**	1.00	1.48
Infection	1331	**1.83**	1.53	2.17	**1.13**	0.94	1.34
Multisystem	58	**0.00**	0.00	1.24	**0.00**	0.00	1.99
Musculoskeletal	941	**0.09**	0.02	0.22	**0.24**	0.06	0.60
Neurological	3234	**1.23**	1.06	1.40	**0.85**	0.74	0.97
Oncology	1045	**0.85**	0.62	1.13	**1.46**	1.07	1.94
Respiratory	7178	**0.76**	0.67	0.85	**0.61**	0.54	0.68
Trauma	1100	**1.57**	1.27	1.92	**1.05**	0.85	1.29
Other	1420	**1.06**	0.84	1.32	**1.03**	0.82	1.29

Table 10.1.8 Standardised mortality ratios 2004 by NHS trust

NHS trust	Number of admissions	Standardised Mortality Ratio					
		Unadjusted (95% CI)			Adjusted (95% CI)		
		SMR	Lower	Upper	SMR	Lower	Upper
A	442	**0.84**	0.51	1.30	**1.36**	0.82	2.09
B	285	**0.14**	0.02	0.49	**0.22**	0.03	0.79
C	265	**1.11**	0.63	1.80	**0.66**	0.37	1.06
D	584	**1.25**	0.88	1.70	**0.82**	0.58	1.12
E	1776	**1.38**	1.16	1.64	**1.11**	0.93	1.32
F	1165	**0.93**	0.70	1.20	**0.68**	0.51	0.88
G	44	**1.79**	0.50	4.26	**0.89**	0.25	2.13
H	307	**1.60**	1.05	2.32	**1.29**	0.84	1.86
I	859	**1.17**	0.88	1.52	**1.20**	0.90	1.57
J	82	**0.00**	0.00	0.87	**0.00**	0.00	1.23
K	883	**0.98**	0.72	1.30	**0.94**	0.69	1.25
L	226	**0.87**	0.42	1.57	**0.72**	0.35	1.31
M	373	**1.11**	0.69	1.67	**1.03**	0.65	1.55
N	337	**0.70**	0.36	1.21	**0.60**	0.31	1.03
O	552	**0.68**	0.41	1.05	**0.99**	0.60	1.53
P	982	**1.02**	0.76	1.33	**1.10**	0.82	1.43
Q	549	**0.54**	0.30	0.88	**0.62**	0.35	1.01
R	585	**0.57**	0.33	0.91	**0.53**	0.31	0.84
S	167	**0.35**	0.07	1.01	**0.52**	0.11	1.50
T	366	**0.59**	0.30	1.04	**0.73**	0.37	1.29
U	392	**1.00**	0.62	1.53	**0.74**	0.46	1.12
V	983	**1.56**	1.24	1.93	**0.92**	0.73	1.14
W	648	**0.97**	0.67	1.36	**0.85**	0.59	1.19
X	965	**0.73**	0.52	1.01	**1.12**	0.79	1.54
Y	20	**1.96**	0.24	6.22	**1.41**	0.17	4.45

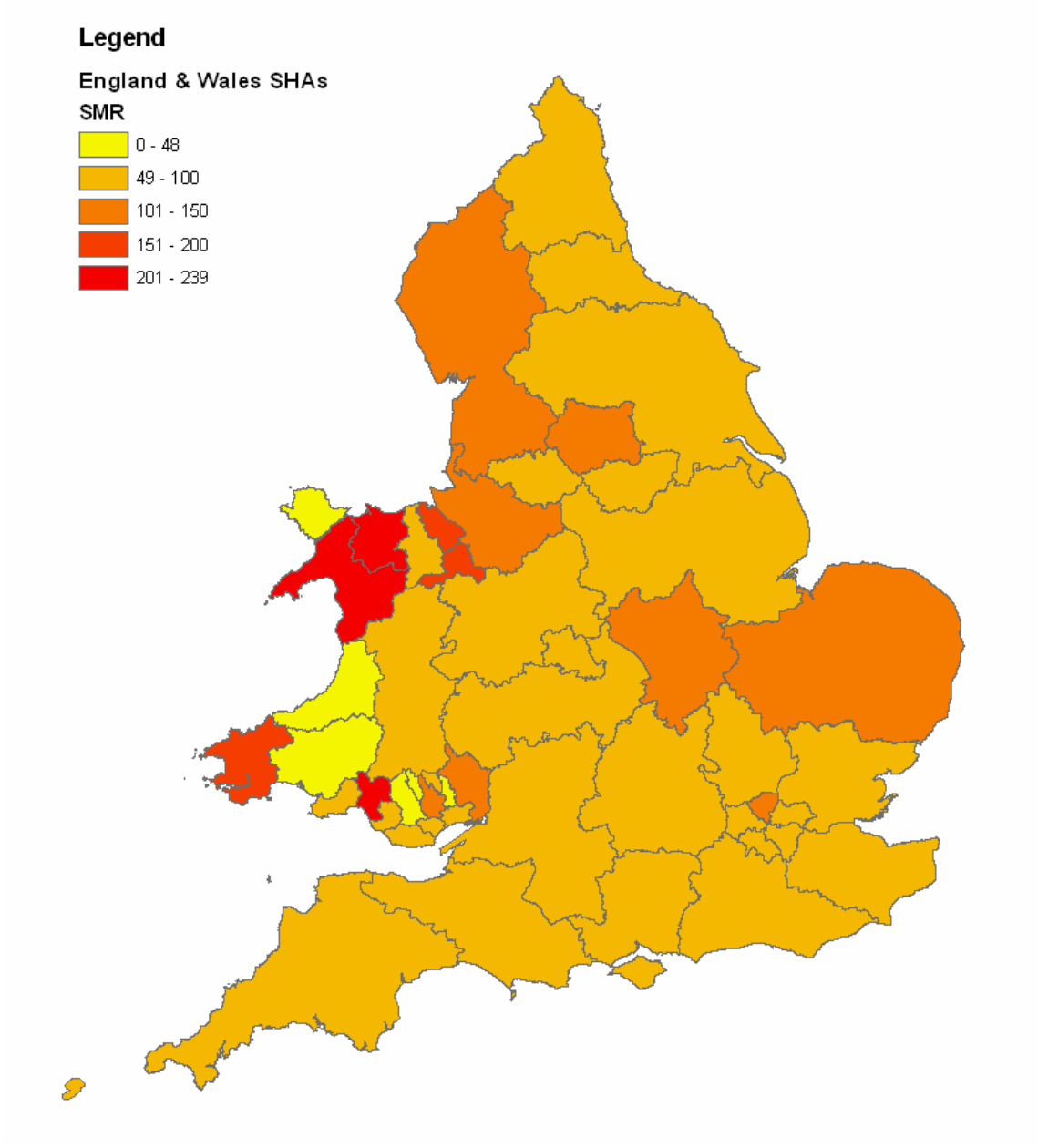
Table 10.1.9 Standardised mortality ratios 2005 by NHS trust

NHS trust	Number of admissions	Standardised Mortality Ratio					
		Unadjusted (95% CI)			Adjusted (95% CI)		
		SMR	Lower	Upper	SMR	Lower	Upper
A	414	**0.40**	0.17	0.78	**0.52**	0.23	1.02
B	233	**0.09**	0.00	0.49	**0.14**	0.00	0.76
C	254	**0.97**	0.51	1.67	**0.64**	0.34	1.10
D	580	**1.38**	0.99	1.87	**0.92**	0.66	1.25
E	1510	**1.42**	1.17	1.71	**1.05**	0.86	1.26
F	1122	**0.94**	0.70	1.22	**0.67**	0.50	0.87
G	50	**3.70**	1.76	6.47	**1.03**	0.49	1.80
H	336	**1.16**	0.71	1.79	**1.09**	0.66	1.68
I	853	**1.13**	0.84	1.49	**1.06**	0.78	1.40
J	96	**0.21**	0.01	1.17	**0.42**	0.01	2.26
K	883	**0.86**	0.61	1.18	**0.77**	0.54	1.05
L	274	**0.83**	0.42	1.46	**0.85**	0.43	1.49
M	355	**0.58**	0.28	1.05	**0.52**	0.25	0.94
N	295	**1.05**	0.59	1.70	**0.85**	0.48	1.37
O	611	**0.51**	0.28	0.83	**0.69**	0.39	1.13
P	1017	**1.38**	1.08	1.73	**1.31**	1.02	1.64
Q	581	**0.53**	0.30	0.87	**0.68**	0.38	1.12
R	665	**0.62**	0.38	0.95	**0.63**	0.39	0.97
S	180	**0.46**	0.13	1.15	**0.55**	0.15	1.37
T	413	**0.75**	0.42	1.22	**0.96**	0.54	1.57
U	408	**1.16**	0.74	1.72	**0.74**	0.48	1.10
V	909	**1.86**	1.49	2.28	**1.05**	0.84	1.28
W	701	**0.88**	0.60	1.25	**0.71**	0.48	1.00
X	891	**0.81**	0.57	1.12	**1.06**	0.74	1.47
Y	391	**0.53**	0.25	0.96	**0.52**	0.25	0.94

Table 10.1.10 Standardised mortality ratios 2004 - 2005 combined by NHS trust

NHS trust	Number of admissions	Standardised Mortality Ratio					
		Unadjusted (95% CI)			Adjusted (95% CI)		
		SMR	Lower	Upper	SMR	Lower	Upper
A	856	**0.63**	0.42	0.92	**0.92**	0.61	1.33
B	518	**0.12**	0.02	0.34	**0.18**	0.04	0.53
C	519	**1.05**	0.70	1.50	**0.65**	0.43	0.93
D	1164	**1.31**	1.04	1.63	**0.87**	0.69	1.08
E	3286	**1.40**	1.23	1.59	**1.08**	0.95	1.22
F	2287	**0.93**	0.77	1.12	**0.67**	0.55	0.81
G	94	**2.78**	1.52	4.53	**0.98**	0.54	1.60
H	643	**1.38**	1.01	1.83	**1.20**	0.88	1.59
I	1712	**1.15**	0.94	1.39	**1.13**	0.92	1.37
J	178	**0.11**	0.00	0.62	**0.19**	0.00	1.03
K	1766	**0.92**	0.74	1.14	**0.85**	0.68	1.05
L	500	**0.84**	0.53	1.28	**0.78**	0.49	1.18
M	728	**0.86**	0.59	1.20	**0.78**	0.54	1.10
N	632	**0.86**	0.57	1.24	**0.72**	0.47	1.03
O	1163	**0.59**	0.41	0.82	**0.83**	0.58	1.15
P	1999	**1.20**	1.00	1.42	**1.21**	1.01	1.44
Q	1130	**0.53**	0.36	0.76	**0.65**	0.44	0.92
R	1250	**0.60**	0.42	0.82	**0.58**	0.41	0.80
S	347	**0.41**	0.16	0.83	**0.53**	0.22	1.09
T	779	**0.67**	0.44	0.98	**0.85**	0.56	1.23
U	800	**1.08**	0.79	1.44	**0.74**	0.54	0.99
V	1892	**1.70**	1.46	1.97	**0.98**	0.84	1.14
W	1349	**0.92**	0.71	1.18	**0.77**	0.60	0.99
X	1856	**0.77**	0.60	0.97	**1.09**	0.86	1.37
Y	411	**0.59**	0.31	1.01	**0.58**	0.30	1.00

Figure 10.1.7 Map showing risk adjusted mortality by SHA / HB



10.2 Follow up

Table 10.2.1 Admissions by 30-day follow-up status and age

Follow-up status	Age group (years)								Total	
	<1		1-4		5-10		11-15			
	n	%	n	%	n	%	n	%	n	%
Alive	5591	(47)	2916	(25)	1694	(14)	1661	(14)	**11862**	**(46.5)**
Dead	141	(52)	68	(25)	30	(11)	31	(11)	**270**	**(1.1)**
Unknown	6663	(50)	3285	(25)	1817	(14)	1610	(12)	**13375**	**(52.4)**
Total	**12395**	**(48.6)**	**6269**	**(24.6)**	**3541**	**(13.9)**	**3302**	**(12.9)**	**25507**	

Table 10.2.2 Admissions by 30-day follow-up status and age (age less than one year)

Follow-up status	Age group (months)								Total	
	<1		1-2		3-5		6-11			
	n	%	n	%	n	%	n	%	n	%
Alive	1886	(34)	1377	(25)	1159	(21)	1169	(21)	**5591**	**(45.1)**
Dead	39	(28)	39	(28)	30	(21)	33	(23)	**141**	**(1.1)**
Unknown	2397	(36)	1535	(23)	1324	(20)	1407	(21)	**6663**	**(53.8)**
Total	**4322**	**(34.9)**	**2951**	**(23.8)**	**2513**	**(20.3)**	**2609**	**(21.0)**	**12395**	

Table 10.2.3 Admissions by 30-day follow-up status and sex

Follow-up status	Sex								Total	
	Male		Female		Ambiguous		Unknown			
	n	%	n	%	n	%	n	%	n	%
Alive	6853	(58)	4987	(42)	3	(0)	19	(0)	**11862**	**(46.5)**
Dead	140	(52)	129	(48)	1	(0)	0	(0)	**270**	**(1.1)**
Unknown	7609	(57)	5751	(43)	5	(0)	10	(0)	**13375**	**(52.4)**
Total	**14602**	**(57.2)**	**10867**	**(42.6)**	**9**	**(0.0)**	**29**	**(0.1)**	**25507**	

Table 10.2.4 Admissions by 30-day follow-up status and sex (age less than one year)

Follow-up status	Sex								Total	
	Male		Female		Ambiguous		Unknown			
	n	%	n	%	n	%	n	%	n	%
Alive	3347	(60)	2231	(40)	2	(0)	11	(0)	**5591**	**(45.1)**
Dead	73	(52)	68	(48)	0	(0)	0	(0)	**141**	**(1.1)**
Unknown	3945	(59)	2709	(41)	3	(0)	6	(0)	**6663**	**(53.8)**
Total	**7365**	**(59.4)**	**5008**	**(40.4)**	**5**	**(0.0)**	**17**	**(0.1)**	**12395**	

Table 10.2.5 Admissions by 30-day follow-up status and NHS trust

Year	NHS trust	Follow-up status: Alive n	Alive %	Dead n	Dead %	Unknown n	Unknown %	Total n	Total %
2004	**A**	19	(5)	0	(0)	381	(95)	**400**	**(3.2)**
	B	253	(97)	7	(3)	0	(0)	**260**	**(2.1)**
	C	235	(94)	3	(1)	12	(5)	**250**	**(2.0)**
	D	483	(89)	18	(3)	39	(7)	**540**	**(4.3)**
	E	0	(0)	0	(0)	1604	(100)	**1604**	**(12.7)**
	F	0	(0)	0	(0)	1100	(100)	**1100**	**(8.7)**
	G	38	(95)	2	(5)	0	(0)	**40**	**(0.3)**
	H	18	(6)	0	(0)	263	(94)	**281**	**(2.2)**
	I	771	(98)	18	(2)	1	(0)	**790**	**(6.2)**
	J	75	(95)	1	(1)	3	(4)	**79**	**(0.6)**
	K	224	(27)	7	(1)	593	(72)	**824**	**(6.5)**
	L	176	(97)	6	(3)	0	(0)	**182**	**(1.4)**
	M	314	(92)	10	(3)	18	(5)	**342**	**(2.7)**
	N	8	(2)	2	(1)	315	(97)	**325**	**(2.6)**
	O	466	(90)	0	(0)	49	(10)	**515**	**(4.1)**
	P	915	(99)	7	(1)	1	(0)	**923**	**(7.3)**
	Q	447	(88)	21	(4)	39	(8)	**507**	**(4.0)**
	R	445	(79)	7	(1)	112	(20)	**564**	**(4.5)**
	S	146	(97)	5	(3)	0	(0)	**151**	**(1.2)**
	T	0	(0)	0	(0)	317	(100)	**317**	**(2.5)**
	U	0	(0)	0	(0)	275	(100)	**275**	**(2.2)**
	V	875	(98)	16	(2)	0	(0)	**891**	**(7.0)**
	W	0	(0)	0	(0)	574	(100)	**574**	**(4.5)**
	X	466	(51)	9	(1)	440	(48)	**915**	**(7.2)**
	Y	17	(94)	0	(0)	1	(6)	**18**	**(0.1)**
2004 Total		**6391**	**(50.5)**	**139**	**(1.1)**	**6137**	**(48.4)**	**12667**	
2005	**A**	31	(8)	1	(0)	346	(92)	**378**	**(2.9)**
	B	202	(99)	3	(1)	0	(0)	**205**	**(1.6)**
	C	106	(45)	0	(0)	132	(55)	**238**	**(1.9)**
	D	513	(96)	16	(3)	5	(1)	**534**	**(4.2)**
	E	0	(0)	0	(0)	1392	(100)	**1392**	**(10.8)**
	F	0	(0)	0	(0)	1059	(100)	**1059**	**(8.2)**
	G	33	(80)	0	(0)	8	(20)	**41**	**(0.3)**
	H	19	(6)	0	(0)	292	(94)	**311**	**(2.4)**
	I	763	(97)	23	(3)	1	(0)	**787**	**(6.1)**
	J	71	(77)	4	(4)	17	(18)	**92**	**(0.7)**
	K	357	(43)	21	(3)	457	(55)	**835**	**(6.5)**
	L	223	(98)	4	(2)	0	(0)	**227**	**(1.8)**
	M	324	(96)	2	(1)	11	(3)	**337**	**(2.6)**
	N	21	(8)	2	(1)	256	(92)	**279**	**(2.2)**
	O	393	(79)	2	(0)	105	(21)	**500**	**(3.9)**
	P	914	(98)	18	(2)	4	(0)	**936**	**(7.3)**
	Q	530	(97)	14	(3)	4	(1)	**548**	**(4.3)**
	R	512	(80)	12	(2)	116	(18)	**640**	**(5.0)**
	S	153	(99)	2	(1)	0	(0)	**155**	**(1.2)**
	T	0	(0)	0	(0)	351	(100)	**351**	**(2.7)**
	U	0	(0)	0	(0)	341	(100)	**341**	**(2.7)**
	V	0	(0)	0	(0)	804	(100)	**804**	**(6.3)**
	W	0	(0)	0	(0)	623	(100)	**623**	**(4.9)**
	X	77	(9)	6	(1)	767	(90)	**850**	**(6.6)**
	Y	229	(61)	1	(0)	147	(39)	**377**	**(2.9)**
2005 Total		**5471**	**(42.6)**	**131**	**(1.0)**	**7238**	**(56.4)**	**12840**	
Total		**11862**	**(46.5)**	**270**	**(1.1)**	**13375**	**(52.4)**	**25507**	

10.3 Summary

- The mortality rate before discharge from paediatric intensive care was 5.1% in 2004 and 4.9% in 2005.
- The mortality rate varied between NHS trusts, from 0 - 10% in 2004 and from 0 - 18% in 2005.
- Risk-adjusted SMRs fall below the upper control limits for all NHS trusts indicating no statistical excess in mortality.
- Status at 30 days post-discharge is not known for over 50% of children admitted to PICU, indicating the difficulties experienced in collecting this data. However this varies by unit, with some units successfully collecting this data for all their admissions and others recording 'not known' for all their admissions.
- Mapping SMRs by SHA indicates that there is some variability that needs further exploration in a larger data set.

References

1. Shann F, Pearson G, Slater A, Wilkinson K, Paediatric index of mortality (PIM): a mortality prediction model for children in intensive care. Intensive Care Med 1997; 23:201-207.

2. Spiegelhalter D. Funnel plots for institutional comparison. Quality and Safety in Health Care 2002;11(4):390-391.

11 DATA ON INDIVIDUAL CHILDREN

11.1 Child-based admissions

In all other chapters of this report, PICU activity is presented for episodes of care or admissions. This chapter describes activity enumerating individual patients and their patterns of care within PICU, giving a picture of the burden on the childhood population rather than the needs for service delivery.

PICANet has been granted exemption from Section 60 of the Health and Social Care Act by PIAG to allow holding of patient identifiable information. With each individual identified in the PICANet data set, internal linkage permits admissions to be described for each patient.

PICANet reports 27,859 admissions (0 - 15 years) during 2004 - 2005, representing 21,794 children. Here, data is examined at the level of individual child; these data will be exploited to characterise re-admissions in relation to age, diagnostic group, NHS trust and other factors in the near future.

Table 11.1.1 Number of admissions of individual children by their NHS trust of first admission

NHS trust	Number of admissions																Total	
	1		2		3		4		5		6		7		8+			
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
A	581	(83)	77	(11)	31	(4)	4	(1)	6	(1)	1	(0)	2	(0)	0	(0)	**702**	**(3.2)**
B	287	(73)	62	(16)	22	(6)	12	(3)	4	(1)	2	(1)	1	(0)	3	(1)	**393**	**(1.8)**
C	379	(86)	41	(9)	15	(3)	2	(0)	2	(0)	0	(0)	0	(0)	1	(0)	**440**	**(2.0)**
D	816	(85)	93	(10)	24	(3)	16	(2)	1	(0)	2	(0)	1	(0)	5	(1)	**958**	**(4.4)**
E	1995	(81)	314	(13)	101	(4)	40	(2)	12	(0)	3	(0)	5	(0)	4	(0)	**2474**	**(11.4)**
F	1199	(74)	275	(17)	84	(5)	29	(2)	10	(1)	3	(0)	6	(0)	4	(0)	**1610**	**(7.4)**
G	66	(74)	17	(19)	6	(7)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	**89**	**(0.4)**
H	406	(83)	46	(9)	19	(4)	10	(2)	5	(1)	3	(1)	1	(0)	0	(0)	**490**	**(2.2)**
I	1112	(82)	160	(12)	52	(4)	13	(1)	8	(1)	3	(0)	0	(0)	4	(0)	**1352**	**(6.2)**
J	115	(78)	20	(14)	5	(3)	3	(2)	2	(1)	1	(1)	0	(0)	1	(1)	**147**	**(0.7)**
K	997	(78)	183	(14)	51	(4)	26	(2)	14	(1)	4	(0)	5	(0)	3	(0)	**1283**	**(5.9)**
L	394	(88)	37	(8)	7	(2)	4	(1)	1	(0)	1	(0)	2	(0)	1	(0)	**447**	**(2.1)**
M	505	(85)	64	(11)	14	(2)	6	(1)	3	(1)	1	(0)	0	(0)	2	(0)	**595**	**(2.7)**
N	433	(84)	63	(12)	11	(2)	5	(1)	1	(0)	2	(0)	1	(0)	1	(0)	**517**	**(2.4)**
O	763	(82)	119	(13)	36	(4)	11	(1)	2	(0)	1	(0)	1	(0)	0	(0)	**933**	**(4.3)**
P	1343	(84)	180	(11)	51	(3)	18	(1)	10	(1)	3	(0)	1	(0)	1	(0)	**1607**	**(7.4)**
Q	723	(81)	119	(13)	28	(3)	6	(1)	9	(1)	5	(1)	0	(0)	4	(0)	**894**	**(4.1)**
R	825	(82)	123	(12)	33	(3)	19	(2)	4	(0)	3	(0)	3	(0)	1	(0)	**1011**	**(4.6)**
S	223	(83)	23	(9)	8	(3)	6	(2)	4	(1)	0	(0)	1	(0)	3	(1)	**268**	**(1.2)**
T	499	(85)	64	(11)	12	(2)	5	(1)	3	(1)	1	(0)	0	(0)	5	(1)	**589**	**(2.7)**
U	616	(89)	57	(8)	9	(1)	5	(1)	2	(0)	0	(0)	1	(0)	2	(0)	**692**	**(3.2)**
V	1271	(85)	156	(10)	49	(3)	14	(1)	7	(0)	4	(0)	0	(0)	0	(0)	**1501**	**(6.9)**
W	914	(84)	114	(10)	35	(3)	12	(1)	6	(1)	2	(0)	3	(0)	5	(0)	**1091**	**(5.0)**
X	992	(74)	207	(16)	79	(6)	25	(2)	15	(1)	4	(0)	7	(1)	4	(0)	**1333**	**(6.1)**
Y	329	(87)	37	(10)	7	(2)	1	(0)	2	(1)	0	(0)	2	(1)	0	(0)	**378**	**(1.7)**
Total	**17783**	**(81.6)**	**2651**	**(12.2)**	**789**	**(3.6)**	**292**	**(1.3)**	**133**	**(0.6)**	**49**	**(0.2)**	**43**	**(0.2)**	**54**	**(0.2)**	**21794**	

Note: The above table shows the number of admissions of individual children by their trust of first admission e.g. a child admitted to trust A twice, B once and C once would appear under A as four admissions.

Investigation of the number of admissions of individual children showed that over the two year period 2004 - 2005, the vast majority of children (82%) were admitted on a

single occasion, with 12% experiencing two admissions and the remaining 6% receiving three or more episodes of care (table 11.1.1).

Table 11.1.2 Number of individual children by NHS trust and diagnostic group of first admission

NHS trust	Diagnostic group																											
	Blood / lymphatic		Body wall and cavities		Cardiovascular		Endocrine / metabolic		Gastrointestinal		Infection		Multisystem		Musculoskeletal		Neurological		Oncology		Respiratory		Trauma		Other		Missing		Total	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
A	11	(2)	16	(2)	16	(2)	20	(3)	70	(10)	36	(5)	3	(0)	32	(5)	141	(20)	90	(13)	140	(20)	59	(8)	67	(10)	1	(0)	**702**	**(3.2)**
B	2	(1)	26	(7)	13	(3)	11	(3)	80	(20)	26	(7)	0	(0)	7	(2)	51	(13)	5	(1)	127	(32)	16	(4)	29	(7)	0	(0)	**393**	**(1.8)**
C	5	(1)	13	(3)	13	(3)	8	(2)	22	(5)	46	(10)	3	(1)	66	(15)	63	(14)	13	(3)	118	(27)	38	(9)	19	(4)	13	(3)	**440**	**(2.0)**
D	12	(1)	7	(1)	43	(4)	21	(2)	46	(5)	85	(9)	1	(0)	44	(5)	175	(18)	54	(6)	329	(34)	94	(10)	47	(5)	0	(0)	**958**	**(4.4)**
E	15	(1)	55	(2)	958	(39)	53	(2)	160	(6)	77	(3)	4	(0)	76	(3)	246	(10)	72	(3)	548	(22)	119	(5)	91	(4)	0	(0)	**2474**	**(11.4)**
F	2	(0)	16	(1)	694	(43)	31	(2)	14	(1)	84	(5)	1	(0)	71	(4)	183	(11)	3	(0)	398	(25)	36	(2)	65	(4)	12	(1)	**1610**	**(7.4)**
G	0	(0)	0	(0)	4	(4)	2	(2)	5	(6)	16	(18)	0	(0)	0	(0)	36	(40)	1	(1)	12	(13)	7	(8)	6	(7)	0	(0)	**89**	**(0.4)**
H	10	(2)	8	(2)	11	(2)	22	(4)	100	(20)	11	(2)	0	(0)	3	(1)	98	(20)	16	(3)	66	(13)	61	(12)	78	(16)	6	(1)	**490**	**(2.2)**
I	9	(1)	7	(1)	512	(38)	28	(2)	64	(5)	63	(5)	1	(0)	37	(3)	117	(9)	63	(5)	288	(21)	71	(5)	86	(6)	6	(0)	**1352**	**(6.2)**
J	4	(3)	10	(7)	4	(3)	6	(4)	36	(24)	4	(3)	0	(0)	0	(0)	27	(18)	1	(1)	39	(27)	1	(1)	14	(10)	1	(1)	**147**	**(0.7)**
K	9	(1)	79	(6)	374	(29)	18	(1)	138	(11)	69	(5)	3	(0)	30	(2)	131	(10)	81	(6)	223	(17)	61	(5)	67	(5)	0	(0)	**1283**	**(5.9)**
L	3	(1)	4	(1)	16	(4)	14	(3)	9	(2)	21	(5)	0	(0)	47	(11)	90	(20)	1	(0)	209	(47)	9	(2)	22	(5)	2	(0)	**447**	**(2.1)**
M	5	(1)	5	(1)	15	(3)	20	(3)	42	(7)	58	(10)	1	(0)	64	(11)	86	(14)	42	(7)	193	(32)	40	(7)	24	(4)	0	(0)	**595**	**(2.7)**
N	0	(0)	16	(3)	169	(33)	9	(2)	19	(4)	12	(2)	3	(1)	37	(7)	63	(12)	26	(5)	123	(24)	29	(6)	11	(2)	0	(0)	**517**	**(2.4)**
O	0	(0)	2	(0)	811	(87)	0	(0)	5	(1)	4	(0)	0	(0)	8	(1)	3	(0)	5	(1)	76	(8)	1	(0)	7	(1)	11	(1)	**933**	**(4.3)**
P	2	(0)	67	(4)	662	(41)	14	(1)	71	(4)	75	(5)	1	(0)	97	(6)	137	(9)	68	(4)	291	(18)	78	(5)	41	(3)	3	(0)	**1607**	**(7.4)**
Q	6	(1)	38	(4)	20	(2)	24	(3)	92	(10)	69	(8)	0	(0)	82	(9)	119	(13)	53	(6)	298	(33)	53	(6)	33	(4)	7	(1)	**894**	**(4.1)**
R	4	(0)	14	(1)	333	(33)	10	(1)	96	(9)	42	(4)	1	(0)	72	(7)	126	(12)	32	(3)	198	(20)	48	(5)	35	(3)	0	(0)	**1011**	**(4.6)**
S	0	(0)	0	(0)	6	(2)	19	(7)	3	(1)	10	(4)	0	(0)	27	(10)	46	(17)	0	(0)	123	(46)	20	(7)	14	(5)	0	(0)	**268**	**(1.2)**
T	18	(3)	9	(2)	10	(2)	10	(2)	74	(13)	26	(4)	2	(0)	10	(2)	77	(13)	102	(17)	187	(32)	41	(7)	23	(4)	0	(0)	**589**	**(2.7)**
U	18	(3)	2	(0)	18	(3)	28	(4)	17	(2)	87	(13)	0	(0)	0	(0)	151	(22)	1	(0)	332	(48)	7	(1)	30	(4)	1	(0)	**692**	**(3.2)**
V	9	(1)	39	(3)	605	(40)	51	(3)	137	(9)	33	(2)	4	(0)	25	(2)	112	(7)	27	(2)	217	(14)	117	(8)	42	(3)	83	(6)	**1501**	**(6.9)**
W	6	(1)	7	(1)	482	(44)	23	(2)	30	(3)	51	(5)	0	(0)	10	(1)	149	(14)	32	(3)	255	(23)	7	(1)	36	(3)	3	(0)	**1091**	**(5.0)**
X	13	(1)	28	(2)	598	(45)	17	(1)	84	(6)	65	(5)	5	(0)	17	(1)	113	(8)	30	(2)	268	(20)	44	(3)	44	(3)	7	(1)	**1333**	**(6.1)**
Y	0	(0)	12	(3)	12	(3)	8	(2)	22	(6)	27	(7)	3	(1)	72	(19)	67	(18)	18	(5)	87	(23)	26	(7)	24	(6)	0	(0)	**378**	**(1.7)**
Total	**163**	**(0.7)**	**480**	**(2.2)**	**6399**	**(29.4)**	**467**	**(2.1)**	**1436**	**(6.6)**	**1097**	**(5.0)**	**36**	**(0.2)**	**934**	**(4.3)**	**2607**	**(12.0)**	**836**	**(3.8)**	**5145**	**(23.6)**	**1083**	**(5.0)**	**955**	**(4.4)**	**156**	**(0.7)**	**21794**	

Table 11.1.2 shows each child's primary reason for admission at their first admitting NHS trust. The proportions by diagnostic group broadly reflect the patterns of admissions overall (see table 6.6.3 from chapter 6).

Table 11.1.3 Individual child admissions by diagnostic group and readmission status

Diagnostic group	Single admission		Multiple admissions				Total	
			1 trust		2+ trusts			
	n	%	n	%	n	%	n	%
Blood / lymphatic	131	(80)	28	(17)	4	(2)	**163**	**(0.7)**
Body wall and cavities	382	(80)	82	(17)	16	(3)	**480**	**(2.2)**
Cardiovascular	4941	(77)	1284	(20)	174	(3)	**6399**	**(29.4)**
Endocrine / metabolic	405	(87)	43	(9)	19	(4)	**467**	**(2.1)**
Gastrointestinal	1122	(78)	265	(18)	49	(3)	**1436**	**(6.6)**
Infection	953	(87)	105	(10)	39	(4)	**1097**	**(5.0)**
Multisystem	26	(72)	9	(25)	1	(3)	**36**	**(0.2)**
Musculoskeletal	815	(87)	110	(12)	9	(1)	**934**	**(4.3)**
Neurological	2235	(86)	300	(12)	72	(3)	**2607**	**(12.0)**
Oncology	663	(79)	158	(19)	15	(2)	**836**	**(3.8)**
Respiratory	4132	(80)	746	(14)	267	(5)	**5145**	**(23.6)**
Trauma	1045	(96)	23	(2)	15	(1)	**1083**	**(5.0)**
Other	802	(84)	125	(13)	28	(3)	**955**	**(4.4)**
Missing	131	(84)	20	(13)	5	(3)	**156**	**(0.7)**
Total	**17783**	**(81.6)**	**3298**	**(15.1)**	**713**	**(3.3)**	**21794**	

Note: Readmission status examines the number of times a child was admitted to PICU, and for those children who were readmitted, determines whether or not all the readmissions were to the same trust.

Table 11.1.3 shows that of the 4,011 children with multiple admissions, 3,298 children (82%) were repeatedly admitted to the same NHS trust. Those children admitted to more than one NHS trust (n=713) did not appear to fall into any particular diagnostic group.

11.2 Summary

- The majority of children (82%) were only admitted to a PICU on one occasion.
- Overall 4,011 children were admitted to a PICU more than once (these repeated admissions may not necessarily have been within the same NHS trust).

12 EPIDEMIOLOGY OF PAEDIATRIC INTENSIVE CARE

12.1 Background

Age and sex specific prevalence for admission to PICUs in England and Wales have been calculated with 95% Poisson confidence intervals using population counts from the 2001 Census[1]: overall and by SHA and HB, together with age-sex standardised prevalence for the childhood population (less than 16 years).

Children were allocated to an SHA / HB using their residential address at admission. Addresses were validated using the All Fields Directory (AFD) address validation software to obtain a correct postcode.[2] Using the AFPD, postcodes were then linked to SHA / HB.[3]

Prevalence for Scotland is not presented as PICANet currently only receives data from the Royal Hospital for Sick Children, Edinburgh.

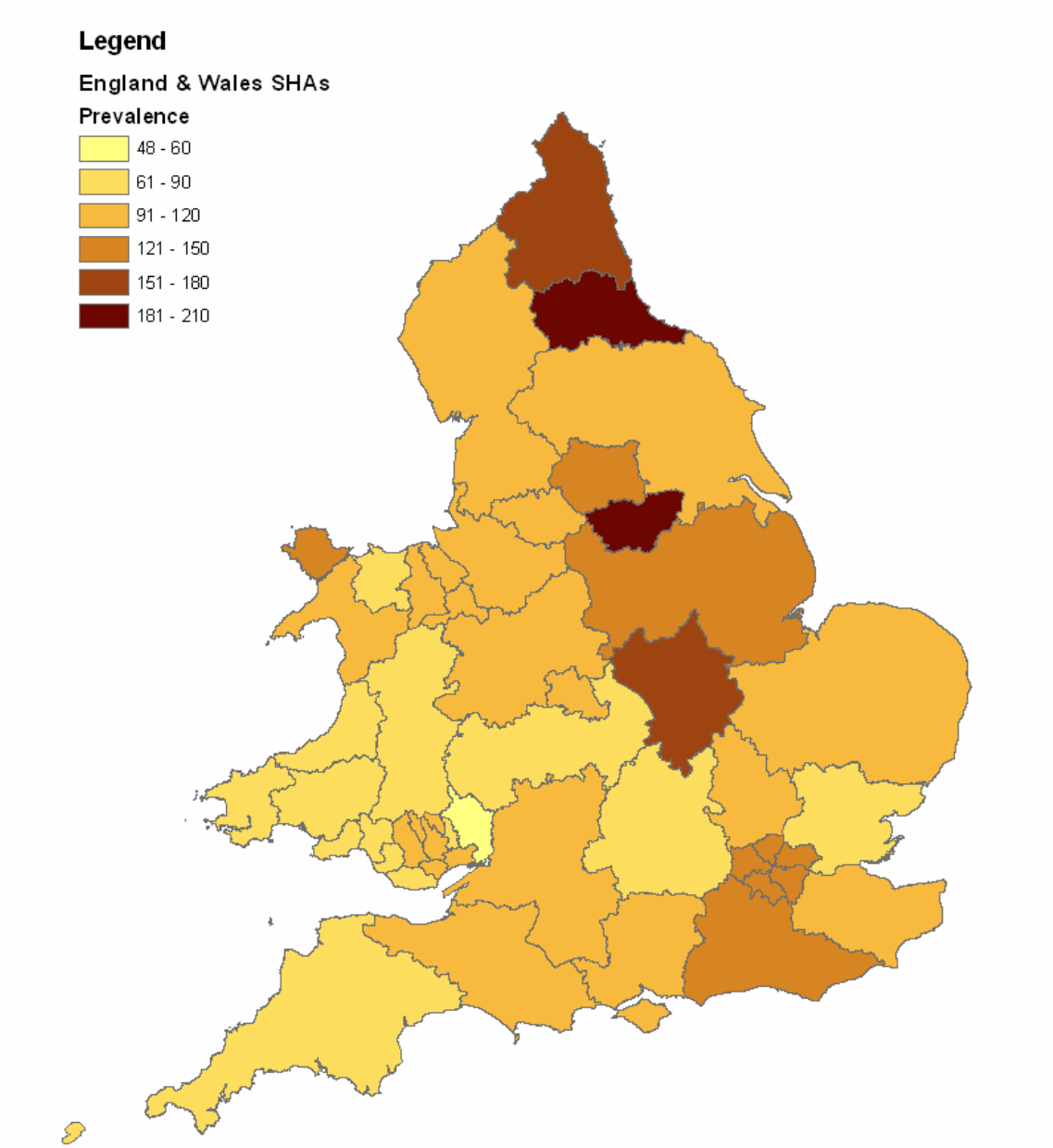
Table 12.1.1 Age specific prevalence (per 100,000 per year) for admissions to paediatric intensive care in England and Wales, 2004 - 2005

Sex	Age group (years)	Population (2001 Census)	Prevalence rates					
			2004 (95% CI)			2005 (95% CI)		
			Rate	Lower	Upper	Rate	Lower	Upper
Male	**<1**	299495	**1294**	1253	1334	**1261**	1221	1300
	1-4	1283386	**145**	138	151	**139**	133	146
	5-10	2054488	**40**	38	43	**42**	40	45
	11-15	1735486	**66**	62	70	**62**	59	66
Female	**<1**	287826	**912**	878	947	**887**	853	922
	1-4	1224673	**118**	112	124	**120**	114	126
	5-10	1955812	**36**	33	39	**36**	33	38
	11-15	1650642	**56**	52	60	**57**	53	61
Total		**10491808**	**118**	**116**	**120**	**117**	**115**	**119**

Table 12.1.2 Age-sex standardised prevalence (per 100,000 per year) for admissions to paediatric intensive care by SHA in England and HB in Wales, 2004 - 2005

SHA / HB	Population (2001 Census)	Prevalence rates					
		2004 (95% CI)			2005 (95% CI)		
		Rate	Lower	Upper	Rate	Lower	Upper
WALES							
Monmouthshire	**16963**	**38**	7	68	**57**	20	95
Gwynedd	**22435**	**83**	47	119	**108**	67	150
Pembrokeshire	**22978**	**70**	36	105	**80**	43	118
Ceredigion	**12016**	**101**	44	158	**50**	10	91
Neath Port Talbot	**26323**	**86**	50	121	**79**	44	113
Swansea	**42993**	**101**	71	131	**72**	47	97
Conwy	**20271**	**118**	69	166	**62**	27	98
Cardiff	**63048**	**124**	96	151	**94**	70	117
Rhondda Cynon Taff	**48320**	**86**	60	113	**122**	91	154
Anglesey	**13110**	**157**	88	225	**87**	36	138
Caerphilly	**36413**	**106**	72	139	**97**	65	129
Bridgend	**26400**	**88**	52	124	**45**	20	70
Wrexham	**25160**	**82**	47	117	**100**	62	139
Flintshire	**29620**	**75**	44	107	**110**	72	148
Vale of Glamorgan	**25571**	**85**	48	121	**94**	56	132
Carmarthenshire	**33806**	**63**	36	90	**76**	46	105
Merthyr Tydfil	**12130**	**57**	11	102	**130**	62	197
Newport	**30938**	**111**	74	148	**89**	55	122
Denbighshire	**18324**	**101**	55	148	**108**	59	156
Blaenau Gwent	**14764**	**85**	37	133	**147**	81	212
Torfaen	**19396**	**71**	30	111	**92**	48	136
Powys	**23352**	**65**	31	99	**91**	51	130
ENGLAND							
Norfolk, Suffolk and Cambridgeshire	**418674**	**116**	106	126	**103**	93	113
Bedfordshire and Hertfordshire	**338923**	**105**	94	115	**110**	99	121
Essex	**325061**	**97**	86	108	**83**	73	93
North West London	**326709**	**123**	112	135	**132**	120	144
North Central London	**232651**	**127**	113	140	**122**	108	135
North East London	**337428**	**136**	124	148	**126**	115	138
South East London	**305152**	**140**	127	153	**141**	128	153
South West London	**250991**	**140**	126	154	**140**	126	154
Northumberland, Tyne & Wear	**267030**	**167**	152	183	**170**	154	185
County Durham and Tees Valley	**230272**	**205**	186	224	**207**	188	226
North and East Yorkshire and Northern Lincolnsh	**318795**	**97**	86	108	**88**	78	99
West Yorkshire	**442044**	**129**	118	139	**136**	125	146
Cumbria and Lancashire	**385408**	**92**	82	101	**96**	86	106
Greater Manchester	**527416**	**98**	90	107	**113**	104	122
Cheshire & Merseyside	**479512**	**125**	114	135	**107**	98	117
Thames Valley	**431744**	**83**	75	91	**85**	76	93
Hampshire and Isle of Wight	**349806**	**113**	102	124	**125**	113	136
Kent and Medway	**327518**	**110**	99	122	**112**	100	124
Surrey and Sussex	**484382**	**149**	138	159	**141**	130	151
Avon, Gloucestershire and Wiltshire	**429384**	**101**	92	111	**97**	88	106
South West Peninsula	**290448**	**59**	50	69	**65**	55	74
Dorset and Somerset	**219359**	**102**	88	116	**98**	85	112
South Yorkshire	**254539**	**165**	149	181	**197**	179	214
Trent	**515591**	**151**	141	162	**131**	121	141
Leicestershire, Northamptonshire and Rutland	**320588**	**187**	172	202	**162**	148	176
Shropshire and Staffordshire	**295907**	**106**	94	117	**109**	97	121
Birmingham and the Black Country	**497644**	**95**	87	104	**100**	91	109
West Midlands South	**303274**	**78**	68	88	**84**	73	94

Figure 12.1.1 Age-sex standardised prevalence (per 100,000 per year) for admissions to paediatric intensive care by SHA in England and HB in Wales, 2004 - 2005



12.2 Summary

- National prevalence for admission to paediatric intensive care was 118 and 117 per 100,000 population under 16 years in 2004 and 2005 respectively.
- Prevalence varied widely by SHA / HB from 38 to 205 in 2004 and 45 to 207 in 2005 per 100,000 population under 16 years.

References

1 Office for National Statistics. 2001 Census : Census Area Statistics (England and Wales) [computer file]. ESRC/JISC Census Programme, Census Dissemination Unit, MIMAS (University of Manchester).

2 AFD Postcode Plus version 6.4.16. AFD Software Ltd, Old Post Office Lane, West Quay, Ramsey, ISLE OF MAN, IM8 1RF, UK, 2005.

3 Office for National Statistics, All Fields Postcode Directory August 2004 [computer file]. ESRC/JISC Census Programme, Census Dissemination Unit, MIMAS (University of Manchester). © Crown Copyright 2004.

13 ACUTE RESPIRATORY FAILURE IN CHILDREN UNDER ONE YEAR

Roddy O'Donnell, Mark Darowski and the PICANet team

Note: In this section age < one year has been calculated as < 365 days. The rest of the report is based on true calendar years. Hence the slight difference in numbers arises due to leap years.

13.1 Introduction

The SG and CAG of PICANet have recognised the need to provide information for projects led by clinicians. Collaboration between the PICANet team and the clinical community is an important element in the development of PICANet data for use in clinical audit, intervention trials and primary research. This chapter is the first example of the PICANet data set being exploited by such a partnership.

Most PICUs in the UK admit children up to the age of 16 years. The largest proportion of admissions comes in the first year of life. Approximately a quarter of all admissions to PICU are because of respiratory failure, making this diagnostic group second only to cardiac in frequency.

There are a number of reasons why a young child might develop a respiratory illness requiring intensive care; most of these are due to infection. These illnesses include pneumonia and croup, but the most frequent diagnosis associated with acute respiratory failure (ARF) is acute viral bronchiolitis. Overwhelmingly, respiratory viral infections are most common in the UK during the coldest point of the winter. The reason for this is unknown. RSV infections, for example, occur predominantly as a tight peak around the end of December each year. This annual epidemic stretches paediatric wards and intensive care units every year. Vaccine studies in the USA at the end of the 1960s were associated with enhanced illness and at present there is no effective immunisation.

Acute bronchiolitis is a clinical diagnosis and may be caused by a number of viruses such as parainfluenza, adenovirus and human metapneumovirus. However, the most common cause (in up to 75% of cases) is RSV. About 28 per 1000 children in the UK are admitted to hospital with RSV bronchiolitis. The peak age of admission to hospital with bronchiolitis is between three and six months. Children born before term are more vulnerable to severe illness.

In a typical infection, bronchiolitis presents with upper respiratory tract infection. The infant may then develop difficulty feeding and increasing effort of breathing, sometimes

with audible grunting on expiration. Very young babies, especially those under three months of age, frequently present with apnoeas where breathing stops suddenly.

Admissions for bronchiolitis have been rising over the last 10 to 15 years in the UK, USA and Europe, for reasons that are not clear. Studies of serum antibody to RSV have shown that most of the population, up to 95%, have been infected in the first three years. Admission usually occurs during a primary viral infection. Those at increased risk of needing hospitalisation include those exposed to cigarette smoke, those with many older siblings and those from lower socioeconomic groups.

Small babies have been described as being on the edge of respiratory failure even when well. As well as immunological naivety, there are a number of putative anatomical reasons why babies are most at risk, including smaller airway size, soft deformable rib cages and a tendency to reach small airway closure during breathing out (referred to as closing volume).

A very small number of those admitted will need admission to paediatric intensive care and the data presented in this section is some of the most complete information that we have had in the UK about what happens to these infants.

13.2 Methods

ARF was defined using relevant Read Codes given for the primary reason for admission for children under one year of age with an unplanned admission to a PICU. 'Unplanned following surgery' admissions were excluded. Expert scrutiny of all diagnoses classified as 'respiratory' in this group was carried out by the authors. The postcode of the residential address on admission was used to link to a 2001 Census output area using the AFPD[1] and data from the 2001 Census[2] were used to calculate the Townsend deprivation score[3] of the area in which the child lived.

Predicted probability of mortality was calculated using PIM.[4] Risk-adjusted mortality for children under one with an unplanned admission was compared between children with ARF and those with other diagnoses between pre-defined categories and using logistic regression. Other standard summary statistics were used to describe the data.

13.3 Results

13,386 admissions to paediatric intensive care in 2004 - 2005 were aged under one year. 7,518 of these were unplanned admissions, of whom 2,467 (33%) were admitted with ARF, accounting for 68% of the overall number of admissions with ARF (3,623). In total, there were 2.1 admissions per year per 1000 infants. Table 13.3.1 details the frequencies of the principal diagnoses of the ARF admissions and the distribution of the diagnostic groups for the non-ARF admissions.

Table 13.3.1 Diagnostic definitions for children under one year with an unplanned admission of ARF and diagnostic groups for those admitted as an unplanned admission (non ARF)

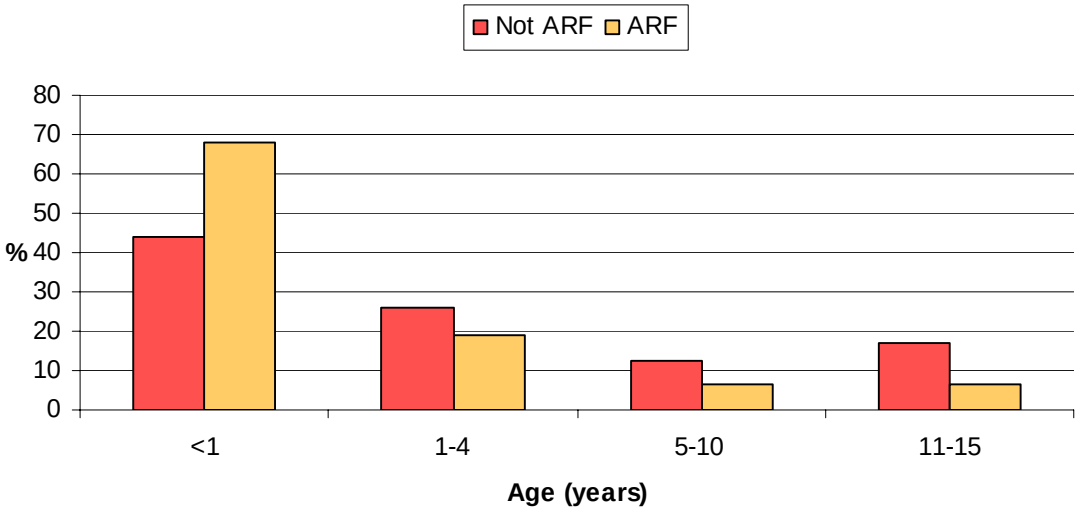
Acute respiratory failure diagnoses				Non-acute respiratory failure diagnoses		
Description	**Read code**	**n**	**(%)**	**Diagnostic group**	**n**	**(%)**
Acute bronchiolitis due to RSV	H0615	488	(20)	Neurological	724	(14)
Acute bronchiolitis	H061.	343	(14)	Cardiac	1682	(33)
Bronchiolitis	XSDOK	297	(12)	Respiratory	812	(16)
Respiratory distress	XM07z	277	(11)	Oncology	39	(1)
Respiratory failure	XM09V	249	(10)	Infection	443	(9)
Pneumonia	X100E	145	(6)	Musculoskeletal	12	(0)
Apnoea	X76Gw	115	(5)	Gastrointestinal	509	(10)
Acute respiratory failure	H590.	109	(4)	Other	291	(6)
Recurrent apnoea	X76Hk	76	(3)	Blood / lymphatic	42	(1)
Acute viral bronchiolitis	X100C	66	(3)	Trauma	63	(1)
Respiratory arrest	XM09W	62	(3)	Endocrine / metabolic	178	(4)
Acute lower respiratory tract infection	XE0Xt	50	(2)	Multisystem	20	(0)
Other acute respiratory diagnoses	-	190	(8)	Body wall and cavities	234	(5)
Total		**2467**			**5049**	

13.4 Demographic profiles

Age

The data for 2004 - 2005 show that in paediatric intensive care practice there is a skew towards children under one year of age, which is more pronounced for those admitted because of respiratory failure (figure 13.4.1).

Figure 13.4.1 Age distribution of children with an unplanned admission to PICU in 2004 - 2005, ARF vs. non-ARF



The role of socioeconomic factors

Socioeconomic factors may play a role in protecting or enhancing the risk of children under one year of age becoming severely ill (figure 13.4.2) and this is more pronounced in those with ARF (figure 13.4.3). A higher proportion of children admitted to PICU came from areas with higher levels of deprivation compared to the Great Britain (GB) average. Children under one year admitted with ARF tended to live in more deprived areas than those admitted with non ARF diagnoses.

Figure 13.4.2 Socioeconomic status of children under one with an unplanned admission to PICU in 2004 - 2005, non ARF compared with GB population using the Townsend deprivation score

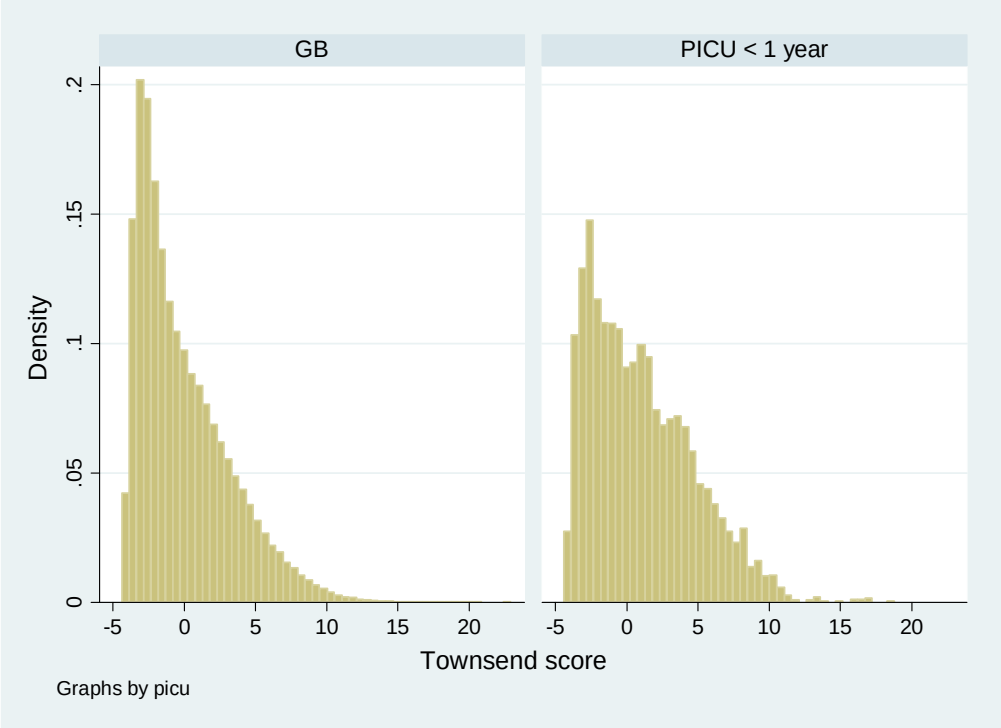


Figure 13.4.3 Socioeconomic status of children under one with an unplanned admission to PICU in 2004 - 2005, ARF compared with GB population using the Townsend deprivation score

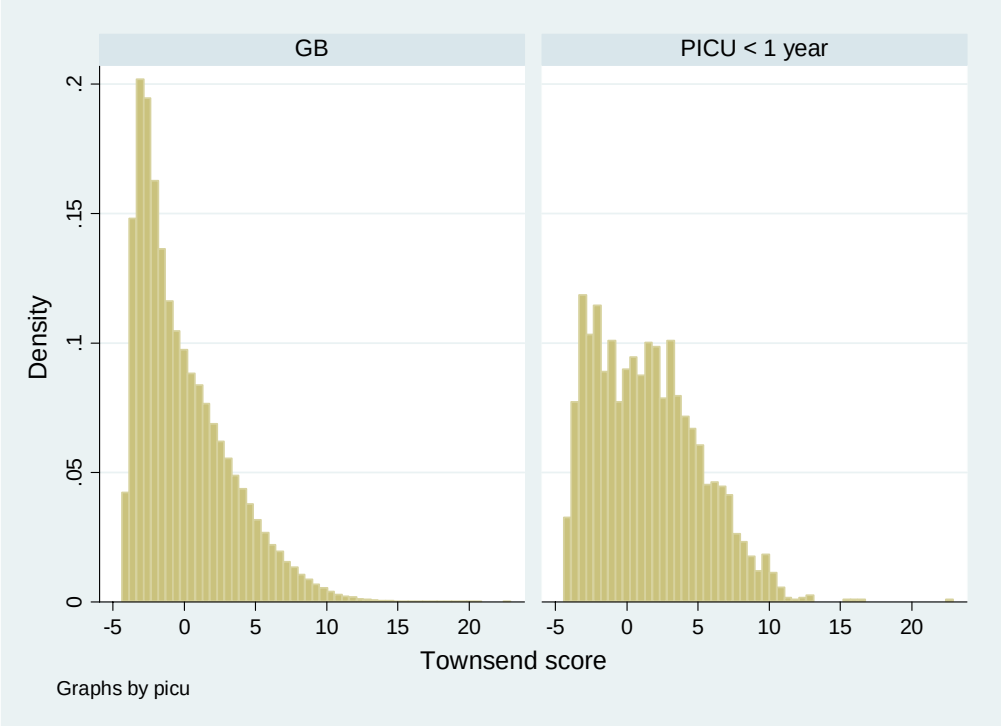
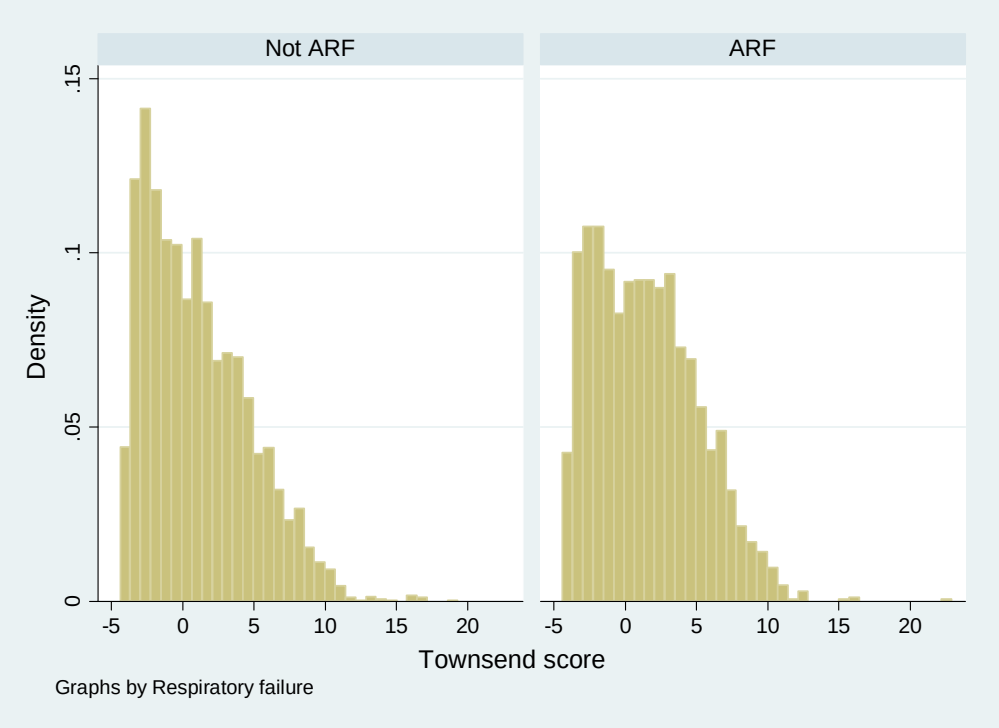


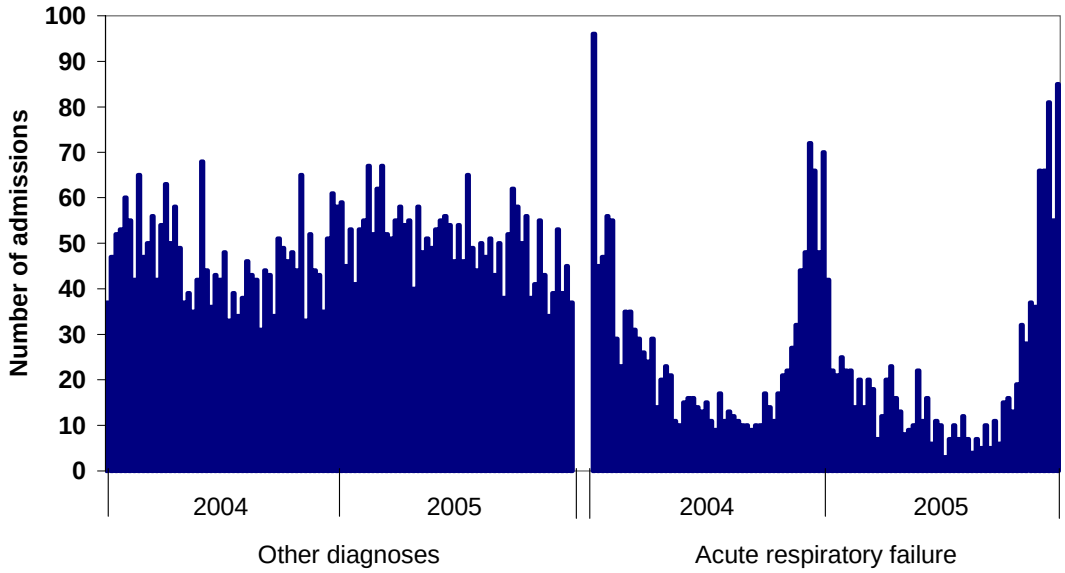
Figure 13.4.4 Socioeconomic status of children under one with an unplanned admission to PICU in 2004 - 2005, ARF vs. non-ARF using the Townsend deprivation score



13.5 Patterns of admission

Admission rates for children with ARF show a marked seasonal variation, with annual mid winter admission peaks of 65 to 100 children per week in winter compared with less than 20 children per week in the mid summer (figure 13.5.1).

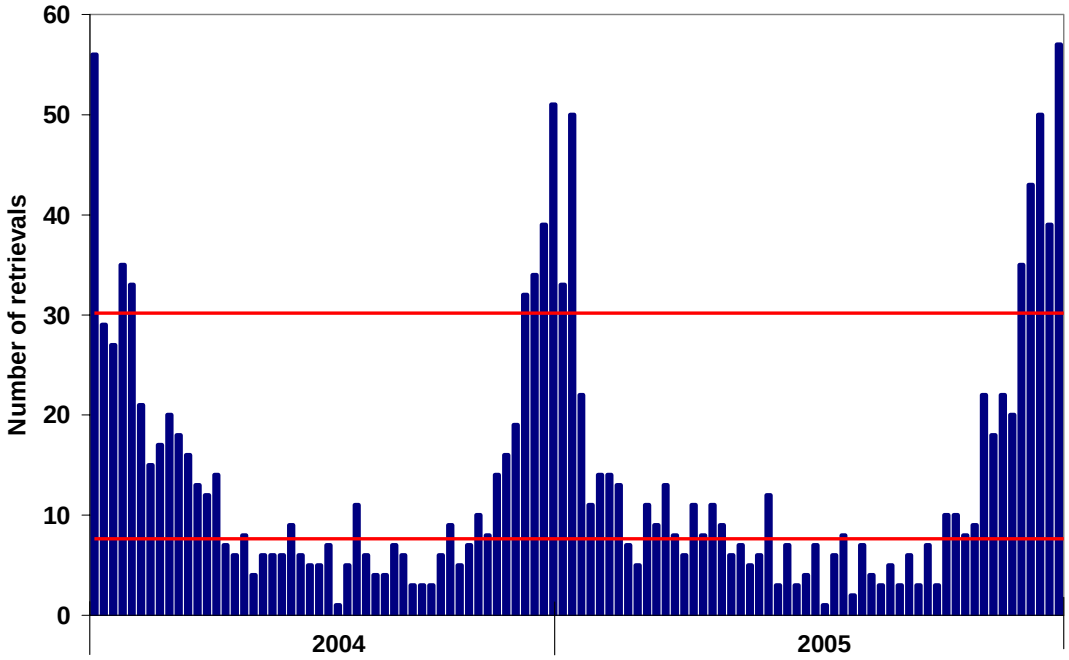
Figure 13.5.1 Unplanned admissions to PICU in 2004 - 2005 for children under one, ARF vs. non-ARF



13.6 Pressure seasonal ARF exerts on retrievals

Over 57% of those with ARF are retrieved by a PICU team. Most of these occur in the winter creating particular pressures on the retrieval networks. The proportion of children admitted who are retrieved is shown according to season in figure 13.6.1. The horizontal red lines indicate the mean number of admissions in the winter months (upper line) vs. the rest of the year (lower line).

Figure 13.6.1 Number of retrievals for ARF per week in children under one, 2004 - 2005



13.7 Length of stay

Children with ARF spent longer on PICU than other children in the PICU population: the median and IQR for length of stay being 5 (3-8) compared to 3 (2-5) for those without ARF.

Table 13.7.1 Length of stay of children under one

	Lenth of stay (days)								Total
	1		2 to 4		5 to 7		>7		
	n	%	n	%	n	%	n	%	
Not ARF	620	(12)	2,115	(42)	1,029	(20)	1,285	(25)	**5,049**
ARF	123	(5)	964	(39)	664	(27)	716	(29)	**2,467**
Total	**743**	**(9.9)**	**3,079**	**(41.0)**	**1,693**	**(22.5)**	**2,001**	**(26.6)**	**7,516**

13.8 Interventions – use of ventilation

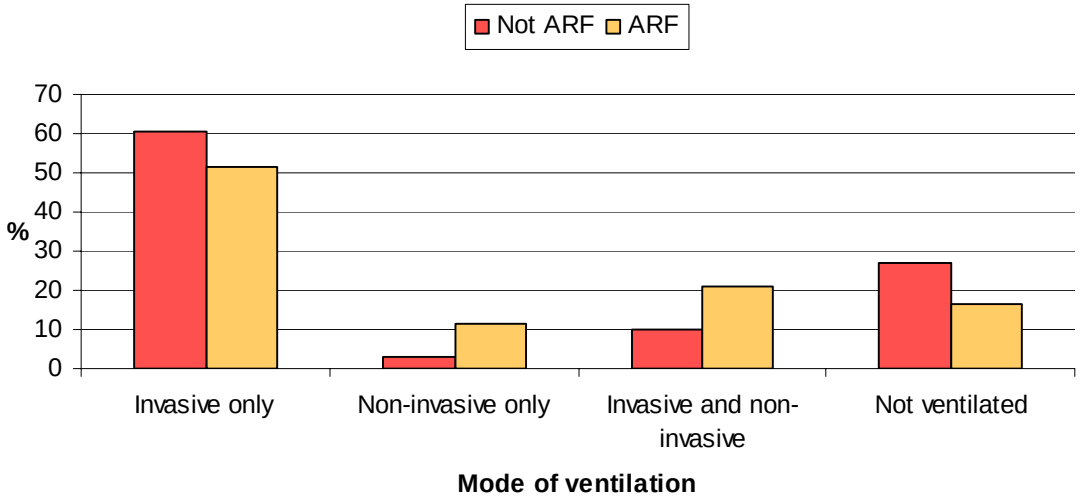
Approximately 72% of children under one year with ARF received invasive ventilation during their PICU stay, 11% received only non-invasive ventilation and 16% did not require ventilatory support. The patterns of use of invasive and non-invasive ventilation are illustrated in table 13.8.1 and figure 13.8.1. Additionally, ECMO was required by 17 of these children.

Table 13.8.1 Mode of ventilation of children under one with an unplanned admission to PICU in 2004 - 2005.

	Ventilation								Total
	IV[a] only		NIV[b] only		IV & NIV		Not ventilated		
	n	%	n	%	n	%	n	%	
Not ARF	3047	(60)	154	(3)	496	(10)	1,352	(27)	**5,049**
ARF	1266	(51)	283	(11)	514	(21)	404	(16)	**2,467**
Total	**4313**	**(57.4)**	**437**	**(5.8)**	**1,010**	**(13.4)**	**1,756**	**(23.4)**	**7,516**

Notes: a Invasive ventilation
b Non-invasive ventilation

Figure 13.8.1 Mode of ventilation of children under one with an unplanned admission to PICU in 2004 - 2005



13.9 Mortality: predicted probability of death and actual mortality

Children with ARF predominate in the 5 - <15% predicted mortality risk group, with proportionately fewer falling into the higher mortality risk groups and slightly fewer in the lowest risk group (table 13.9.1). Out of 2,467 admissions, 94 (3.8%) children with ARF died compared to 463 (9.2%) of non-ARF admissions (table 13.9.2). The risk-adjusted odds ratio for mortality is 0.49 (95% CI 0.39-0.62) for children with ARF when compared with non-ARF admissions.

Table 13.9.1 Expected probability of mortality of children under one with an unplanned admission to PICU in 2004 - 2005 by mortality risk group

	Mortality risk group								Total
	1-<5%		5-<15%		15-<30%		>=30%		
	n	%	n	%	n	%	n	%	
Not ARF	2131	(42)	2,147	(43)	534	(11)	237	(5)	**5,049**
ARF	945	(38)	1342	(54)	145	(6)	35	(1)	**2,467**
Total	**3076**	**(40.9)**	**3,489**	**(46.4)**	**679**	**(9.0)**	**272**	**(3.6)**	**7,516**

Table 13.9.2 Mortality of children under one with an unplanned admission to PICU in 2004 - 2005

	Mortality				Total
	Alive		Dead		
	n	%	n	%	
Not ARF	4,586	(91)	463	(9)	**5,049**
ARF	2,373	(96)	94	(4)	**2,467**
Total	**6,959**	**(92.6)**	**557**	**(7.4)**	**7,516**

13.10 Discussion

The data presented in this report offer the most complete information available in the UK for unplanned admissions to PICU of infants with ARF. Every year thousands of children are admitted to hospital with bronchiolitis and other serious respiratory illnesses. A small proportion of these children go on to need the support of their regional PICU, and the data produced here demonstrate the importance of that support. In the period studied, about 2,500 babies were admitted. Most were retrieved from their referring centre and the vast majority of these children were under one year of age. Over 96% survived their critical illness, but sadly 4% (n=94) died despite intensive care. In common with many severe illnesses, lower socioeconomic status increased the risk of admission to PICU with ARF and this appeared to be more pronounced than for other illnesses.

The data support what is already known to the clinicians: that bronchiolitis and ARF, although variable in intensity from year to year, create a predictable peak each winter which puts extra pressure not just on the admitting units but also on the retrieval networks that stabilise and transfer these children.

Of those children admitted, new technologies (such as non-invasive ventilation and ECMO for some of the sickest) have an important role in addition to conventional ventilation. As a clinical community it would probably be helpful to be able to study the usefulness of these modes of support. Data from the PICANet database offers an invaluable source from which to initiate new national studies.

13.11 Summary

Admissions to PICUs are skewed towards young infants, especially those under one year of age. This effect is even more pronounced for those admitted with ARF. Every winter there are episodes of high activity in paediatric intensive care due predominantly to respiratory illnesses, especially bronchiolitis. As well as the impact on intensive care units themselves, the retrieval services that are involved in stabilising and transferring children to PICUs are put under additional pressure as they try to support the referring hospitals. The outcomes for these critically ill infants are very good and new modes of ventilatory and non-ventilatory support are being used. The PICANet database may be a unique resource through which to develop original research to improve the outcome for children across the UK with ARF.

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1 Office for National Statistics, All Fields Postcode Directory August 2004 [computer file]. ESRC/JISC Census Programme, Census Dissemination Unit, MIMAS (University of Manchester). © Crown Copyright 2004.

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3 Phillimore P, Beattie A, Townsend P. Widening inequality of health in northern England, 1981-91. BMJ 1994; 308: 1125-1128.

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14 CHILDREN RECEIVING CARE IN ADULT INTENSIVE CARE UNITS

14.1 Children treated in adult units in 2004

Data on children (under 16 years) treated in adult intensive care units (AICUs) including age in months, sex, date of admission and discharge, outcome and discharge location and admission diagnosis were provided by the Intensive Care National Audit & Research Centre (ICNARC), the All Wales Audit of Critically Ill Children (AWACIC) and the South West Audit of Critically Ill Children (SWACIC). SWACIC were also able to provide the data necessary to calculate PIM / PIM2. Analysis is restricted to 2004 however, and does not include risk-adjusted mortality, as no 2005 data or risk adjustment variables were available from ICNARC. ICNARC receives data from 74% of AICUs in England and 62% in Wales (see http://www.icnarc.org/audit/cmp/participating-units/).

Signed consent was obtained from the unit director of each AICU. One AICU providing data to SWACIC did not give explicit permission for PICANet to receive their data.

Table 14.1.1 Admission of children to AICUs by age and sex, England, 2004

Sex	Age group (years) <1		1-4		5-10		11-15		Total	
	n	%	n	%	n	%	n	%	n	%
Male	76	(19)	93	(23)	98	(24)	138	(34)	**405**	**(54.3)**
Female	70	(21)	77	(23)	58	(17)	128	(38)	**333**	**(44.6)**
Unknown/Missing	2	(25)	3	(38)	2	(25)	1	(13)	**8**	**(1.1)**
Total	**148**	**(19.8)**	**173**	**(23.2)**	**158**	**(21.2)**	**267**	**(35.8)**	**746**	

Table 14.1.2 Admission of children to AICUs by age and month of admission, England, 2004

		Age group (years) <1		1-4		5-10		11-15		Total	
		n	%	n	%	n	%	n	%	n	%
2004	**January**	19	(23)	17	(20)	15	(18)	33	(39)	**84**	**(11.3)**
	February	14	(21)	17	(26)	14	(21)	21	(32)	**66**	**(8.8)**
	March	12	(17)	18	(26)	11	(16)	29	(41)	**70**	**(9.4)**
	April	17	(26)	19	(29)	17	(26)	12	(18)	**65**	**(8.7)**
	May	15	(16)	23	(24)	20	(21)	36	(38)	**94**	**(12.6)**
	June	11	(20)	10	(19)	14	(26)	19	(35)	**54**	**(7.2)**
	July	8	(13)	11	(18)	16	(26)	26	(43)	**61**	**(8.2)**
	August	4	(9)	9	(19)	12	(26)	22	(47)	**47**	**(6.3)**
	September	9	(21)	7	(16)	9	(21)	18	(42)	**43**	**(5.8)**
	October	6	(14)	10	(24)	10	(24)	16	(38)	**42**	**(5.6)**
	November	16	(25)	15	(24)	9	(14)	23	(37)	**63**	**(8.4)**
	December	17	(30)	17	(30)	11	(19)	12	(21)	**57**	**(7.6)**
Total		**148**	**(19.8)**	**173**	**(23.2)**	**158**	**(21.2)**	**267**	**(35.8)**	**746**	

Table 14.1.3 Admission of children to AICUs by age and diagnostic group, England, 2004

Diagnostic group	Age group (years) <1 n	%	1-4 n	%	5-10 n	%	11-15 n	%	Total n	%
Blood/lymphatic	0	(0)	0	(0)	0	(0)	4	(100)	**4**	**(0.5)**
Body wall and cavities	2	(50)	0	(0)	2	(50)	0	(0)	**4**	**(0.5)**
Cardiovascular	14	(48)	2	(7)	5	(17)	8	(28)	**29**	**(3.9)**
Endocrine/metabolic	3	(11)	8	(29)	5	(18)	12	(43)	**28**	**(3.8)**
Gastrointestinal	8	(30)	1	(4)	9	(33)	9	(33)	**27**	**(3.6)**
Infection	8	(23)	12	(34)	5	(14)	10	(29)	**35**	**(4.7)**
Musculoskeletal	1	(4)	2	(8)	4	(16)	18	(72)	**25**	**(3.4)**
Neurological	36	(15)	73	(31)	51	(22)	75	(32)	**235**	**(31.5)**
Oncology	4	(27)	2	(13)	2	(13)	7	(47)	**15**	**(2.0)**
Other	6	(6)	22	(22)	16	(16)	56	(56)	**100**	**(13.4)**
Respiratory	63	(35)	40	(22)	38	(21)	39	(22)	**180**	**(24.1)**
Trauma	3	(5)	11	(17)	21	(33)	29	(45)	**64**	**(8.6)**
Total	**148**	**(19.8)**	**173**	**(23.2)**	**158**	**(21.2)**	**267**	**(35.8)**	**746**	

Table 14.1.4 Mortality of children admitted to AICUs by diagnostic group and age, England, 2004

Diagnostic group	Age group (years) <1 n	%	1-4 n	%	5-10 n	%	11-15 n	%	Total n	%
Body wall and cavities	1	(100)	0	(0)	0	(0)	0	(0)	**1**	**(3.4)**
Cardiac	2	(50)	0	(0)	0	(0)	2	(50)	**4**	**(13.8)**
Gastrointestinal	3	(75)	0	(0)	1	(25)	0	(0)	**4**	**(13.8)**
Infection	1	(25)	2	(50)	0	(0)	1	(25)	**4**	**(13.8)**
Neurological	3	(21)	3	(21)	3	(21)	5	(36)	**14**	**(48.3)**
Oncology	0	(0)	1	(100)	0	(0)	0	(0)	**1**	**(3.4)**
Respiratory	0	(0)	0	(0)	0	(0)	1	(100)	**1**	**(3.4)**
Total	**10**	**(34.5)**	**6**	**(20.7)**	**4**	**(13.8)**	**9**	**(31.0)**	**29**	

Table 14.1.5 Discharge destination for children admitted to AICUs, England, 2004

Discharge destination	Total n	%
Discharged to PICU	288	(38.6)
Discharged elsewhere	429	(57.5)
Died	29	(3.9)

Table 14.1.6 Length of stay for surviving children admitted to AICUs, England, 2004

	Age group (years) <1	1-4	5-10	11-15
Median length of stay	1	1	2	2
Range (days)	1 to 18	1 to 6	1 to 5	1 to 28

14.2 Summary

- A total of 746 children (0 -15 years) were recorded as receiving treatment in an AICU in 2004 representing 5% of all admissions of children receiving intensive care in England and Wales.
- Over 35% of these admissions were over 11 years of age but nearly 20% were under one year.
- Over 31% were admitted with a neurological diagnosis.
- Neurological conditions represented nearly half of all deaths.
- Over 38% of children admitted to an AICU were transferred to a PICU.
- Median length of stay was one day for those up to five years of age and two days for those over five, with some children remaining on an AICU for a considerably longer period.

15 STAFFING

PICANet is committed to monitoring and analysing staffing levels within PICUs, and each national report produced to date has included a chapter on this topic.

Staffing questionnaires had previously been sent out to units in September 2003, March 2004 and October 2004, and the process was repeated in October 2005. Information was collected on numbers of nursing staff and medical staff employed on units, and details were recorded at four specific 'snapshot' time periods (a weekday at noon and midnight, and a weekend at noon and midnight). For copies of the most recent questionnaires, please see Appendix K.

15.1 Staffing survey return rates

The staffing questionnaires, designed in order to assess levels and grades of PICU staff, were first developed in 2003, but have been refined and updated after each round of surveys. The most recent questionnaires were distributed in October 2005 and the data collected is comparable to that obtained in October 2004.

The questionnaires were sent to the lead doctor and senior nurse in each PICU. Each unit was contacted by telephone by the PICANet research nurse to aid completion of all data items, and as in previous years, units were offered a visit should they prefer this method of support. Response rates for both 2004 and 2005 (for the general establishment surveys and the snapshot surveys) are shown below:

Table 15.1.1 Response rate from participating NHS trusts to the PICANet staffing survey (general establishment)

		Number of returns			
	Number of trusts	Doctors		Nurses	
Time of survey	surveyed	n	%	n	%
October 04	24	22[a]	(92)	24	(100)
October 05	25	20[b]	(80)	24[c]	(96)

Notes: a no data returned from trusts G, J.
b no data returned from trusts F, G, L, N, Y.
c no data returned from trust G.

Table 15.1.2 Response rate from participating NHS trusts to the PICANet staffing survey (snapshots)

Time of survey	Number of trusts surveyed	Number of returns n	%
October 04	24	22[d]	(92)
October 05	25	23[e]	(92)

Notes: d no data returned from trusts G, J.
e no data returned from trusts G, P. Nursing data only from trusts A, J.

15.2 Nursing staff

Under the Agenda for Change, modern NHS pay scales are by bands rather than grades. The Agenda for Change is the system of pay established in 2004 for most NHS-employed staff. It is designed to be simpler and more flexible than the old system, and is directly linked to work rather than job titles.[1] Nursing staff data collected by PICANet in 2004 were by grade, whilst data collected in 2005 were a mixture of grades and bands. For the purpose of this report, to enable analysis of 2004 and 2005 nursing data, we have mapped bands 1-4 to grades A-C, band 5 to grades D-E, band 6 to grade F, band 7 to grade 8 and band 8 to grades H-I, as the mapping of grades to bands is not directly comparable for all units.

Table 15.2.1 shows the proportion of qualified nurses, specially trained children's nurses and children's nurses with additional training in paediatric intensive care (ENB 415) identified as working in PICUs by the Bridge to the Future report[2] and the October 2004 and 2005 PICANet staffing surveys. The Bridge to the Future figures are based on 21 PICUs within 21 NHS trusts. An additional three NHS trusts were included in the October 2004 PICANet survey and a further one in the October 2005 PICANet survey.

Table 15.2.1 Comparison of the proportion of nurses by their level of paediatric qualification in four different years (1996, 1997, 2004 + 2005)

Survey	Number of trusts returning survey	Number of trusts included in analysis	% of children's trained nurses	% of children's trained nurses with additional intensive care training (ENB 415)
Bridge to the Future report (May 96)	21	21	85	48
Bridge to the Future report (January 97)	21	21	88	47
PICANet survey (October 04)	24	23	89	58
PICANet survey (October 05)	24	24	91	40

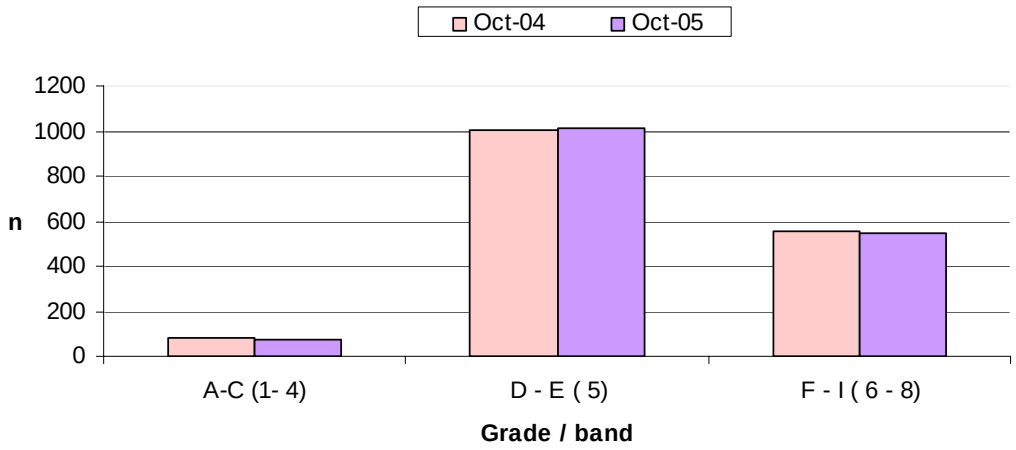
Notes: The figures are based on all qualified nurses working on PICU, whether clinical or non-clinical.
The % of children's trained nurses is as a proportion of qualified nurses.
The % of children's trained nurses with additional intensive care training (ENB 415) is as a proportion of children's trained nurses.
Trust G have no nursing staff employed specifically for paediatric intensive care patients. Nurses are employed by the critical care department for this trust and provide intensive care on the adult intensive care unit. For this reason they have not been included in the analysis of PICANet 2004 data. They did not return data for 2005.

Table 15.2.2 Numbers of nursing staff (WTE) by grade and NHS trust (October 2004 + October 2005)

	Nursing staff (WTE) by grade (Oct 04)							
	A-C (1-4)		D-E (5)		F-I (6-8)		Total	
NHS trust	n	%	n	%	n	%	n	%
A	0.0	(0)	25.9	(60)	17.4	(40)	**43.2**	**(2.6)**
B	0.0	(0)	4.7	(48)	5.1	(52)	**9.8**	**(0.6)**
C	2.0	(5)	27.4	(65)	13.1	(31)	**42.5**	**(2.6)**
D	1.4	(1)	61.7	(64)	33.2	(34)	**96.2**	**(5.9)**
E	11.0	(5)	133.2	(59)	81.3	(36)	**225.4**	**(13.7)**
F	4.4	(4)	70.8	(69)	27.9	(27)	**103.1**	**(6.3)**
H	4.0	(11)	19.4	(53)	13.1	(36)	**36.5**	**(2.2)**
I	10.6	(9)	64.8	(55)	41.8	(36)	**117.2**	**(7.1)**
J	0.0	(0)	0.0	(0)	3.6	(100)	**3.6**	**(0.2)**
K	11.3	(10)	71.0	(61)	33.9	(29)	**116.2**	**(7.1)**
L	3.0	(8)	23.8	(60)	12.6	(32)	**39.4**	**(2.4)**
M	2.2	(4)	29.5	(56)	21.4	(40)	**53.1**	**(3.2)**
N	1.0	(3)	21.0	(54)	17.1	(44)	**39.1**	**(2.4)**
O	1.0	(2)	36.0	(69)	15.5	(29)	**52.5**	**(3.2)**
P	6.6	(5)	78.7	(59)	48.6	(36)	**134.0**	**(8.2)**
Q	3.7	(6)	34.3	(59)	20.2	(35)	**58.2**	**(3.5)**
R	3.8	(6)	39.5	(64)	18.5	(30)	**61.7**	**(3.8)**
S	1.5	(6)	17.5	(66)	7.6	(29)	**26.6**	**(1.6)**
T	2.2	(6)	22.9	(65)	10.0	(29)	**35.1**	**(2.1)**
U	1.0	(2)	24.7	(53)	21.3	(45)	**47.0**	**(2.9)**
V	8.0	(6)	83.9	(66)	34.9	(28)	**126.8**	**(7.7)**
W	0.0	(0)	73.3	(75)	24.4	(25)	**97.8**	**(6.0)**
X	5.1	(7)	38.0	(51)	31.9	(42)	**75.0**	**(4.6)**
Y	-	-	-	-	-	-	**-**	**-**
Total	**83.8**	**(5.1)**	**1001.8**	**(61.1)**	**554.4**	**(33.8)**	**1639.9**	

	Nursing staff (WTE) by grade (Oct 05)							
	A-C (1-4)		D-E (5)		F-I (6-8)		Total	
NHS trust	n	%	n	%	n	%	n	%
A	0.0	(0)	25.1	(58)	18.5	(42)	**43.6**	**(2.5)**
B	0.0	(0)	4.4	(52)	4.0	(48)	**8.4**	**(0.5)**
C	1.0	(2)	32.7	(71)	12.3	(27)	**46.0**	**(2.7)**
D	2.6	(3)	59.4	(61)	35.3	(36)	**97.2**	**(5.7)**
E	6.6	(3)	136.7	(64)	68.6	(32)	**212.0**	**(12.4)**
F	4.4	(4)	66.1	(60)	39.3	(36)	**109.8**	**(6.4)**
H	3.5	(9)	21.9	(58)	12.4	(33)	**37.8**	**(2.2)**
I	10.1	(8)	67.2	(56)	43.0	(36)	**120.3**	**(7.0)**
J	0.0	(0)	2.0	(33)	4.1	(67)	**6.1**	**(0.4)**
K	9.3	(8)	71.3	(65)	29.6	(27)	**110.2**	**(6.4)**
L	4.0	(9)	29.7	(69)	9.3	(22)	**43.0**	**(2.5)**
M	2.2	(5)	28.1	(58)	18.5	(38)	**48.9**	**(2.8)**
N	1.0	(2)	23.8	(53)	20.1	(45)	**44.9**	**(2.6)**
O	2.0	(4)	35.3	(63)	18.4	(33)	**55.7**	**(3.2)**
P	3.0	(2)	99.4	(72)	36.5	(26)	**138.8**	**(8.1)**
Q	3.4	(5)	36.9	(59)	22.5	(36)	**62.8**	**(3.7)**
R	3.2	(5)	45.4	(70)	16.5	(25)	**65.1**	**(3.8)**
S	0.8	(3)	5.0	(20)	19.5	(77)	**25.3**	**(1.5)**
T	5.2	(15)	17.4	(50)	12.5	(36)	**35.0**	**(2.0)**
U	1.0	(3)	16.4	(43)	20.7	(54)	**38.1**	**(2.2)**
V	5.0	(4)	72.0	(62)	38.6	(33)	**115.6**	**(6.7)**
W	1.0	(1)	73.6	(75)	24.0	(24)	**98.6**	**(5.7)**
X	8.1	(10)	43.8	(56)	26.3	(34)	**78.2**	**(4.6)**
Y	4.4	(6)	51.7	(69)	18.7	(25)	**74.7**	**(4.4)**
Total	**81.8**	**(4.8)**	**1065.1**	**(62.1)**	**569.1**	**(33.2)**	**1716.0**	

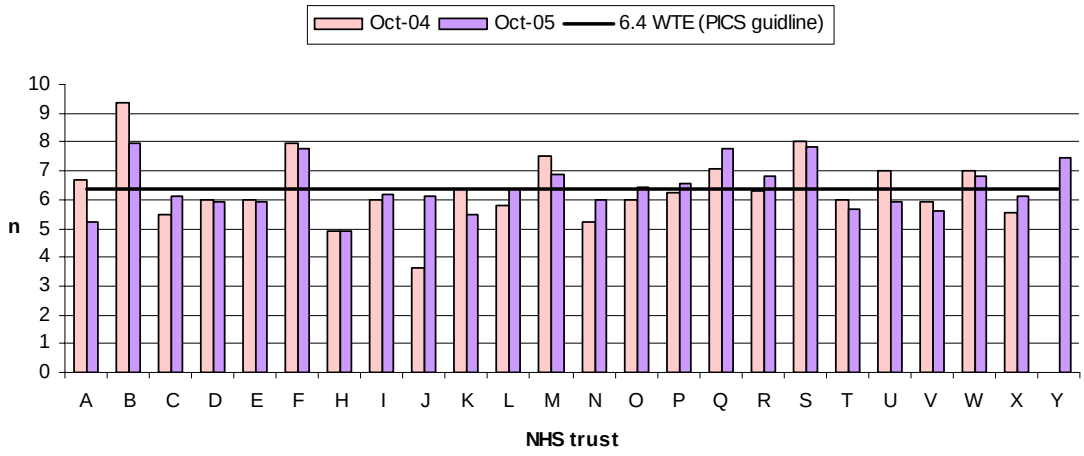
Figure 15.2.1 Total numbers of nursing staff (WTE) by grade (October 2004 + 2005)



Notes: Trust Y is not included in the above figure as data was not available for 2005.
Trust G is not included in the above figure as data was not available for 2005.

The total numbers of nursing staff (WTE) by grade for PICUs in England and Wales are shown in Figure 15.2.1.

Figure 15.2.2 Clinically qualified nursing staff (WTE) per bed by NHS trust (October 2004 + 2005)

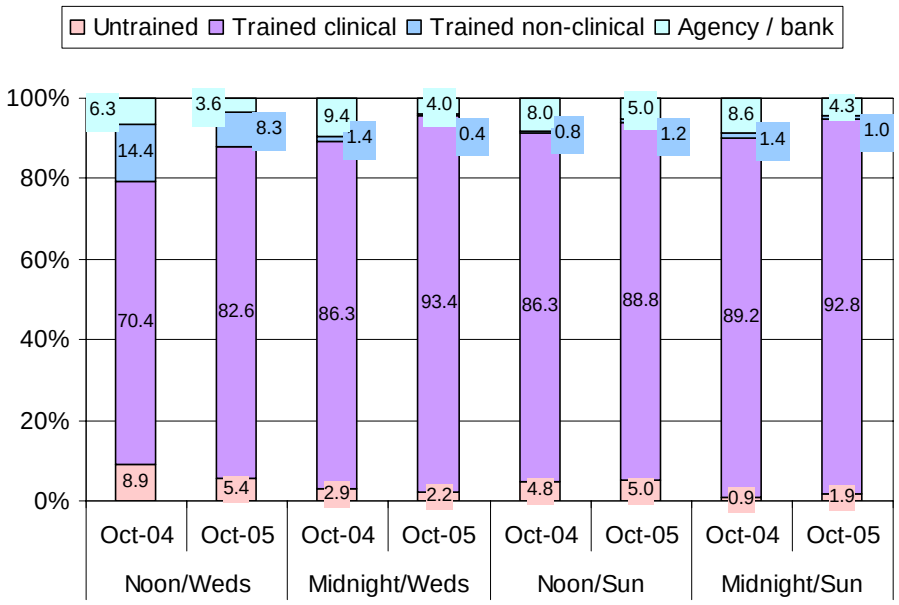


Note: Trust G is not included as data was not available for 2005.

Figure 15.2.2 shows the total numbers of WTE clinically qualified nursing staff per funded intensive care bed (beds identified as high dependency on the PICU are excluded from this analysis) for each NHS trust. The number of beds is based on a survey carried out in 2005 and reconfirmed with PICU lead clinicians in 2006. Data for all qualified nursing staff are shown for October 2004 and 2005. These figures do not include non-clinical staff such as educators and retrieval co-ordinators who are not clinically active on PICU. Guidelines from PICS in 2001 recommended that each

paediatric intensive care bed should be staffed by 6.4 WTE qualified nurses.[3] This guideline is indicated on the graph.

Figure 15.2.3 Proportion (percentage) of nursing staff by clinical and qualification status working on PICU for the four snapshot time periods (October 2004 + 2005)

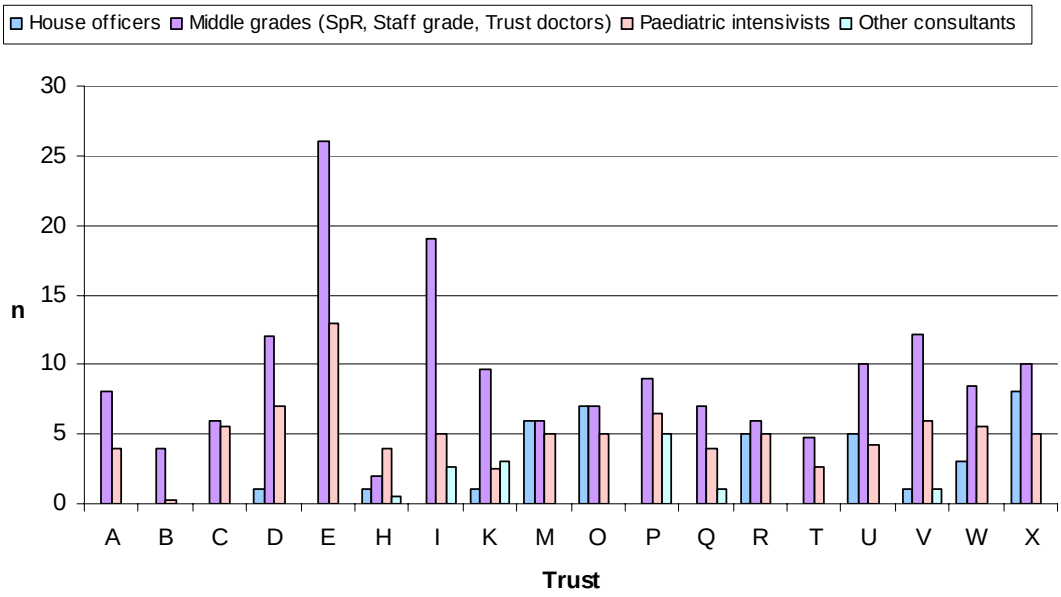


Notes: Trusts G and J are not included in the 2004 data as data was not returned.
Trusts G and P are not included in the 2005 data as data was not returned.

The snapshot surveys looked at the numbers of nursing staff working on a weekday (Wednesday) at midday and midnight and a weekend (Sunday) at midday and midnight. Figure 15.2.3 shows the proportion of untrained, trained (clinical and non-clinical) and agency nursing staff at four different time periods in 2004 and 2005.

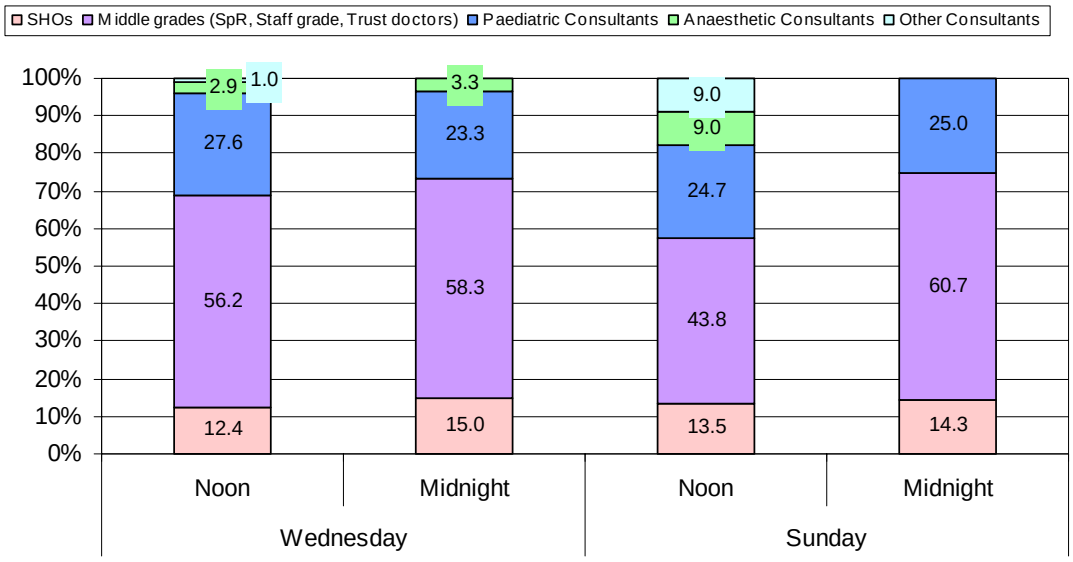
15.3 Medical staff

Figure 15.3.1 Numbers of medical staff (WTE) by position and NHS trust (October 2005)



Notes: Trusts J and S have been excluded due to difficulties analysing the data provided (staff working across more areas than just the PICU).
Trusts F, G, L, N and Y are not included as data was not returned.

Figure 15.3.2 Proportion (percentage) of medical staff by position working on PICU for the four snapshot time periods (October 2005)



Note: Trusts G, P, A and J are not included as data was not returned.

The snapshot surveys looked at the numbers of medical staff working on a weekday (Wednesday) at midday and midnight and a weekend (Sunday) at midday and midnight. Figure 15.3.2 shows the proportion of SHOs, Middle Grades and Consultants

(paediatric, anaesthetic and other) at four different time periods in 2005. Comparative data from 2004 were unavailable.

15.4 Summary

- Although the response rates to the PICANet staffing surveys were very good (80% or above), this does mean we did not have complete data.
- The percentage of children's trained nurses has increased from 2004 - 2005, but the proportion with additional intensive care training (ENB 415) has decreased.
- The majority of nurses employed are grades D – E (62% in 2005).
- The numbers of nursing staff at grades A - C, D - E and F - I have remained constant from 2004 - 2005.
- The most recent survey showed that there are a number of trusts who do not meet the PICS guideline of 6.4 WTE qualified nurses per PICU bed.
- Fewer agency / bank nursing staff were working in 2005 compared to 2004.
- As expected, the numbers of trained non-clinical nursing staff were greater on the day shift during the week than at any other time. These staff include retrieval co-ordinators and nurse educators.
- Over half of trusts with data from the medical establishment questionnaire identified that they had junior medical staff working on the PICU.
- The snapshot survey showed that the majority of medical staff were middle grades.
- Consultants in disciplines other than paediatrics and anaesthetics were only present during day shifts.

References

1 The Agenda for Change (AfC) website: http://www.dh.gov.uk/PolicyAndGuidance/HumanResourcesAndTraining/ModernisingPay/fs/en (accessed 24 April 2006).

2. Bridge to the Future Nursing Standards, Education and Workforce Planning in Paediatric Intensive Care. Report of the Chief Nursing Officer's Taskforce. NHS Executive 1997.

3. Pediatric Intensive Care Society Standards Document 2001.

16 USES AND DISSEMINATION OF PICANet DATA

PICANet was established in collaboration with clinical colleagues from all participating NHS trusts with a view to providing timely and accurate national and local information on PICU activity for those who deliver the service and those who plan the delivery of care. In common with all data sets the use of the data inevitably improves its quality. No data are ever provided or presented which allows an individual to be identified. We act in accordance with the guidelines provided by ONS.

PICANet is pleased to report an increasing number of requests for data and information (Appendix M). Some requests have only asked for aggregated anonymised data from the entire data set. For other requests, for example those that identify individual PICUs, PICANet always ensures that lead clinicians are informed and seeks permission for their data to be used.

Requests have been received and dealt with from individual clinicians, groups of researchers and NHS commissioners. Some of the reports produced have required complex data processing and analyses and this has incurred additional costs.

Dissemination of information from PICANet has been of prime importance to the team and Appendix N details specific talks given at various venues. We welcome the opportunity to present data in these forums.

Appendix N details a number of abstracts that have been presented at conferences and papers published by members of the PICANet team on PICANet and related topics. It is anticipated that a number of papers will be submitted to peer review scientific journals over the next year.

17 RECOMMENDATIONS

PICANet recommends:

1 that high quality data on children receiving intensive care in England, Wales and Edinburgh should continue to be collected to optimise the delivery of care, to facilitate future planning, permit ongoing audit and describe the epidemiology of critically ill children.

2 complete coverage of the UK to incorporate data from all paediatric intensive care units (PICUs) in Scotland and Northern Ireland to enable the diversity of clinical practice to be characterised at a national level.

3 that links with the clinical community and professional organisations, such as the Paediatric Intensive Care Society Study Group, continue to be strengthened and expanded via collaborative use of the PICANet data set.

4 the consideration of the development of a secure interactive web-based information system and reporting tool that allows online data entry.

5 that the PICANet data set should be used for future calibration of risk-adjustment algorithms in paediatric intensive care.

6 that NHS trusts share their experiences of the collection of status at 30 days following discharge from paediatric intensive care to improve this data collection in those trusts with little or no follow-up data.

7 comprehensive collection of staffing information (both nursing and medical) to monitor the delivery care in individual units.

8 continued efforts to capture complete national data on children admitted to adult intensive care units.

9 further investigation of the differences in the prevalence of paediatric intensive care by Strategic Health Authority to determine which factors might explain this variation.

10 further exploration of the patterns of admission for individual children, as one of the key functions of PICANet is to investigate patterns of re-admission to PICUs for children across the UK.

11 that international collaborations should be established to enable the development of large-scale audit comparisons between countries that will inform clinical practice.

APPENDIX A CLINICAL ADVISORY GROUP MEMBERSHIP

Name	Position	NHS Trust / Hospital	Period served
Dr Paul Baines	Consultant in Paediatric Intensive Care	Royal Liverpool Children's NHS Trust Alder Hey Hospital	2002 - present
Ms Corenna Bowers	Sister	Cardiff & Vale NHS Trust University Hospital of Wales	2002 - Sept 2004
Dr Peter Davis	Consultant in Paediatric Intensive Care	United Bristol Healthcare NHS Trust Bristol Royal Hospital for Children	March 2006 - present
Dr Andrew Durward	Consultant in Paediatric Intensive Care	Guy's & St Thomas' NHS Foundation Trust Evelina Children'sHospital	2002 - present
Ms Georgina Gymer	Research Nurse	Queen's Medical Centre Nottingham University NHS Trust Queen's Medical Centre	2005 - present
Dr James Fraser	Consultant in Paediatric Intensive Care	United Bristol Healthcare NHS Trust Bristol Royal Hospital for Children	2002 – March 2006
Dr Hilary Klonin	Consultant in Paediatric Intensive Care	Hull & East Yorkshire Hospitals NHS Trust Hull Royal Infirmary	2002 - present
Ms Christine Mackerness	Sister	Newcastle Upon Tyne Hospitals NHS Trust Newcastle General Hospital	2002 - present
Dr Jillian McFadzean	Consultant in Paediatric Intensive Care	NHS Lothian – University Hospitals Division Edinburgh Royal Hospital for Sick Children	2005 - present
Ms Victoria McLaughlin	Audit Nurse	Central Manchester & Manchester Children's University Hospitals NHS Trust Royal Manchester Children's Hospital	2002 - present
Dr Roddy O'Donnell	Consultant in Paediatric Intensive Care	Cambridge University Hospitals NHS Foundation Trust Addenbrooke's Hospital	2002 - present
Ms Geralyn Oldham	Information Support Manager	Great Ormond Street Hospital for Children NHS Trust Great Ormond Street Hospital for Sick Children	2002 - present
Dr Gale Pearson (Chair)	Consultant in Paediatric Intensive Care	Birmingham Children's Hospital NHS Trust Diane, Princess of Wales Children's Hospital	2002 - present
Dr Damian Pryor	Consultant in Paediatric Intensive Care	Cardiff & Vale NHS Trust University Hospital of Wales	2002 - Sept 2004
Dr Allan Wardhaugh	Consultant in Paediatric Intensive Care	Cardiff & Vale NHS Trust University Hospital of Wales	Sept 2004 - present
Ms Debbie White	Sister	Cambridge University Hospitals NHS Foundation Trust Addenbrooke's Hospital	2002 - present

APPENDIX B STEERING GROUP MEMBERSHIP

Name	Position	Organisation	Representation	Period Served
Mrs Pamela Barnes	Chair of Action for Sick Children	Action for Sick Children	Lay Member	2002 - present
Professor Nick Black (Chair)	Head of Health Services Research Unit	London School of Hygiene and Tropical Medicine	Health Services Research / Public Health	2002 - present
Mr William Booth	Clinical Nurse Manager	PICU Bristol Royal Hospital for Children	Royal College of Nursing	2002 - present
Ms Bev Botting	Child Health and Pregnancy Statistics	Office for National Statistics	Office for National Statistics (data protection)	2002 - Sept 2003
Dr Jean Chapple	Consultant in Perinatal Epidemiology / Public Health	Westminster Primary Care Trust	PICNET founder	2002 - present
Dr Bill Chaudhry	Consultant Paediatrician	PICU Newcastle Upon Tyne Hospitals NHS Trust	Clinical IT	2002 - Sept 2003
Dr Mark Darowski	Consultant Paediatric Anaesthetist	PICU Leeds Teaching Hospitals NHS Trust	Royal College of Anaesthetists	2002 - present
Mr Noel Durkin	Department of Health	Child Health Services Directorate	Department of Health	2002 - present
Dr Steve Kerr	Consultant in Paediatric Intensive Care	PICU Royal Liverpool Children's NHS Trust	Chair of PICS	Sept 2003 - present
Ms Helen Laing	Clinical Audit	Healthcare Commission	Healthcare Commission	March 2004 - present
Mr Ian Langfield	Audit Co-ordinator	National Assembly of Wales	National Assembly of Wales	2002 - Sept 2003
Dr Michael Marsh	Director of Paediatric Intensive Care	PICU Southampton University Hospitals NHS Trust	Royal College of Paediatrics and Child Health	2002 - present
Dr Jillian McFadzean / Ms Laura Reekie	Consultant in Anaesthesia and Intensive Care / PA	PICU Lothian NHS Trust	Edinburgh Royal Hospital for Sick Children	2005 - present
Dr Roddy McFaul	Medical Advisor	Child Health Services Directorate	Department of Health	2002 - Sept 2003
Professor Jon Nicholl	Director of Medical Care Research Unit	School of Health and Related Research University of Sheffield	Health Services Research / Statistics	2002 - present
Dr Gale Pearson	Consultant in Paediatric Intensive Care	PICU Birmingham Children's Hospital NHS Trust	Chair of PICANet CAG	2002 - present
Ms Tanya Ralph	Nursing Research Lead	PICU Sheffield Children's NHS Trust	PICS	2002 - present

Name	Position	Organisation	Representation	Period Served
Dr Kathy Rowan	Director	ICNARC	Intensive Care National Audit & Research Centre	2002 - present (on sabbatical 2004 represented by Lucy Scott)
Mr Stuart Rowe	PCT Commissioner	Commissioning Department Hammersmith PCT	PCT Commissioner (Pan-Thames)	Sept 2003 - present
Ms Dominique Sammut	Audit Co-ordinator	Health Commission Wales	Health Commission Wales	Sept 2003 – present
Dr Jenifer Smith	Medical Advisor	Office Project Team	Commission for Health Improvement	2002 – March 2004
Dr Charles Stack	Consultant in Paediatric Intensive Care	PICU Sheffield Children's NHS Trust	PICS t	2002 - present
Professor Stuart Tanner	Medical Advisor in Paediatrics and Child Health	Child Health Services Directorate Department of Health	Department of Health	Sept 2003 - present
Dr Robert Tasker	Lecturer in Paediatrics	Department of Paediatrics University of Cambridge Clinical School	PICS SG	Sept 2004 - present

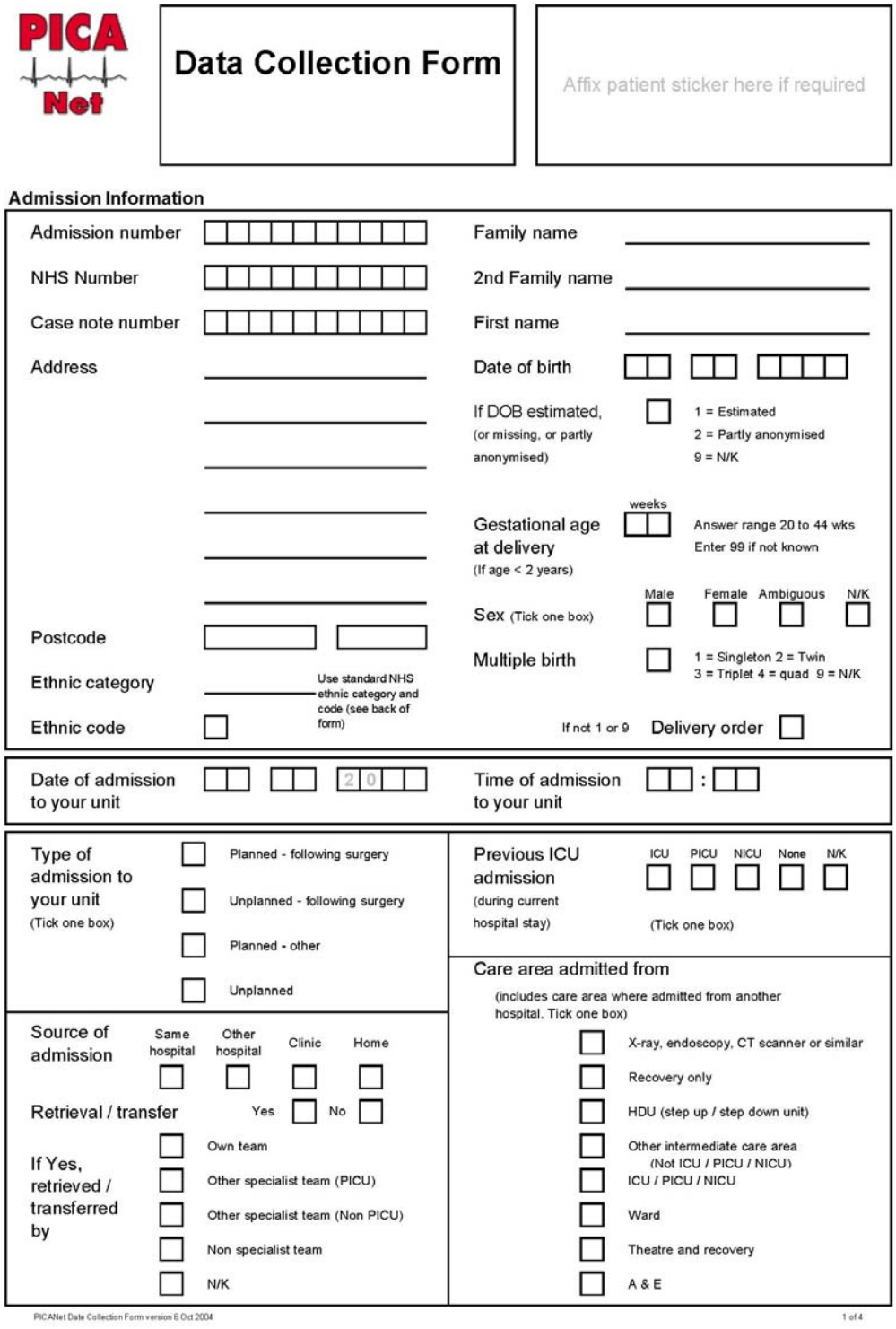
APPENDIX C PARTICIPATING NHS TRUSTS AND HOSPITAL CHARACTERISTICS

NHS Trust	Participating Hospital	Unit / Ward	Number of ITU beds	Number of HDU beds	Type of unit
Cambridge University Hospitals NHS Foundation Trust	Addenbrookes Hospital	PICU	6	6	General
Birmingham Children's Hospital NHS Trust	Birmingham Children's Hospital	PICU	19	0	General & Cardiac
Brighton & Sussex University Hospitals NHS Trust	Royal Alexandra hospital for Sick Children	Lydia Ward	1	1	General
Cardiff & Vale NHS Trust	University Hospital of Wales	PICU	7	0	General
Central Manchester & Manchester Children's University Hospitals NHS Trust	Royal Manchester Children's Hospital	PICU	15	0	General
Great Ormond Street Hospital NHS Trust	Great Ormond Street Hospital for Children	CCCU	10	0	Cardiac,
	Great Ormond Street Hospital for Children	PICU & NICU	21	0	General & Neonatal Unit
Guy's & St. Thomas' NHS Foundation Trust	Evelina Children's Hospital	PICU	12	0	General & Cardiac
Hull & East Yorkshire Hospitals NHS Trust	Hull Royal Infirmary	PICU beds on AITU	2	0	Adult ICU providing General PICU
King's College Hospital NHS Trust	King's College Hospital	PICU	6	0	General & Hepatic
Leeds Teaching Hospitals NHS Trust	Leeds General Infirmary	Wards 2 & 4	16[a]	0	General & Cardiac
	St. James' University Hospital	PICU	16[a]	0	General
Newcastle Upon Tyne Hospitals NHS Trust	Newcastle General Hospital	PICU	10[b]	6[b]	General
	Royal Victoria Infirmary	Ward 3	10[b]	6[b]	Surgical ICU
	Freeman Hospital	Ward 28	7	0	Cardiac
NHS Lothian – University Hospitals Division	Royal Hospital for Sick Children, Edinburgh	PICU	9[c]	3[c]	General
Oxford Radcliffe Hospitals NHS Trust	John Radcliffe Hospital	PICU	7	0	General & Cardiac
Queen's Medical Centre Nottingham University NHS Trust	Queen's Medical Centre	PICU	6	0	General
Royal Brompton & Harefield NHS Trust	Royal Brompton Hospital	PICU	10	4	Cardiac

NHS Trust	Participating Hospital	Unit / Ward	Number of ITU beds	Number of HDU beds	Type of unit
Royal Liverpool Children's NHS Trust	Royal Liverpool Children's Hospital	PICU	20	0	General & Cardiac
Sheffield Children's Hospital NHS Trust	Sheffield Children's Hospital	PICU	9	2	General
	Sheffield Children's Hospital	Neonatal Surgical Unit	2	0	Neonatal Surgical Unit
Southampton University Hospitals NHS Trust	Southampton General Hospital	PICU	9	0	General & Cardiac
South Tees Hospitals NHS Trust	James Cook University Hospital	PICU	3	1	General
St. George's Healthcare NHS Trust	St. George's Hospital	PICU	5	0	General
St. Mary's NHS Trust	St. Mary's Hospital	PICU	8	2	General
The Lewisham Hospitals NHS Trust	University Hospital, Lewisham	PICU	1	1	General
United Bristol Healthcare NHS Trust	Bristol Royal Hospital for Children	PICU	14	0	General & Cardiac
University Hospital of Leicester NHS Trust	Leicester Royal Infirmary	CICU	6	2	General
	The Glenfield Hospital	PICU	5	0	Cardiac
University Hospital of North Staffordshire NHS Trust	City General Hospital	PICU	6	1	General

Notes: a Nurses / beds used flexibly across the sites
b Total bed numbers split between two hospital sites
c ITU / HDU beds used flexibly (e.g. 6 ITU + 6 HDU, 9 ITU + 3 HDU, 11 ITU +1 HDU)

APPENDIX D DATA COLLECTION FORM



PICA Net

Data Collection Form

Affix patient sticker here if required

Admission Information

Admission number

NHS Number

Case note number

Address

Postcode

Ethnic category — Use standard NHS ethnic category and code (see back of form)

Ethnic code

Family name

2nd Family name

First name

Date of birth

If DOB estimated, (or missing, or partly anonymised) — 1 = Estimated 2 = Partly anonymised 9 = N/K

Gestational age at delivery (If age < 2 years) — weeks — Answer range 20 to 44 wks Enter 99 if not known

Sex (Tick one box) — Male Female Ambiguous N/K

Multiple birth — 1 = Singleton 2 = Twin 3 = Triplet 4 = quad 9 = N/K

If not 1 or 9 Delivery order

Date of admission to your unit — 20

Time of admission to your unit

Type of admission to your unit (Tick one box)
- Planned - following surgery
- Unplanned - following surgery
- Planned - other
- Unplanned

Previous ICU admission (during current hospital stay) — ICU PICU NICU None N/K (Tick one box)

Source of admission — Same hospital, Other hospital, Clinic, Home

Retrieval / transfer — Yes No

If Yes, retrieved / transferred by
- Own team
- Other specialist team (PICU)
- Other specialist team (Non PICU)
- Non specialist team
- N/K

Care area admitted from (includes care area where admitted from another hospital. Tick one box)
- X-ray, endoscopy, CT scanner or similar
- Recovery only
- HDU (step up / step down unit)
- Other intermediate care area (Not ICU / PICU / NICU)
- ICU / PICU / NICU
- Ward
- Theatre and recovery
- A & E

PICANet Data Collection Form version 6 Oct 2004 1 of 4

Primary diagnosis for this admission

Other reasons for this admission

Operations or procedures performed during this admission

Co-morbidity

PIM/PIM2 - Medical History

Evidence available to assess past medical history? Yes ☐ No ☐

If yes tick appropriate box (es)

Cardiac arrest before ICU admission	☐ →	**If yes:** cardiac arrest **OUT** of Hospital?	☐
Cardiomyopathy or myocarditis	☐	Admitted following cardiac bypass	☐
Severe combined immune deficiency	☐	Spontaneous cerebral haemorrhage	☐
Hypoplastic left heart syndrome	☐	Neurodegenerative disorder	☐
Leukaemia / lymphoma after 1st induction	☐	Severe developmental delay	☐
Liver failure (main reason for PICU admission)	☐	Human Immunodeficiency Virus (HIV)	☐

PIM/PIM2 - Reason for admission

Please tick this box if the admission was elective: ☐

Please tick one of the boxes below if main reason for this PICU admission:

Asthma	☐	Croup	☐	Recovery from surgery	☐
Bronchiolitis	☐	Obstructive sleep apnoea	☐	Diabetic ketoacidosis	☐

PIM/PIM2 - Physiology (valid time period: from 1st face to face contact with a doctor until **1 hour** after admission to your unit)

Systolic blood pressure ☐☐☐ (mmHg)

PaO_2 (arterial) ☐☐ . ☐☐ (kPa)

or

☐☐☐ (mmHg)

FiO_2 (at time of above sample) ☐ . ☐☐

Mechanical ventilation — Yes ☐ No ☐ N/K ☐

CPAP (include mask / nasal / negative pressure) — Yes ☐ No ☐ N/K ☐

Blood gas in 1st hour — Yes ☐ No ☐

Base excess (arterial / capillary) ☐ ☐☐ . ☐ (indicate plus or minus)

Pupil reaction — Both fixed & dilated ☐ Other reaction ☐ N/K ☐

Intubation (at time of PaO_2) — Yes ☐ No ☐ N/K ☐

Headbox (at time of PaO_2) — Yes ☐ No ☐ N/K ☐

Interventions during this admission to your unit

Invasive ventilation Yes ☐ No ☐ N/K ☐ Non-invasive ventilation Yes ☐ No ☐ N/K ☐

If Yes total number of days given ☐☐☐ If Yes total number of days given ☐☐☐

START invasive ventilation ☐☐ ☐☐ 20☐☐ START non- invasive ventilation ☐☐ ☐☐ 20☐☐

END invasive ventilation ☐☐ ☐☐ 20☐☐ END non-invasive ventilation ☐☐ ☐☐ 20☐☐

Please note that start and end dates are for your reference only and are not submitted to PICANet

Tracheostomy Yes ☐ No ☐ N/K ☐ ECMO Yes ☐ No ☐ N/K ☐

IV vasoactive drugs Yes ☐ No ☐ N/K ☐ LVAD Yes ☐ No ☐ N/K ☐

Renal support Yes ☐ No ☐ N/K ☐ ICP device Yes ☐ No ☐ N/K ☐

(If Yes to Renal Support please tick treatments given)

Haemofiltration ☐

Haemodialysis ☐

Plasmafiltration ☐

Plasma exchange ☐

Peritoneal dialysis ☐

(If Yes to ICP device please tick as appropriate)

Ventricular drain ☐

ICP bolt ☐

Please note that ventilation for any part of a day (midnight to midnight) is counted as one day. EXAMPLE: If a child started ventilation at 23:00 and stopped at 07:00 the next day this would be counted as two days.

Discharge Information

Status at discharge from your unit

Alive ☐ Dead ☐ Discharged for Palliative care? ☐

Date of discharge ☐☐ ☐☐ 20☐☐ Date of death ☐☐ ☐☐ 20☐☐

Time of discharge ☐☐ : ☐☐ Time of death ☐☐ : ☐☐

Destination following discharge from your unit

Normal residence ☐

Hospice ☐

Same hospital ☐

Other hospital ☐

ICU ☐ PICU ☐ NICU ☐ HDU ☐ SCBU ☐ Ward ☐ Other ☐

Follow up 30 days post discharge from your unit

Status Alive ☐ Dead ☐ N/K ☐

Date of death ☐☐ ☐☐ 20☐☐

Normal residence ☐ N/K ☐

Hospice ☐

Same hospital ☐

Other hospital ☐

ICU ☐ PICU ☐ NICU ☐ HDU ☐ SCBU ☐ Ward ☐ Other ☐

PICANet Data collection Form Version 6 Oct 2004 3 of 4

Form completed by:

Comments

User defined fields

Variable name	Description				

Ethnic categories

These are the standard ethnic categories to be used for the collection of ethnicity information

	Ethnic category		Codes
a	White	British	A
		Irish	B
		Any other White background	C
b	Mixed	White and Black Caribbean	D
		White and Black African	E
		White and Asian	F
		Any other mixed background	G
c	Asian and Asian British	Indian	H
		Pakistani	J
		Bangladeshi	K
		Any other Asian background	L
d	Black or black British	Caribbean	M
		African	N
		Any other Black background	P
e	Other ethnic groups	Chinese	R
		Any other ethnic group	S
f	Not stated	Not stated	Z

A query to picanet@sheffield.ac.uk will reach every team member

Individual contact details

Sam Jones
0114 222 0772
sam.jones@sheffield.ac.uk

Roger Parslow
0113 343 4856
r.c.parslow@leeds.ac.uk

Nicky Davey
0116 252 5450
nd36@le.ac.uk

Krishnan Thiru
020 7762 6713
ThiruK1@gosh.nhs.uk

APPENDIX E INFORMATION LEAFLET

What is a paediatric intensive care unit?

A paediatric or children's intensive care unit is a special ward that is staffed and equipped to provide specialist care and treatment to children with illnesses, injuries or complications.

What is PICANet?

PICANet is a national database of paediatric intensive care run by the Universities of Leeds, Leicester and Sheffield.

What does PICANet do?

PICANet collects information on all children being cared for in a paediatric intensive care unit.

Why is PICANet important?

The information collected for PICANet will help to find out the best methods of care and treatment for children. This will ensure that there is adequate provision for paediatric intensive care services in the future.

Who is paying for PICANet?

Government departments are funding PICANet.

Does my child have to be included?

No, if you do not want your child's information to be included please tell the nurse or doctor caring for them. They will then ensure that no personal details are sent to PICANet. Your decision will not affect the care that your child receives in this or any other hospital.

What information is needed?

Information about your child's identity, such as name, date of birth and NHS number, helps us to follow their progress if they are moved to another paediatric intensive care unit.

Postcodes will be used to help plan future paediatric intensive care services within your area.

Information about your child's care, treatment and condition will also be collected.

How is information collected?

Information about your child's condition or illness will be recorded onto a form. This will be entered onto a computer locally before being sent to the University of Sheffield, where it will be stored on a secure computer.

PICANet is collecting the same information on all children cared for in a paediatric intensive care unit. We expect to have information on a large number of children, about 15,000 per year. This will mean that we can look at what is happening all over the country and not just in your child's hospital.

What will happen to my child's information?

The information will be used to help write reports and inform studies in the future. Information may be linked to data from the Office of National Statistics to allow follow up of your child's health status.

It will not be possible to identify your child in any of these reports.

Will the information be safe?

All information is treated as confidential and will be sent securely to a central computer, located in a safe room. No one will be able to look at the information unless it is their job to do so.

Where can I get more information?

If you have any questions about PICANet you can:

- ask your child's nurse or doctor for more information.
- visit the PICANet website at www.picanet.org.uk.
- contact a member of the PICANet team on one of the telephone numbers overleaf.

PICANet contact information:

Nicky Davey, University of Leicester:
0116 252 5450

Sam Jones, University of Sheffield:
0114 222 0772

Roger Parslow, University of Leeds:
0113 343 4856

Krish Thiru, Pan Thames Coordinator:
0207 762 6713

E-mail: picanet@sheffield.ac.uk

PICA Net

Paediatric Intensive Care Audit Network

Information leaflet for parents, families and guardians of children admitted to paediatric intensive care

Version 3.0 May 2005

APPENDIX F MONTHLY ADMISSIONS REPORT

Admissions		SITEID																													
Year	Month	1	2	3	4	5	6	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	31	Total
2004	1	109	23	71	33	39	99	56	34	89	133	114	20	48	29	42	10	54	19	26	35	18	30	28	3	44	29	5	45		1285
	2	92	36	70	35	25	77	56	37	89	143	87	22	50	18	39	4	53	7	19	34	24	24	33	7	47	20	8	56		1212
	3	86	35	50	43	27	68	46	40	104	166	106	20	53	28	39	12	58	18	23	25	28	43	31	3	53	22	2	48		1277
	4	87	20	51	37	25	87	56	24	78	148	102	23	36	27	27	8	52	11	31	31	23	26	28	7	48	16	7	38		1154
	5	71	12	54	34	15	78	50	31	75	151	101	35	44	43	33	4	45	13	28	37	18	25	28	4	46	23	2	42		1142
	6	70	16	54	33	13	77	63	46	84	161	92	31	51	29	23	9	43	14	25	28	14	37	33	6	54	17	4	39		1166
	7	72	18	47	39	23	60	51	32	76	160	92	26	53	34	29	5	46	17	18	30	18	26	27	7	41	13	0	39		1099
	8	78	23	45	28	18	66	53	38	74	162	75	22	47	28	23	5	40	18	25	22	21	42	33	8	53	12	3	29		1091
	9	82	24	52	43	19	67	41	19	84	158	80	28	41	30	27	9	47	9	22	32	33	37	16	8	50	21	3	28		1110
	10	74	24	50	44	11	72	32	29	70	138	97	25	48	31	34	7	51	18	27	23	18	26	32	9	74	21	3	43		1131
	11	90	32	57	44	24	57	52	30	79	145	105	27	51	40	43	6	60	15	22	25	21	36	24	4	60	19	4	40		1212
	12	85	30	60	35	30	70	39	36	91	150	128	37	31	35	35	3	49	15	31	21	25	28	27	7	44	21	4	47	23	1237
2004 Total		996	293	661	448	269	878	595	396	993	1815	1179	316	553	372	394	82	598	174	297	343	261	380	340	73	614	234	45	494	23	14116
2005	1	73	33	55	34	24	79	38	35	91	149	94	22	56	33	36	18	64	19	20	31	20	28	17	6	50	24	5	43	34	1231
	2	73	20	64	39	32	81	35	30	87	98	92	31	43	36	35	5	40	13	17	27	29	36	29	8	59	24	1	48	37	1169
	3	92	13	60	45	23	68	58	45	77	133	103	27	39	55	34	9	64	18	24	32	24	26	25	5	46	24	9	39	42	1259
	4	74	22	56	31	18	72	43	39	86	132	89	29	46	31	34	5	53	18	24	23	18	26	19	7	58	16	2	49	33	1153
	5	81	23	60	40	18	68	59	30	100	129	73	26	37	29	30	13	44	14	23	21	18	26	28	6	57	24	4	34	29	1144
	6	78	12	71	34	24	69	36	31	101	127	97	38	58	31	27	9	35	9	31	35	22	36	30	8	55	21	5	40	35	1205
	7	75	16	60	38	25	74	32	30	79	152	103	36	65	31	30	11	55	8	26	26	26	29	16	7	53	22	4	41	28	1198
	8	66	9	59	31	16	54	46	32	75	134	88	23	60	35	21	7	44	12	26	27	22	26	24	7	61	24	6	36	47	1118
	9	86	20	59	31	18	66	47	29	78	114	85	27	50	34	30	5	55	20	32	18	28	34	30	10	71	23	2	40	40	1182
	10	63	23	60	29	11	76	33	36	91	119	75	20	61	34	39	4	45	11	25	23	16	36	26	11	61	23	3	33	37	1124
	11	77	24	58	35	22	76	33	36	96	116	113	31	56	34	50	6	48	19	28	29	24	31	31	9	63	32	4	61	28	1270
	12	84	21	53	32	25	88	43	26	73	138	119	29	47	36	46	5	50	24	36	21	33	23	22	5	54	35	5	51	37	1261
2005 Total		922	236	715	419	256	871	503	399	1034	1541	1131	339	618	419	412	97	597	185	312	313	280	357	297	89	688	292	50	515	427	14314
Total		1918	529	1376	867	525	1749	1098	795	2027	3356	2310	655	1171	791	806	179	1195	359	609	656	541	737	637	162	1302	526	95	1009	450	28430

APPENDIX G DATA VALIDATION REPORT

The Royal Hospital

Key to clinical code errors

Value(s):
READ code followed by READ code description followed by the text recorded in the unit notes e.g. XSDOK- Bronchiolitis [respiratory distress]

Example errors:
A) (no code) – (no description) [(no notes)], this means nothing has been supplied.
B) X44vY – [ASD], this means an invalid READ code and no READ code description have been supplied.
C) 00000 – [abdominal tumour resection], this means no READ code and no READ code description have been supplied.

Admission number 200421	**Casenote number 233X**	**Admitted on 12/02/2004**	**PICANet ID 450**
Reason	**Variable(s)**	**Value(s)**	**Comment**
Missing primary reason	Primary reason for admission	(No code) - (No desription) [(No notes)]	Must have a primary reason for admission recorded

Admission number 200462	**Casenote number 433RX**	**Admitted on 15/04/2004**	**PICANet ID 552**
Reason	**Variable(s)**	**Value(s)**	**Comment**
Missing value	Intubation		
Missing value	Number of days intubated		

Admission number 200479	**Casenote number 756X**	**Admitted on 01/05/2004**	**PICANet ID 660**
Reason	**Variable(s)**	**Value(s)**	**Comment**
Incorrect concept domain	Primary reason for admission	X20UN - Nissen fundoplication [Nissen fundoplication]	Primary reason must be a disorder
Missing value	Follow-up status		

Admission number 2004111	**Casenote number 999X**	**Admitted on 16/12/2004**	**PICANet ID 1273**
Reason	**Variable(s)**	**Value(s)**	**Comment**
Incongruent value	Hospital location	Normal residence / Ward	Discharge destination not hospital but hospital location recorded
Logic error	Admission date / Discharge date	12/03/2003 / 10/03/2003	Please check dates; cannot be discharged before admitted
Missing value	Unit discharge status	Not known	Status at discharge from your unit expected (Alive or Dead)

PICA Net

23/03/2006 16:41

Unit import and error status report

January 2004 - December 2005

SITEID	Last imported	ExportID	Admissions	First admission	Most recent admission	Missing value	Out of range	Invalid value	Logic violation	Incongruity	Check value	Invalid code	Uncoded reason	Total	Error rate
11	02/03/2006	58	3356	01/01/2004	31/12/2005									0	0.000
26	07/03/2006	69	1302	01/01/2004	31/12/2005									0	0.000
18	01/03/2006	63	1195	01/01/2004	31/12/2005									0	0.000
14	17/03/2006	40	1171	02/01/2004	31/12/2005									0	0.000
23	13/03/2006	242	737	01/01/2004	29/12/2005									0	0.000
16	16/03/2006	39	806	01/01/2004	31/12/2005									0	0.000
24	22/02/2006	91	637	01/01/2004	31/12/2005									0	0.000
15	13/03/2006	79	791	01/01/2004	30/12/2005									0	0.000
20	22/02/2006	57	609	01/01/2004	31/12/2005									0	0.000
22	01/03/2006	54	541	04/01/2004	30/12/2005									0	0.000
2	16/02/2006	97	529	01/01/2004	28/12/2005									0	0.000
19	08/03/2006	240	359	02/01/2004	31/12/2005									0	0.000
28	23/03/2006	111	95	05/01/2004	27/12/2005									0	0.000
6	01/03/2006	54	1749	02/01/2004	30/12/2005	1								1	0.001
4	23/03/2006	195	867	01/01/2004	24/12/2005					1				1	0.001
3	16/02/2006	63	1376	01/01/2004	31/12/2005	2	1				1			4	0.003
9	10/03/2006	217	795	02/01/2004	29/12/2005	1			2					3	0.004
31	06/03/2006	77	450	07/12/2004	30/12/2005	3								3	0.007
29	02/03/2006	114	1009	01/01/2004	31/12/2005	7								7	0.007
27	14/02/2006	118	526	01/01/2004	30/12/2005	5								5	0.010
10	20/03/2006	71	2027	02/01/2004	31/12/2005	24								24	0.012
21	08/03/2006	32	656	02/01/2004	30/12/2005	16							1	17	0.026
25	23/03/2006	81	162	05/01/2004	29/12/2005	5								5	0.031
8	23/03/2006	106	1098	01/01/2004	30/12/2005	43		2	1					46	0.042
12	06/02/2006	3	2310	01/01/2004	31/12/2005	51	17		2	25	5			100	0.043
17	03/02/2006	61	179	02/01/2004	30/12/2005	20				1				21	0.117
1	02/03/2006	15	1918	01/01/2004	31/12/2005	232	13		7	37	3			292	0.152
13	20/03/2006	71	655	02/01/2004	27/12/2005	253					4			257	0.392
5	13/03/2006	115	525	01/01/2004	31/12/2005	721				2			5	728	1.387
			28430			1384	31	2	12	66	13	0	6	1514	0.053

Last imported: the date on which the data was most recently exported
ExportID: the ID of the most recent export (this increments with each export)
Total admissions: the number of admissions during the time period of this report
First admission: the earliest admission date included in this report
Most recent admission: the latest admission date included in this report
Missing value: value missing when required
Out of range: value outside normal ranges (as specified in the manual)
Invalid value: value not valid (e.g. wrongly enumerated code)
Logic violation: illogical values supplied (e.g. a discharge date before an admission date)
Incongruity: value supplied when not required (e.g. a retrieval team specified when the patient was not retrieved)
Check value: value requiring confirmation
Invalid code: invalid Read Code supplied
Uncoded reason: no Read Code supplied
Total: total number of errors
Error rate: number of errors per patient

Note: error rates are provided for unit use only and should not be used as performance indicators

APPENDIX I SITE VISIT DIFFERENCES

Denominator = 713 sets of notes examined		Differences	
Variable	**PIM**	**n**	**%**
Postcode		15	(2.1)
Date of birth		9	(1.3)
DOB estimated/missing		2	(0.3)
Gestational age at delivery		41	(5.8)
Multiple birth		23	(3.2)
Delivery order		10	(1.4)
Sex		10	(1.4)
Ethnic code		47	(6.6)
Date of admission to your unit	Y	20	(2.8)
Time of admission to your unit	**Y**	**98**	**(13.7)**
Admission type	Y	35	(4.9)
Previous ICU admission		**90**	**(12.6)**
Source of admission		17	(2.4)
Care area admitted from		**85**	**(11.9)**
Retrieval		41	(5.8)
Retrieved by		29	(4.1)
Family name		6	(0.8)
2nd Family name		7	(1.0)
First name		4	(0.6)
Address1		15	(2.1)
Primary reason for admission - as recorded in notes	**Y**	**158**	**(22.2)**
Evidence available to assess past medical history	Y	28	(3.9)
Malignancy*	Y	10	
Malignancy after completion of first induction?*	Y	8	
Leukaemia/Lymphoma after 1st induction?	Y	8	(1.1)
Liver failure	Y	8	(1.1)
HIV	Y	5	(0.7)
AIDS*		5	
CPR outside hospital prior to admission*	Y	9	
Cardiac arrest preceeding hospital admission*	Y	1	
CPR in hospital before ICU admission*	Y	13	
Cardiomyopathy or myocarditis	Y	6	(0.8)
Spontaneous cerebral haemorrhage	Y	5	(0.7)
Severe combined immune deficiency	Y	5	(0.7)
Neurodegenerative disorder	Y	6	(0.8)
Hypoplastic left heart syndrome	Y	7	(1.0)
Severe developmental delay	Y	11	(1.5)
Systolic blood pressure	**Y**	**176**	**(24.7)**
Oxygen flow (ml/kg/min)*		5	
Oxygen flow (l/min)*		21	
Blood gas in the first hour?*		6	
Method of administration*		21	
CPAP during the first hour on your unit?*	Y	1	
Pupillary reaction	Y	45	(6.3)
Base excess in arterial or capillary blood	**Y**	**169**	**(23.7)**
Mechanical ventilation during first hour on unit	Y	17	(2.4)
PaO2 - oxygen pressure - kPa	**Y**	**155**	**(21.7)**
PaO2 - oxygen pressure - mmHg	Y	28	(3.9)
FiO2 at time of PaO2 sample - oxygen inspired	**Y**	**108**	**(15.1)**
Associated intubation	Y	16	(2.2)
Use of headbox	Y	10	(1.4)
Intubation*		32	
Left ventricular assist device		2	(0.3)
Intracranial pressure device - Ventricular drain		1	(0.1)
Intracranial pressure device - ICP BOLT		3	(0.4)
Renal support - haemofiltration		5	(0.7)
Renal support - haemodialysis		1	(0.1)
Renal support - plasma exchange		1	(0.1)
Renal support - peritoneal dialysis		2	(0.3)
Number of days intubated*		104	
Invasive ventilation		41	(5.8)
Invasive ventilation - days		**144**	**(20.2)**
Non-invasive ventilation		47	(6.6)
Non-invasive ventilation days		63	(8.8)
Tracheostomy		8	(1.1)
ECMO		3	(0.4)
IV vasoactive drug therapy		19	(2.7)
Status at discharge from unit		3	(0.4)
Date of discharge from unit		26	(3.6)
Time of discharge from unit		**114**	**(16.0)**
Discharge for palliative care		1	(0.1)
Date of death		1	(0.1)
Time of death		3	(0.4)
Destination following discharge from unit		20	(2.8)
Destination following discharge from unit: hospital		13	(1.8)
Status at 30 days post discharge from unit		37	(5.2)
Location 30 days following discharge from unit		41	(5.8)
Location 30 days post discharge from unit: hospital		6	(0.8)

Note: * Where variables have been removed or added between 2004 - 2005, a percentage for the number of difference found is not shown.

APPENDIX J COMPLETENESS CHECKS

FIELD	Eligible	Complete						Incomplete					
		Valid		Exceptions		Total		Invalid		Blank		Total	
		n	%	n	%	n	%	n	%	n	%	n	%
ADDATE	28435	28435	(100.0)	0	(0.0)	28435	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)
ADDRESS1	28435	28419	(99.9)	0	(0.0)	28419	(99.9)	0	(0.0)	16	(0.1)	16	(0.1)
ADNO	28435	28435	(100.0)	0	(0.0)	28435	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)
ADTIME	28435	28433	(100.0)	0	(0.0)	28433	(100.0)	0	(0.0)	2	(0.0)	2	(0.0)
ADTYPE	28435	28339	(99.7)	85	(0.3)	28424	(100.0)	0	(0.0)	11	(0.0)	11	(0.0)
APDIAG	28435	28435	(100.0)	0	(0.0)	28435	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)
BASEEXCESS	22991	17422	(75.8)	5548	(24.1)	22970	(99.9)	0	(0.0)	21	(0.1)	21	(0.1)
BGFIRSTHR	9505	8643	(90.9)	792	(8.3)	9435	(99.3)	0	(0.0)	70	(0.7)	70	(0.7)
BPSYS	28435	24177	(85.0)	4123	(14.5)	28300	(99.5)	0	(0.0)	135	(0.5)	135	(0.5)
CAREAREAAD	28016	26963	(96.2)	1052	(3.8)	28015	(100.0)	0	(0.0)	1	(0.0)	1	(0.0)
CASENO	28435	28434	(100.0)	0	(0.0)	28434	(100.0)	0	(0.0)	1	(0.0)	1	(0.0)
DELORDER	873	749	(85.8)	123	(14.1)	872	(99.9)	0	(0.0)	1	(0.1)	1	(0.1)
DISPALCARE	26999	26477	(98.1)	520	(1.9)	26997	(100.0)	0	(0.0)	2	(0.0)	2	(0.0)
DOB	28429	28429	(100.0)	0	(0.0)	28429	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)
DOBEST	28435	28430	(100.0)	5	(0.0)	28435	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)
DOD	1701	1699	(99.9)	0	(0.0)	1699	(99.9)	0	(0.0)	2	(0.1)	2	(0.1)
ECMO	28435	27317	(96.1)	1084	(3.8)	28401	(99.9)	0	(0.0)	34	(0.1)	34	(0.1)
ETHNIC	28435	28432	(100.0)	0	(0.0)	28432	(100.0)	0	(0.0)	3	(0.0)	3	(0.0)
FAMILYNAME	28435	28428	(100.0)	0	(0.0)	28428	(100.0)	0	(0.0)	7	(0.0)	7	(0.0)
FIO2	20665	15611	(75.5)	4215	(20.4)	19826	(95.9)	0	(0.0)	839	(4.1)	839	(4.1)
FIRSTNAME	28435	28428	(100.0)	0	(0.0)	28428	(100.0)	0	(0.0)	7	(0.0)	7	(0.0)
FU30DISSTATUS	26009	12569	(48.3)	13292	(51.1)	25861	(99.4)	0	(0.0)	148	(0.6)	148	(0.6)
FU30LOCATION	12301	10989	(89.3)	1301	(10.6)	12290	(99.9)	0	(0.0)	11	(0.1)	11	(0.1)
FU30LOCHOSP	2044	2001	(97.9)	41	(2.0)	2042	(99.9)	0	(0.0)	2	(0.1)	2	(0.1)
GEST	16480	11128	(67.5)	5341	(32.4)	16469	(99.9)	0	(0.0)	11	(0.1)	11	(0.1)
HEADBOX	20665	19111	(92.5)	1201	(5.8)	20312	(98.3)	0	(0.0)	353	(1.7)	353	(1.7)
ICPDEVICE	9505	8782	(92.4)	645	(6.8)	9427	(99.2)	0	(0.0)	78	(0.8)	78	(0.8)
INTTRACHEOSTOMY	28435	27278	(95.9)	1123	(3.9)	28401	(99.9)	0	(0.0)	34	(0.1)	34	(0.1)
INTUBATION	20665	19785	(95.7)	536	(2.6)	20321	(98.3)	0	(0.0)	344	(1.7)	344	(1.7)
INTUBDAYS	898	898	(100.0)	0	(0.0)	898	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)
INTUBEVER	28435	28432	(100.0)	3	(0.0)	28435	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)
INVVENT	28419	27294	(96.0)	1099	(3.9)	28393	(99.9)	0	(0.0)	26	(0.1)	26	(0.1)
INVVENTDAY	18691	18492	(98.9)	150	(0.8)	18642	(99.7)	0	(0.0)	49	(0.3)	49	(0.3)
LVAD	28435	27321	(96.1)	1080	(3.8)	28401	(99.9)	0	(0.0)	34	(0.1)	34	(0.1)
MECHVENT	28435	28024	(98.6)	375	(1.3)	28399	(99.9)	0	(0.0)	36	(0.1)	36	(0.1)
MEDHISTEVID	28435	27960	(98.3)	457	(1.6)	28417	(99.9)	0	(0.0)	18	(0.1)	18	(0.1)
MULT	28435	22336	(78.6)	6099	(21.4)	28435	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)
NHSNO	28435	20018	(70.4)	944	(3.3)	20962	(73.7)	0	(0.0)	7473	(26.3)	7473	(26.3)
NONINVVENT	28435	27193	(95.6)	1209	(4.3)	28402	(99.9)	0	(0.0)	33	(0.1)	33	(0.1)
NONINVVENTDAY	3397	3381	(99.5)	11	(0.3)	3392	(99.9)	0	(0.0)	5	(0.1)	5	(0.1)
PAO2	22991	14935	(65.0)	8036	(35.0)	22971	(99.9)	0	(0.0)	20	(0.1)	20	(0.1)
POSTCODE	28435	28410	(99.9)	0	(0.0)	28410	(99.9)	0	(0.0)	25	(0.1)	25	(0.1)
PREVICUAD	28435	28038	(98.6)	384	(1.4)	28422	(100.0)	0	(0.0)	13	(0.0)	13	(0.0)
PRIMDIAG	28435	28270	(99.4)	0	(0.0)	28270	(99.4)	0	(0.0)	165	(0.6)	165	(0.6)
PRIMREASON	9505	8908	(93.7)	529	(5.6)	9437	(99.3)	0	(0.0)	68	(0.7)	68	(0.7)
PUPREACT	28435	25412	(89.4)	2991	(10.5)	28403	(99.9)	0	(0.0)	32	(0.1)	32	(0.1)
RENALSUPPORT	9505	8783	(92.4)	644	(6.8)	9427	(99.2)	0	(0.0)	78	(0.8)	78	(0.8)
RETRIEVAL	28435	28281	(99.5)	141	(0.5)	28422	(100.0)	0	(0.0)	13	(0.0)	13	(0.0)
RETRIEVALBY	9896	9531	(96.3)	365	(3.7)	9896	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)
SEX	28435	28400	(99.9)	35	(0.1)	28435	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)
SOURCEAD	28435	28355	(99.7)	67	(0.2)	28422	(100.0)	0	(0.0)	13	(0.0)	13	(0.0)
TIMEDTH	1419	1419	(100.0)	0	(0.0)	1419	(100.0)	0	(0.0)	0	(0.0)	0	(0.0)
UNITDISDATE	28419	28418	(100.0)	0	(0.0)	28418	(100.0)	0	(0.0)	1	(0.0)	1	(0.0)
UNITDISDEST	26999	26699	(98.9)	297	(1.1)	26996	(100.0)	0	(0.0)	3	(0.0)	3	(0.0)
UNITDISDESTHOSP	26099	23611	(90.5)	2485	(9.5)	26096	(100.0)	0	(0.0)	3	(0.0)	3	(0.0)
UNITDISSTATUS	28435	28418	(99.9)	1	(0.0)	28419	(99.9)	0	(0.0)	16	(0.1)	16	(0.1)
UNITDISTIME	28419	28410	(100.0)	0	(0.0)	28410	(100.0)	0	(0.0)	9	(0.0)	9	(0.0)
VASOACTIVE	28435	27238	(95.8)	1163	(4.1)	28401	(99.9)	0	(0.0)	34	(0.1)	34	(0.1)
Total	1314555	1234663	(93.9)	69592	(5.3)	1304255	(99.2)	0	(0.0)	10300	(0.8)	10300	(0.8)

APPENDIX K STAFFING SURVEY FORMS

K.1 NURSING STAFF SURVEY FORM

Hospital……

Unit:……

Name:……

PICU Nursing Staff Survey Form
October 2005

Please complete all sections relating to nursing staff employed on your PICU as of Monday 3rd October 2005

Staff type[1]	WTE in post[2]	None (tick)[3]	Number of staff[4]	Number of long term sick as WTE[5]	Number on maternity leave as WTE[6]	Number of Paediatric trained nurses[7]	Number of staff with ENB 415[8]	Number of staff with other PIC course[9]	Number of staff with other qualifications[10]
A									
B									
C									
D									
E									
F clinical									
F non-clinical									

[1] Grade of staff or Band equivalent. For non-clinical staff and all staff recorded in "Other" rows please record job title in the Free Text Box e.g., Educator or Retrieval co-ordinator etc. Please write in the Free Text Box if Band equivalent is complex.
[2] How many whole time equivalents are there at this grade, i.e. someone working part time might be 0.5 WTE
[3] If you have no staff at this grade, please tick this box.
[4] How many actual, real people at this grade work in the PICU – both part timers and whole timers
[5] Please record total number of staff at this grade on long-term sick leave as whole time equivalents.
[6] Please record total number of staff at this grade on maternity leave as whole time equivalents.
[7] Please record whole number of staff at this grade that are either RSCN or Child Branch (Part 15) trained.
[8] Please record whole number of staff at this grade who hold the ENB 415 qualification.
[9] Please record whole number of staff at this grade who hold any other paediatric intensive care qualification e.g. in-house or foreign course
[10] Please record whole number of staff at this grade who have other qualifications. If complex, please give details in the Free Text Box. Please identify how many have each type of qualification i.e. 2 X ENB 100 etc.

PICANet Nursing Staff Survey October2005 Page 1 of 2

Staff type[1]	WTE in post[2]	None (tick)[3]	Number of staff[4]	Number of long term sick as WTE[5]	Number on maternity leave as WTE[6]	Number of Paediatric trained nurses[7]	Number of staff with ENB 415[8]	Number of staff with other PIC course[9]	Number of staff with other qualifications[10]
G									
G non-clinical									
H									
H non-clinical									
I									
Nurse Consultant									
Other									
Other									

PICANet Nursing Staff Survey October2005 Page 2 of 2

K.2 MEDICAL STAFF SURVEY FORM

PICANet Medical Staffing Survey 2005

Please complete all sections as fully as possible. If you have any queries please contact Nicky Davey, PICANet Research Nurse on 0116 252 5450.

PLEASE RETURN BY MONDAY 24th OCTOBER 2005

Staff Type	Cover provided	Actual bodies[1]	WTE[2]	Other commitments when covering PICU[3]	Shift pattern[4]
JUNIOR HOUSE OFFICER					
	Daytime				
	On-Call				
SENIOR HOUSE OFFICER					
Level 1	Daytime				
	On-Call				
Level 2	Daytime				
	On-Call				
TRUST DOCTORS					
	Daytime				
	On-Call				
SPECIALIST REGISTRARS					
	Daytime				
	On-Call				
PICU CONSULTANT INTENSIVISTS					
	Daytime				
	On-Call				
OTHER CONSULTANTS WORKING ON PICU[5]					
	Daytime				
	On-Call				
ANY OTHER MEDICAL STAFF ON PICU[6]					

Return to **Nicky Davey,**
PICANet Research Nurse,
Department of Health Sciences,
University of Leicester,
22 -28 Princess Road West,
Leicester, LE1 6TP

[1] Total number of people working on your PICU at this grade. If none pleas put 0
[2] How many whole time equivalents are there at this grade – i.e. someone working part time might only be 0.5 WTE
[3] What other areas does the doctor have primary responsibility for when also covering PICU? If none, please write "None".
[4] What type of shift pattern is worked i.e. 12 hours, etc
[5] Please record base speciality for all staff recorded here this includes anaesthetists, cardiac surgeons etc
[6] Please identify any other medical staff working on your unit here

K.3 SNAPSHOT SURVEY FORM

PICA Net

Hospital: ... ...

Unit / Ward name or number: ... ...

PICANet staff survey

Please complete for Wednesday 5th October 2005 at 12 Noon

Nursing Grade	1) Number on duty at 12 Noon	Number with ICU qualification
A		
B		
C		
D		
E		
F		
F non - clinical		
G clinical		
G non - clinical		
H clinical		
H non - clinical		
I		
Other		
Band 5		
Band 6		
Band 7		
Band 8		
Agency / Bank please specify		
Agency / Bank please specify		
Agency / Bank please specify		

Number of beds on your unit	2) Total number funded	3) Open - Occupied	4) Open - Empty	5) Closed	6) Reasons for closure
ICU designated					
HDU designated					

Medical Grade	On duty at 12 Noon	On call at 12 Noon
Junior house Officer		
Senior house Officer		
Trust Doctor		
Fellows		
Specialist Registrar		
Consultant Paediatric Intensivist		
Consultant Anaesthetics		
Other Consultants working on PICU specify speciality below		

APPENDIX L POLICY FOR UNITS FALLING OUTSIDE THE CONTROL LIMITS

PICANet policy on PICUs lying outside the control limits of the mortality ratio funnel plots (dated November 2005)

Background – mortality ratios and funnel plots

PICANet is required by the Department of Health to report on the mortality outcomes of all children admitted for paediatric intensive care. The PICANet Clinical Advisory Group and Steering Group recommended that the mortality outcomes from each PICU be adjusted for the illness severity of the child at admission using Paediatric Index of Mortality (PIM) (Shann *et al.*, 1997). PICANet reports the unadjusted mortality outcome from all PICUs and a mortality ratio based on the ratio of observed mortality in each PICU to the expected mortality calculated using PIM. The 2005 Annual report used the algorithm derived from the recently completed United Kingdom Paediatric Intensive Care Outcome Study. In future years, PIM 2 will be used for risk-adjustment (Shann *et al.*, 2003).

Earlier work published by members of PICANet team (Parry *et al.*, 1998) has highlighted the problems of attempting to rank PICUs on their annual mortality, whether unadjusted or adjusted. PICANet however, has also recognised the need to identify units which appear to have outcomes very different to other units. Consequently, in the 2004 and 2005 reports PICANet published a funnel plot of the observed to expected mortality ratio of individual PICUs. The funnel plots are constructed in such a way that there is an approximately 5% chance of a PICU falling outside the control limits if the distribution of the mortality ratios is random.

The mortality ratio is calculated for each PICU by dividing the expected number of deaths calculated using the published PIM algorithm by the observed number of deaths for each PICU. The mortality ratio is then plotted on the y-axis against the number of admissions to the PICU on the x-axis. In order to satisfy the condition that if the overall distribution of the mortality ratios is random there exists an approximately 5% chance of a PICU falling outside the control limits, then the upper and lower control limits constructed at an individual PICU level must represent not 95% confidence intervals, but 99.9% confidence intervals around a mortality ratio of 1 by number of admissions (Spiegelhalter, 2002). This is analogous to increasing the confidence interval (or significance level) when correcting for multiple comparisons in data containing numerous groups.

Data outliers

- A PICU whose mortality ratio lies outside of these control limits will be identified as having returned data that is markedly different to the other PICUs.
- It is important to note that a PICU lying outside the control limits is not sufficient evidence to suggest a PICU has either markedly higher or markedly lower mortality than the other PICUs, it merely indicates that the data they have returned is different to that of other PICUs.
- For those PICUs that do lie outside the control limits the principals of clinical governance should apply:
    - PICANet will raise the issue with the lead clinician of the PICU and the Trust Chief Executive.
    - PICANet will work with the PICU and the Trust, following the plan below until the issue is resolved.

In these circumstances, PICANet will:

1 review the data to investigate whether there are data driven reasons for a PICU lying outside of the control limits (it is known that risk-adjustment tools can be unreliable when a PICU has a particularly high proportion of patients at either end of the bounds of the tool).

2 review the data quality of the PICU. The quality of the data is the responsibility of the PICU. PICANet will provide feedback from PICU visits and central validation procedures. The PICU will be expected to check the quality of individual data items.

3 plot the data quality indicators over time to identify whether the anomaly can be traced to a certain data collection period.

4 plot the mortality ratio over time to identify whether the anomaly can be traced to a certain data collection period.

5 plot the observed mortality over time to identify whether the anomaly can be traced to a certain data collection period.

6 plot the expected mortality over time to identify whether the anomaly can be traced to a certain data collection period.

7 investigate the primary reason for admission to the PICU. If the PICU has a markedly high proportion of some primary reason of admission to the PICU

compared with other PICUs this may suggest further refinements to the risk-adjustment method are required.

8 produce a brief summary report of the above to be forwarded to the lead clinician and Chief Executive at the PICU concerned together with an invitation to meet in person to review the data with the PICANet team.

Where reference is made to the Chief Executive it is accepted that they may be represented by their clinical governance lead.

Note: Excess mortality in particular sub-groups of patients or associated with other aspects of service provision may be identified using different statistical methods. The process outlined above will be implemented wherever anomalous results/outliers are identified.

References:

Parry GJ, Gould CR, McCabe CJ, Tarnow-Mordi WO. Annual league tables of hospital mortality in neonatal intensive care: A longitudinal study. BMJ 1998; 316:1931-1935.

Shann F, Slater A, Pearson G. PIM 2: a revised version of the Paediatric Index of mortality. Intensive Care Med 2003; 29:278-285.

Shann F, Pearson G, Slater A, Wilkinson K, Paediatric index of mortality (PIM): a mortality prediction model for children in intensive care. Intensive Care Med 1997; 23:201-207.

Spiegelhalter D. Funnel plots for institutional comparison. Qual. Saf. Health Care, Dec 2002; 11: 390-a - 391.

APPENDIX M DATA / INFORMATION REQUESTS RECEIVED TO DATE

Date Request Received	Name	Position and place of work	Request	Status
06/07/2004	Tom Blyth	Clinical Research Fellow Department of Paediatric Allergy St Mary's Hospital	Number of children admitted with asthma (primary reason for admission). Ages of those children admitted with asthma. Whether or not the children were ventilated (if 'yes' number of days). Length of stay on PICU.	Completed
24/09/2004	Mark Darowski	Clinical Director Leeds Teaching Hospitals Trust	SMR for each of the 3 elements of our service. SMR (with Confidence Intervals) for oncology patients admitted to SJUH as compared to a national aggregate score for oncology patients.	Completed
04/10/2004	Charles Stack	Director ICU Sheffield Children's Hospital	Prevalence rate of admissions per 1000 children per year for the last full year.	Completed
06/10/2004	Simon Nadel and Department of Health	Consultant in Paediatric Intensive Care St. Mary's Hospital	Number of children admitted to UK PICUs with a diagnosis of acute viral bronchiolitis and/ or a diagnosis of RSV infection.	Completed
18/11/2004	Andrew Magnay	Consultant in Paediatric Intensive Care University Hospital of North Staffordshire NHS Trust	Number of admissions by PCT / SHA Number of completed episodes by PCT / SHA Number of days on PICU associated with these completed episodes by PCT / SHA	Completed
30/11/2004	Ulf Theilen	Locum Consultant Royal Hospital for Sick Children Edinburgh	Number of admissions to PICUs in 2003 and 2004 with diagnosis of pertussis. Number of deaths, age at time of death, use of inotropes (yes/no), level of max mean airway pressure (if available).	Completed
07/12/2004	Mark Campbell	SHO Anaesthetics Derriford Hospital, Plymouth	Epidemiology of critical care in teenagers: A) % and numbers of admissions of 13 to 19 year olds (inclusive) B) diagnostic case-mix by broad category C) male:female ratio D) LOS and invasive / non-invasive ventilation (mean and median) E) outcome F) same figures for those admitted from another hospital or from an intensive care unit.	Rejected

Date Request Received	Name	Position and place of work	Request	Status
23/12/2004	Roz Jones	Specialised Services Commissioning Manager Specialised Services Commissioning Team Cheshire West PCT	Number of children (inc. LOS) with bronchiolitis, RSV positive bronchiolitis and RSV negative infection in children admitted to Royal Liverpool Children's Hospital and Royal Manchester Children's Hospital for the period of March 2003 - February 2004.	Completed
10/01/2005	Peter Davis	Consultant Paediatric Intensivist Bristol Royal Hospital for Children	All children admitted to PICUs in UK with burns. Breakdown of numbers per unit, with identification of units if possible. First portion of postcode to identify geographical location of home address of all PICU burn admissions.	Completed (without unit identification)
17/01/2005	Andrew Gill	Senior Casemix Consultant NHS Information Authority	Full PICANet data set requested to develop robust Healthcare Resource Groups for Paediatric Critical Care. This work has been commissioned by the Department of Health to support the Payment by Results (PbR) initiative.	PICANet has written a software utility to enable PICUs to provide data from local PICANet databases for the HRG study. PICANet continues to provide support to the Paediatric Critical Care Expert Working Group in the development of HRGs for paediatric intensive care.
04/05/2005	Sophie Lusby	Project Manager - Children's Services Bart and the London NHS Trust	All data will relate to residents within the NE London SHA and will cover the periods 2003/4 (April – March) and 2004/5 (April – March). DATA BY MONTH Admissions by age, sex, diagnosis, interventions received, LOS, days of intubation + discharge destination. Retrievals by team type. UNIT LEVEL DATA BY MONTH PICU admissions by treating unit (anonymised until agreement received).	Completed

Date Request Received	Name	Position and place of work	Request	Status
29/05/2005	Simon Nadel	Consultant in Paediatric Intensive Care St Mary's Hospital	The numbers of children admitted to PICUs with a primary or secondary diagnosis of sepsis. Is this community or nosocomially acquired? What is the proportion of underlying co-morbidity? What is the age spread? Do you have information about aetiology (i.e. infecting organisms)? How many children with "other" diagnoses (i.e. respiratory/neurological) have a primary infectious cause of PICU admission? What is the outcome?	In progress
13/06/2005	Stuart Rowe	Lead Commissioner - Pan Thames	All data will relate to residents with a postcode in the Pan Thames region and will cover the periods 2003/4 (April – March) and 2004/5 (April – March). DATA BY MONTH AND BY SHA Admissions by sex, age, mortality risk group, diagnosis, interventions received, LOS, days of invasive ventilation, unit discharge status + discharge destination. Retrievals by team type + primary diagnostic group. UNIT LEVEL DATA BY MONTH AND BY SHA PICU admissions by treating unit (anonymised until agreement received).	Completed
21/06/2005	Noel Durkin	Child Health Services Directorate, Department of Health	'National Paediatric Intensive Care Capacity Stocktake' proforma provided for PICANet to completed as far as possible: 1. Current bed numbers by unit (separated by high dependency and intensive care). 2. Number of these beds which are currently fully staffed and at what wte per bed. 3. Information on current workload by unit (including number of patients admitted and their average length of stay). 4. Any information on refusals. 5. Number of retrievals by unit. 6. Average bed occupancy by unit (separated by high dependency and intensive care.	Completed

Date Request Received	Name	Position and place of work	Request	Status
29/07/2005	Duncan Macrae	PICU Director Royal Brompton Hospital	Numbers of admissions of children invasively ventilated and given inotropes, whether they received cardiac surgery or not, length of stay and mortality at discharge. Required to inform proposed glycaemic control intervention trial.	Completed
03/08/2005	Kevin Morris	Consultant in Paediatric Intensive Care Birmingham Children's Hospital	Information about burns cases: numbers, severity (%), length of stay, mortality (and time to death).	Completed
16/08/2005	Kevin Morris	Consultant in Paediatric Intensive Care Birmingham Children's Hospital	Information about children admitted to PICU with a diagnosis of meningitis or encephalitis and the use of neuro-monitoring in these patients.	Completed
22/08/2005	Iain MacIntosh	Consultant in Paediatric Intensive Care Southampton General Hospital	Number of children admitted with a respiratory diagnosis (divided into bronchiolitis/asthma/pneumonia). Also broken down by age (over one year old and under one year old).	Completed
06/10/2005	David Cremonesini	Registrar John Radcliffe Hospital, Oxford	All children admitted to the PICU in Oxford who have received non-invasive ventilation: Admission number, casenote number, name, DOB, admission date, discharge status, discharge date, non-invasive ventilation days, invasive ventilation (plus days), tracheotomy + primary diagnosis.	Completed
10/10/2005	Sophie Lusby	Project Manager – Children's Services Bart and the London NHS Trust	Supplementary data to that in the report recently provided. - Split LOS into <24 hrs, 24 to <48 hrs, 48 hrs plus - Number of days ventilated - Diagnosis	Completed
20/10/2005	Zoey Taylor	Audit Clerk, PICU, University Hospital of Wales	Number of patients admitted to Cardiff's PICU with a diagnosis of meningococcal disease (by month / age / admission source).	Completed

Date Request Received	Name	Position and place of work	Request	Status
26/10/2005	Peter Davis	Consultant Paediatric Intensivist Bristol Royal Hospital for Children	Numbers of both in-hospital and out-of hospital arrests for 2003-4 admitted to PICU; age, admission diagnosis, pupillary reaction + ultimate outcome (survival / non-survival).	Completed
11/11/2005	Mark Darowski	Clinical lead Paediatric Critical Care Network East Leeds PCT	Patient flows, bed activity and demand for Paediatric Intensive Care in the West Yorkshire, North East Yorkshire and North Lincolnshire Strategic Health Authority area.	In progress
06/12/2005	Corinne Camilleri-Ferrante	Consultant in Public Health Medicine TrentCOM	More information on the bed days in Nottingham (QMC), Sheffield and Leicester, particularly the split in Sheffield between PICU and NSU.	Completed
01/12/05	Tim Martand	Consultan Paediatric Neurologist Royal Manchester Children's Hosptial	Collaboration with PICANet to look at treatments used for status epilepticus admissions.	In progress
08/12/2005	Parviz Habibi	Consultant St Mary's Hospital	Annual death rate from bronchiolitis 2004.	Completed
08/12/2005	Nadeem Moghal	Consultant Paediatric Nephrology Royal Victoria Hospital Newcastle upon Tyne	Epidemiology of acute renal failure in PICU setting, nationally - CVVH, HD, PD etc.	Completed
12/01/2006	Nour Hassan	Clinical Fellow PICU Newcastle General Hospital	Information on oncology admissions to NGH and the RVI: Non-invasive ventilation / number of days: Yes/No Invasive ventilation / number of days: Yes/No Inotropes: Yes/No	Completed
16/01/2006	Sian Thomas	Project Manager Children's and Young People Specialist Service Welsh Assembly	Admissions to PICUs (outside Cardiff) with a Welsh postcode, aged under 16 years with a primary diagnosis of traumatic brain injury (June 2003 - May 2005).	Completed
01/03/2006	James Fraser	Consultant in Paediatric Intensive Care Bristol Royal Children's Hospital	The number of admissions and number of bed days by PCT (a) for Bristol admissions and (b) for all PICU admissions.	Completed
02/03/2006	Anna Seale	SpR Paediatric Cardiology Royal Brompton Hospital	Admissions with TAPVC / congeniatal pulmonary vein stenosis.	Completed (information returned to individual PICUs)

APPENDIX N PUBLICATIONS / PRESENTATIONS

N.1 PRESENTATIONS

Meeting / Conference:	Venue:	Date:	Presentation title:	PICANet team attendees:
NW Paediatric Intensive Care Seminar [North West Specialised Commissioning Group]	Dunkenhalgh Hotel, Clayton-le-Moors, Lancashire	23/06/2004	PICANet: Results of national activity	Sam Jones & Roger Parslow
PICANet AGM	London	24/06/2004	Presentation of National report	PICANet team
Welsh National Commissioning Advisory Board Meeting	Royal Welsh Showground, Builth Wells	28/07/2004	PICANet: Presentation of National and Welsh report	Liz Draper & Nicky Davey
Strategic Issues in Health Care Management, Sixth International Conference	University of St Andrews	02/09/2004	Collection of personally identifiable information for a national clinical database: how feasible is it to obtain signed consent?	Sam Jones
PICS SG	Cambridge University	09/09/2004	PICANet: How can it be used for research and audit?	Nicky Davey, Sam Jones, Roger Parslow & Krish Thiru
Confidential Enquiry into Maternal and Child Health	London	08/03/2005	National Paediatric Intensive Care database (PICANet)	Liz Draper
Intensive Care National Audit & Research Centre (ICNARC): Eighth Annual Meeting of the Case Mix Programme	Savoy Hotel, London	13/04/2005	Why is it important to include information on paediatric admissions in the new Case Mix Programme Dataset?	Sam Jones
Pan Thames Report Update: Commissioning Consortium	London	06/05/2005	PICANet: Update on Pan Thames data quality for commissioning	Krish Thiru & Sam Jones
Paediatric Intensive Care Study Day	Royal Manchester Children's Hospital	10/05/2005	The epidemiology of critical illness in children.	Roger Parslow
Trent PIC commissioners	QMC, Nottingham	12/05/2005	PICANet: presentation of National report 2003-2004.	Liz Draper
Paediatric Intensive Care Trainee Meeting	Royal Liverpool Children's Hospital (Alder Hey)	13/05/2005	Role of PICANet + relevance of the national audit to the clinical community	Nicky Davey & Sam Jones
PICANet AGM	London	24/05/2005	Presentation of National report	PICANet team
NORCOM, TRENTCOM & LNR PIC commissioners	Leicester	13/06/2005	PICANet in LNR, Trent and South Yorkshire PCTs	Liz Draper
Health Protection Agency (HPA) annual conference	Warwick	12/09/2005	Mortality, deprivation and ethnicity of critically ill children in England and Wales: preliminary findings from the Paediatric Intensive Care Audit Network (PICANet)	Roger Parslow
Paediatric Critical Care Network Board (East Leeds PCT)	Leeds	06/10/2005	PICANet: Presentation of national data and relevance to commissioning	Tricia McKinney
Welsh National Commissioning Advisory Board Meeting	Lamb and Flag Hotel, Brecon Road, Llanwenarth, Abergavenny	11/10/2005	PICANet: Presentation of National and Welsh report	Gareth Parry
European Society for Paediatric and Neonatal Intensive Care (ESPNIC) annual conference	Antwerp	16/09/2006	Mortality, deprivation and ethnicity of critically ill children in England and Wales: preliminary findings from the Paediatric Intensive Care Audit Network (PICANet)	Roger Parslow

N.2 PUBLICATIONS

Journal:	Title:	Authors:
BMJ 2005;330: 877-9. (16 April).	A feasibility study of signed consent for the collection of patient identifiable information for a national paediatric clinical audit database.	McKinney PA, Jones S, Parslow R, Davey N, Darowski M, Chaudhry B, Stack C, Parry G, Draper ES for the PICANet Consent Study Group.
Archives of Disease in Childhood 2005; 90: 380-387.	Neuropsychological and educational problems at school age associated with neonatal encephalopathy.	Marlow N, Rose AS, Rands CE, Draper ES.
European Journal of Obstetrics, Gynecology & Reproductive Biology 2005; 118(2): 272-4.	Presentation of the European project models of organising access to intensive care for very preterm births in Europe (MOSAIC) using European diversity to explore models for the care of the very preterm babies.	Zeitlin J, Papiernik E, Breart G, Draper E, Kollee L.
Prenatal Diagnosis, 2005; 25:286-291.	Population based study of the outcome following the antenatal diagnosis of cystic hygroma.	Howarth ES, Draper ES, Budd JLS, Konje J, Kurinczuk JJ, Clarke M.
Pediatrics 2004; 113(6): 1653-7.	Trends in the incidence of severe retinopathy of prematurity in a geographically defined population over a 10-year period.	Hameed B, Shyamanur K, Kotecha S, Manktelow B, Woodruff G, Draper ES, Field D.
Pediatrics 2006; 117: 733-42.	Assessment and optimisation of mortality prediction tools for admissions to paediatric intensive care in the United Kingdom.	Brady AR, Harrison D, Black S, Jones S, Rowan K, Pearson G, Ratcliffe J, Parry GJ; UK PICOS Study Group.
BMJ 2005;330: 43 3.	Paediatric cardiac surgical mortality after Bristol; details of risk adjustment tools were not given (letter),	Parry GJ, Draper ES, McKinney P.
Archives of Disease in Childhood 2005; 90: 1182-1187.	Epidemiology of traumatic brain injury in children receiving intensive care in the UK.	Parslow RC, Morris KP, Tasker RC, Forsyth RJ, Hawley C.
Emergency Medical Journal 2006 (in press).	Severe head injury in children: emergency access to neuro surgery in the United Kingdom.	Tasker RC, Morris KP, Forsyth RJ, Hawley CA, Parslow RC on behalf of the UK Paediatric Brain Injury Study Group and the Paediatric Intensive Care Study Group.

Abstract:	Title:	Authors:
Health Protection Agency (HPA) Annual Conference 12-15 September 2005, Warwick (oral presentation).	Mortality, deprivation and ethnicity of critically ill children in England and Wales; preliminary findings from the Paediatric Intensive Care Audit Network (PICANet).	Parslow RC, Tasker RC, Chater T, Davey N, Draper ES, Jones S, Parry GJ, McKinney PA.
European Society for Paediatric and Neonatal Intensive Care (ESPNIC) annual conference, Antwerp, 15-17 September 2005 (oral presentation).	Mortality, deprivation and ethnicity of critically ill children in England and Wales: preliminary findings from the Paediatric Intensive Care Audit Network (PICANet).	Parslow RC, Tasker RC, Chater T, Davey N, Draper ES, Jones S, Parry GJ, Thiru K, McKinney PA.
Dev.Med.Child. Neurol. 2005. 47 (Suppl 101): 4.	Design of randomized controlled trials of the management of raised intracranial pressure in paediatric traumatic brain injury.	Forsyth RJ, Morris K, Parslow RC, Hawley C, Tasker RC.

APPENDIX O GLOSSARY

The following abbreviations / terms are used within the text of this report:

A&E	Accident and Emergency Department
AFPD	All Fields Postcode Directory
AIC	Adult Intensive Care
AICU	Adult Intensive Care Unit
ANZPICS	Australian and New Zealand Paediatric Intensive Care Registry
ARF	Acute Respiratory Failure
AWACIC	All Wales Audit of Critically Ill Children
Bland-Altman plot	Statistical method of comparing two measurement techniques
CAG	Clinical Advisory Group
CATS	Children's Acute Transfer Service
CT3	Clinical Terms 3
CCAD	Central Cardiac Audit Database
DoCDat:	Directory of Clinical Databases
ECMO	Extra corporeal membrane oxygenation
ENB	English National Board
GB	Great Britain
GOSH	Great Ormond Street Hospital
HB	Health Board
ICNARC	Intensive Care National Audit & Research Centre
ICP device	Intracranial pressure device
Invasive ventilation	Any method of ventilation delivered via an endotracheal tube, laryngeal mask or tracheotomy tube
IQR	Interquartile Range
IV Vasoactive therapy	Intravenous drug therapy to support blood pressure and heart rate
LVAD	Left ventricular assist device to support cardiac function
NHS	National Health Service
NHSIA	National Health Service Information Authority
NHSnet	A secure wide area network connecting NHS organisations which enables units to transfer data electronically to PICANet
Non–invasive ventilation	Any method of ventilation NOT given via an endotracheal tube, laryngeal mask or tracheostomy tube
PIAG	Patient Information Advisory Group
PIC	Paediatric Intensive Care
PICANet	Paediatric Intensive Care Audit Network
PICNET	Paediatric Intensive Care Network
PICS	Paediatric Intensive Care Society
PICS SG	Paediatric Intensive Care Society Study Group
PICU	Paediatric Intensive Care Unit

PIM	Paediatric Index of Mortality
PIM 2	Paediatric Index of Mortality version 2
READ Codes	Clinical terminology used to describe clinical conditions, symptoms and observations
RSV	Respiratory syncytial virus
SHO	Senior House Officer
SG	Steering Group
SNOMED	Terminology enabling a consistent way of indexing, storing, retrieving and aggregating clinical data across specialities and sites of care
SMR	Standardised mortality ratio
SHA	Strategic Health Authority
SWACIC	South West Audit of Critically Ill Children
WTE	Whole time equivalent
UK PICOS	United Kingdom Paediatric Intensive Care Outcome Study

www.picanet.org.uk

picanet@sheffield.ac.uk / picanet@leeds.ac.uk

University of Leeds

Patricia McKinney & Roger Parslow

PICANet
Paediatric Epidemiology Group
Centre for Epidemiology and Biostatistics
The Leeds Institute of Genetics, Health and Therapeutics
University of Leeds
30 Hyde Terrace
Leeds LS2 9LN

r.c.parslow@leeds.ac.uk

0113 343 4856

University of Leicester

Elizabeth Draper

PICANet
Department of Health Sciences
University of Leicester
22-28 Princess Road West
Leicester LE1 6TP

msn@;leicester.ac.uk

0116 252 5450

University of Sheffield

Sam Jones, Tim Chater & Gill Ryder

PICANet
Health Services Research, ScHARR
University of Sheffield
Regent Court, 30 Regent Street
Sheffield S1 4DA

sam.jones@sheffield.ac.uk

0114 222 0772

Pan Thames Co-ordinator

Krish Thiru

PICANet
Cardiorespiratory and Critical Care Division
Room 8086, Level 8 – Nurses Home
Great Ormond Street Hospital for Children
Great Ormond Street
London WC1 3JH

thiruk1@gosh.nhs.uk

020 7762 6713

NHS

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