North Trent Critical Care Network Audit Programme

A COMPARISON OF ACP AND CCMDS DATA COLLECTION JANUARY – MARCH 2006

REPORT

Co-ordinated by:
Medical Economics and Research Centre, Sheffield (MERCS)
Intensive Care Unit, Royal Hallamshire Hospital, Glossop Road, Sheffield, S10 2JF
Tel: 0114 2713510 Fax: 0114 2711979 E-mail: info@mercs.org.uk
Registered as a Company limited by Guarantee. Registered No. 3522319 (England). Registered Charity No. 1071106

Compiled by
Sandy Smith NTCCN Audit Coordinator
Jeremy Groves NTCCN Working Group Chair
Gary Mills Director of MERCS
AUDIT REFERENCE NUMBER 19/2006

CONTENTS

TABLES/CHARTS

1 INTRODUCTION

1.1 Background

The Augmented Care Period (ACP) dataset (see Appendix 1) was developed by a working group involving staff from the NHS Executive and clinical professions. Its function was to provide standardised data on intensive and high dependency care activity to support contracting, internal management, national statistical analysis and policy development. The ACP was kept as simple (13 items) as possible in order to ease its implementation and integration with existing hospital data systems. The collection of the ACP dataset was mandatory from 1st October 1997. The Critical Care Minimum Data Set (CCMDS) (see Appendix 2) was developed by the Critical Care Information Advisory Group formed by the Department of Health and the Modernisation Agency in June 2001. It will replace the existing Augmented Care Period data. The Changes are outlined in Data Set Change Notice (DSCN) 02/2005 issued November 2005 with an implementation date of 1st April 2006. DSCN 13/2005 Data Dictionary supports this standard. The North Trent Critical Care Network (NTCCN) Audit Working Group made a decision to start collection of this data from 1st January 2006 in order to allow a learning curve for the staff involved in collecting this data. As part of the support in implementing this new data set collection a new NTCCN Audit Definition book has been published. It was also agreed that the first month of the new data collected should be audited and that a re-audit take place six months later. However it became apparent that with some of the new variables on organ support the potential to take a patient from a level 2 (HDU) to a level 3 (ICU) was greatly increased. In order to understand the differences between the scoring systems the NTCCN Audit working group decided to look at and compare both sets of data over the same three month period.

1.2 Background to the Audit Environment

The North Trent Critical Care Network Audit Group is formed from 8 hospital Critical Care Units these are situated at Barnsley, Bassetlaw, Chesterfield, Doncaster, Rotherham Sheffield NGH, Sheffield RHH and Scunthorpe. Those hospitals with separate ICU and HDUs had each unit's data audited separately.

1.3 Aim of the Audit

To compare the number of support days calculated with ACP versus CCMDS.

2 AUDIT DESIGN

2.1 Data Collection Method

The CCMDS was entered onto the NTCCN Audit database from the 1st January 2006, paper copies of the ACP data collection forms completed for patients admitted during the period January 2006 to the end of March 2006 were sent to Sandy Smith to be entered into a database. However there was no ACP data available for HDU at Chesterfield and Rotherham did not submit January CCMDS data for ICU or HDU and no February data for HDU. Therefore only those months with both sets of data were used in the audit. Doncaster was not included as their ACP data was not available.

Only the data relating to organ support and level days were compared. For ACP this meant Basic and Advanced Respiratory Support, Circulatory, Renal, Neurological whereas with the CCMDS Dermatological and Liver support had been added and Circulatory had been divided into Basic and Advanced. The definitions for the support had also been altered.

2.2 Data Overview

A total of 5726 days were compared from 11 Units.

	No of Days
Barnsley	505
Bassetlaw	417
Chesterfield ICU	531
NGH HDU	593
NGH ICU	969
NGH POSU	543
RHH HDU	588
RHH ICU	524
Rotherham HDU	208
Rotherham ICU	249
Scunthorpe	599

Table 1

2.3 Data Analysis

2.3.1 Respiratory Support Days

Definitions

ACP Basic Respiratory	CCMDS Basic Respiratory
More than 50% oxygen by **fixed performance** mask	More than 50**%** oxygen delivered by **facemask**.
The potential for deterioration to the point of needing advanced respiratory support	Close observation due to the potential for acute deterioration to the point of needing advanced respiratory support (e.g. severely compromised airway or deteriorating respiratory muscle function).
Physiotherapy to clear secretions at least 2 hourly, whether via a tracheostomy, minitracheostomy, or in the absence of an artificial airway	Physiotherapy or suction to clear secretions at least two hourly, whether via tracheostomy, minitracheostomy, or in the absence of an artificial airway.
Patients recently extubated after a prolonged period of intubation and mechanical ventilation	Patients recently extubated after a prolonged period of intubation and mechanical ventilation, (**e.g. more than 24 hours of tracheal intubation**)
Mask CPAP or non-invasive ventilation	Mask CPAP or non-invasive ventilation.
Patients who are intubated to protect the airway but needing no ventilatory support and who are otherwise stable	Patients who are intubated to protect the airway but needing no ventilatory support and who are otherwise stable.

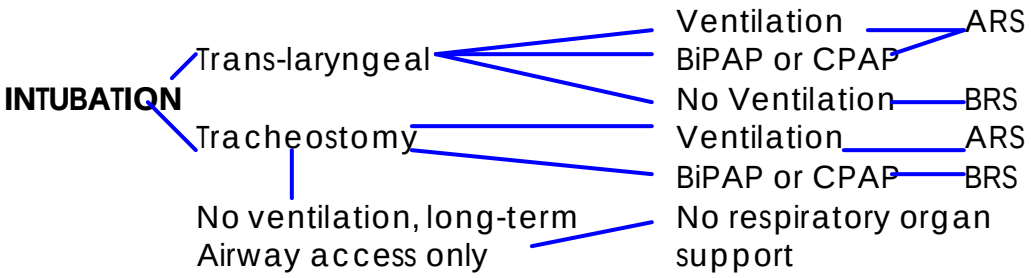
Table 2

As you can see the only difference is in the type of mask via which oxygen is given. This is much broader in the CCMDS definition. Clarification is also given as to what is a prolonged period of tracheal intubation.

ACP Advanced Respiratory	CCMDS Advanced Respiratory
Mechanical ventilatory support, excluding mask (CPAP) or non-invasive methods e.g. mask ventilation	Invasive mechanical ventilatory support (excluding mask CPAP or non-invasive methods e.g. mask ventilation **but including BiPAP or CPAP applied via a tracheal tube**).
Extracorporeal respiratory support	Extracorporeal respiratory support (ECMO)

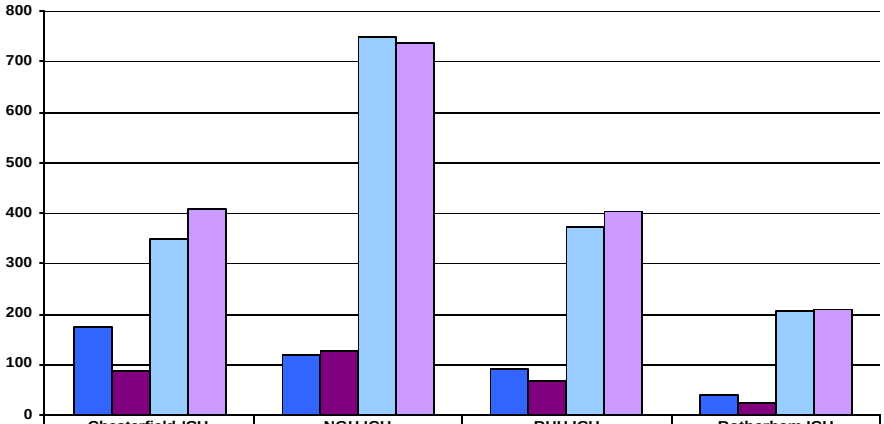
Table 3

The extra factors included Advanced Respiratory Support in the CCMDS caused great confusion with the potential over scoring of patients. This was highlighted at DoH arranged meeting throughout the country during the end of March 2006. The written clarification of the definition did not appear until May 2006 (shown below for information) however, the data collected and used within this comparison was without this clarified information.



Note: Basic respiratory support is likely to occur simultaneously with the above and should not lead to both ARS and BRS being recorded during the same calendar day. ARS supersedes BRS where this occurs.

Respiratory Support in ICUs January - March 2006



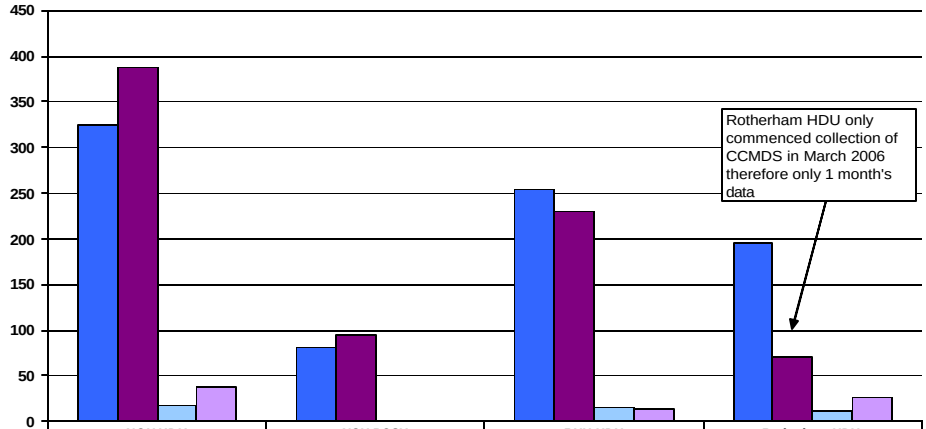
	Chesterfield ICU	NGH ICU	RHH ICU	Rotherham ICU
ACP Basic Respiratory	176	119	92	40
CCMDS Basic Respiratory	88	128	69	25
ACP Advanced Respiratory	349	750	373	206
CCMDSAdvanced Respiratory	410	739	403	208

Chart 1

The above chart shows that within ICU there was very little difference between the ACP data collection and the CCMDS data

collection over the same three month period with advanced respiratory support being dominant as would be expected.

Respiratory Support in HDU's January 2006 - March 2006

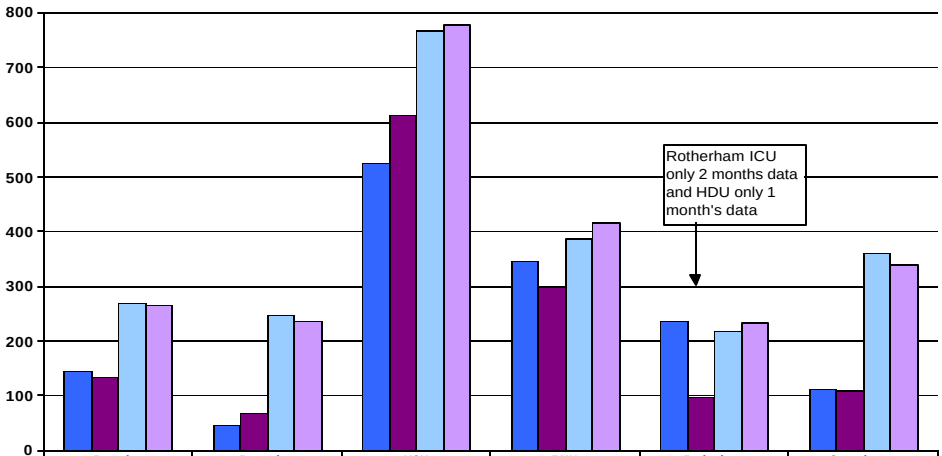


	NGH HDU	NGH POSU	RHH HDU	Rotherham HDU
ACP Basic Respiratory	325	81	254	196
CCMDS Basic Respiratory	388	95	230	71
ACP Advanced Respiratory	17	1	15	12
CCMDSAdvanced Respiratory	38	1	14	26

Chart 2

Whilst basic respiratory support is the predominant support within HDUs the doubling of advanced respiratory support at NGH and Rotherham may be due to the misinterpretation of the definition in relation to those patients who had a tracheostomy plus were receiving CPAP were classed incorrectly as advanced respiratory support).

Respiratory Support in ICU/HDUs January - March 2006



	Barnsley	Bassetlaw	NGH	RHH	Rotherham	Scunthorpe
ACP Basic Respiratory	145	46	525	346	236	111
CCMDS Basic Respiratory	134	67	611	299	96	110
ACP Advanced Respiratory	268	247	768	388	218	359
CCMDSAdvanced Respiratory	265	236	778	417	234	339

Chart 3

2.3.2 Cardiovascular Support Days

Definitions

The definitions relating to cardiovascular support have created the largest change in organ support within the datasets as this has been divided into basic and advanced respiratory care. Extra variables were also added in particular within basic cardiovascular care the inclusion of the presence of either a CVP and/or arterial line for monitoring greatly increased the number of patients who fitted the criteria for some form of cardiovascular support. The largest increases are seen in the HDUs.

Note: Basic CVS support is likely to occur simultaneously with the above but should not lead to both ACVS and BCVS being recorded at the same calendar day. ACVS supersede BCVS where this occurs.

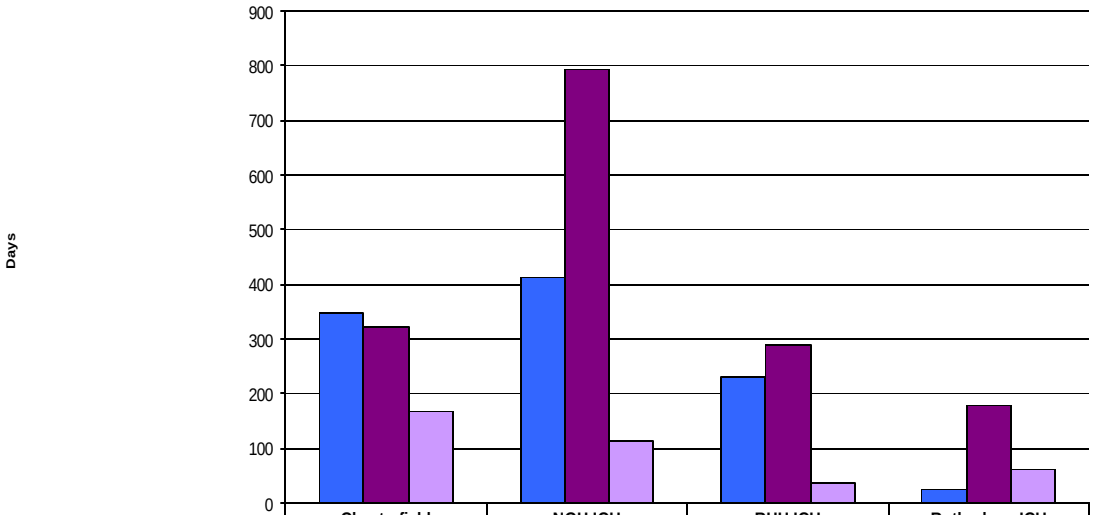
ACP Circulatory	CCMDS Basic Cardiovascular	CCMDS Advanced Cardiovascular
Vasoactive **drugs** used to support arterial pressure or cardiac output	Single intravenous vasoactive drug used to support arterial pressure, cardiac output or organ perfusion	Multiple intravenous vasoactive and/or rhythm controlling drugs used to support arterial pressure, cardiac output or organ perfusion. (e.g. inotropes, amiodarone, nitrates)
Circulatory instability due to hypovolaemia from any cause	Treatment of circulatory instability due to hypovolaemia from any cause	
Patients resuscitated after cardiac arrest where intensive care is considered clinically appropriate		Patients resuscitated after cardiac arrest where intensive therapy is considered clinically appropriate.
Intra aortic balloon pumping		Intra aortic balloon pumping
	Non-invasive measurement of cardiac output (e.g. echocardiography, thoracic impedance)	Observation of cardiac output and derived indices (e.g. pulmonary artery catheter, lithium dilution, pulse contour analyses, oesophageal

		Doppler)
	Use of a CVP line for basic monitoring or central venous access to deliver therapeutic agents	Insertion of a temporary cardiac pacemaker (criteria valid for each day of connection to a functioning external pacemaker unit)
	Use of an arterial line for basic monitoring of arterial pressure or sampling of arterial blood	Placement of a gastrointestinal tonometer
	Intravenous drugs to control cardiac arrhythmias	

Table 4

As this organ support category demonstrated the greatest change between the data sets the data has been present graphically in two formats. Firstly as bar charts representing the number of days each support was scored during the audit period for each variable then with the CCMDS cardiovascular data combined and compared with ACP data as a percentage of the days available (see page 13 chart 7 & 8).

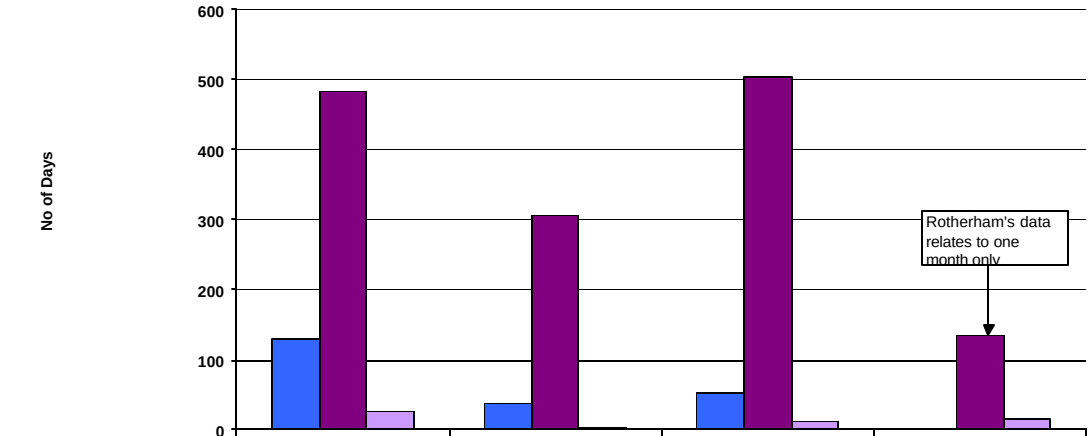
Comparision of ACP Circulatory and CCMDS Cardiovascular Support in ICUs Jan - Mar 06



	Chesterfield	NGH ICU	RHH ICU	Rotherham ICU
ACP Circulatory	348	412	232	24
CCMDS Basic Cardiovascular	323	793	289	178
CCMDS Advanced Cardiovascular	167	113	38	61

Chart 4

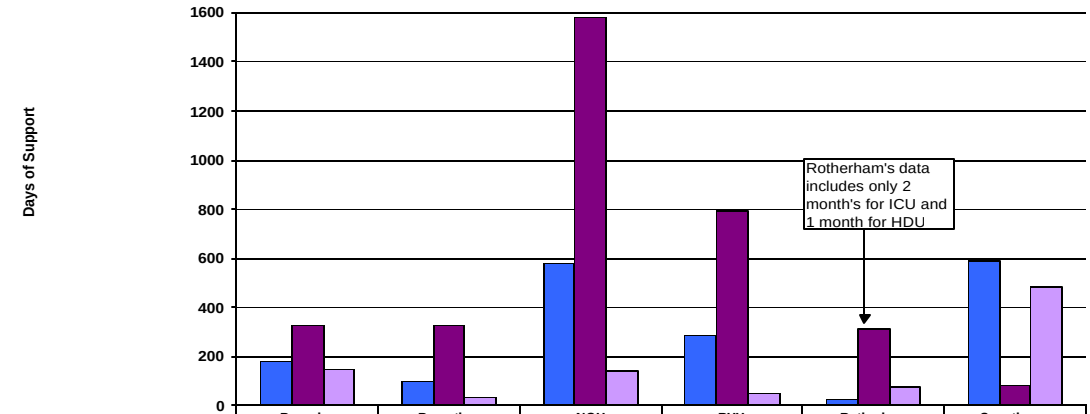
Cardiovascular Support in HDU's January 2006 - March 2006



	NGH HDU	NGH POSU	RHH HDU	Rotherham HDU
ACP Circulatory	131	37	53	2
CCMDS Basic Cardiovascular	483	306	505	135
CCMDS Advanced Cardiovascular	27	4	12	16

Chart 5

Cardiovascular Support in Combined Units Jan - Mar 2006

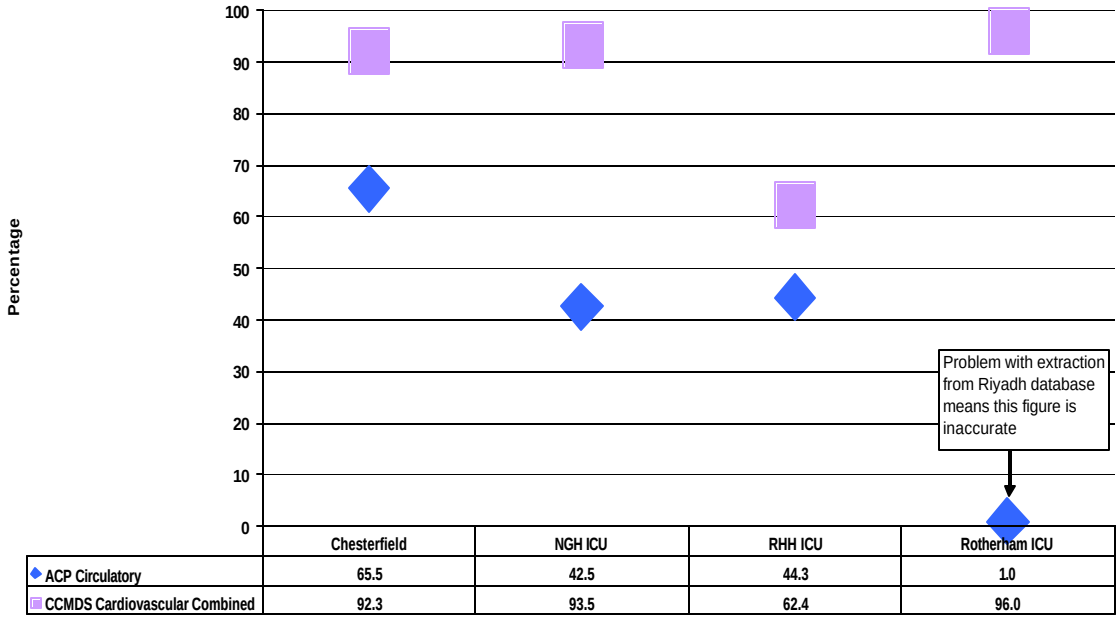


	Barnsley	Bassetlaw	NGH	RHH	Rotherham	Scunthorpe
ACP Circulatory	179	99	580	285	26	591
CCMDS Basic Cardiovascular	325	328	1582	794	313	84
CCMDS Advanced Cardiovascular	149	36	144	50	77	484

Chart 6

In all instances with the exception of Scunthorpe (who did not adhere to the definitions) there is an increase in cardiovascular activity.

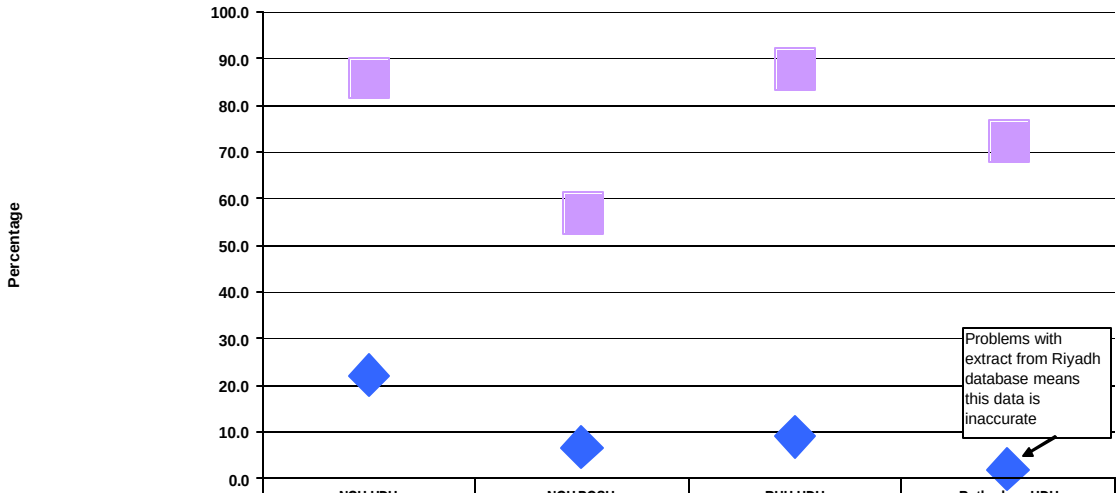
Percentage Cardiovascular Days for ICUs. ACP and CCMDS Circulatory (Basic + Advanced)



	Chesterfield	NGH ICU	RHH ICU	Rotherham ICU
ACP Circulatory	65.5	42.5	44.3	1.0
CCMDS Cardiovascular Combined	92.3	93.5	62.4	96.0

Chart 7

Percentage Cardiovascular Days for HDUs. ACP and CCMDS Circulatory (Basic + Advanced)



	NGH HDU	NGH POSU	RHH HDU	Rotherham HDU
ACP Circulatory	22.1	6.8	9.0	2.0
CCMDS Cardiovascular Combined	86.0	57.1	87.9	72.6

Chart 8

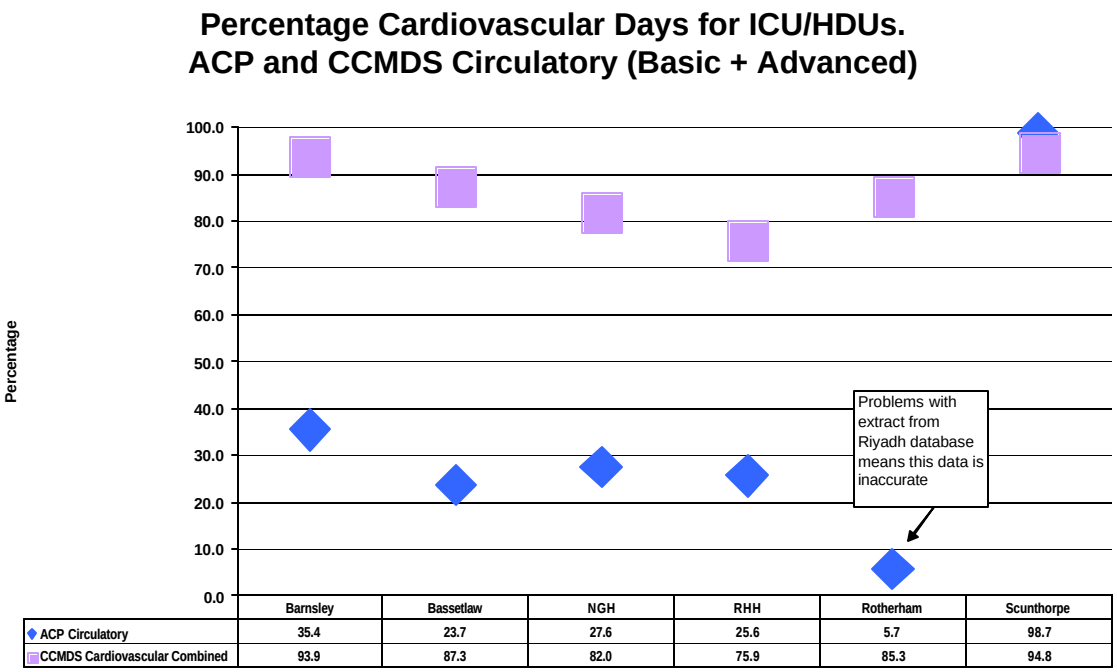


Chart 9

There are large disparities between the two scoring datasets in all types of units. This has a knock on effect on the level days as will be show later.

2.3.3 Liver Support Days

Definition: - Indicated by the use of extracorporeal liver replacement device (e.g. MARS), bioartificial liver or charcoal haemoperfusion. No one scored this variable.

2.3.4 Renal Support Days

Definition

ACP Renal	CCMDS Renal
Acute renal replacement therapy (e.g. haemodialysis, haemofiltration etc.)	Acute renal replacement therapy (e.g. haemodialysis, haemofiltration etc.)

Table 5

The definition is unchanged.

Renal support in ICUs Jan - Mar 06

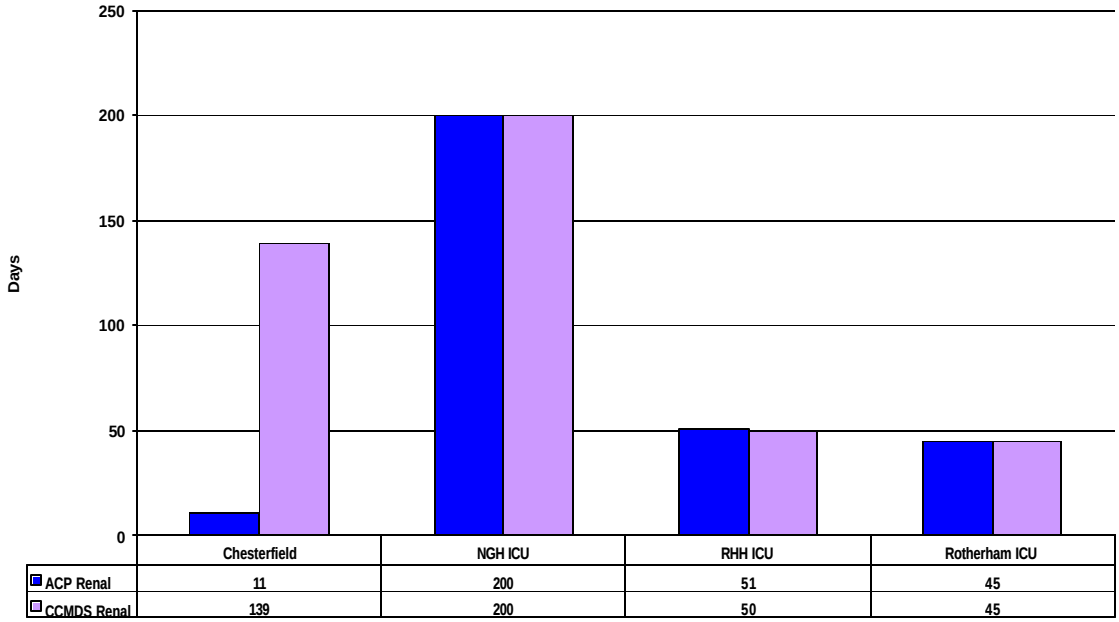


Chart 10

Renal Support in HDUs Jan - Mar 06

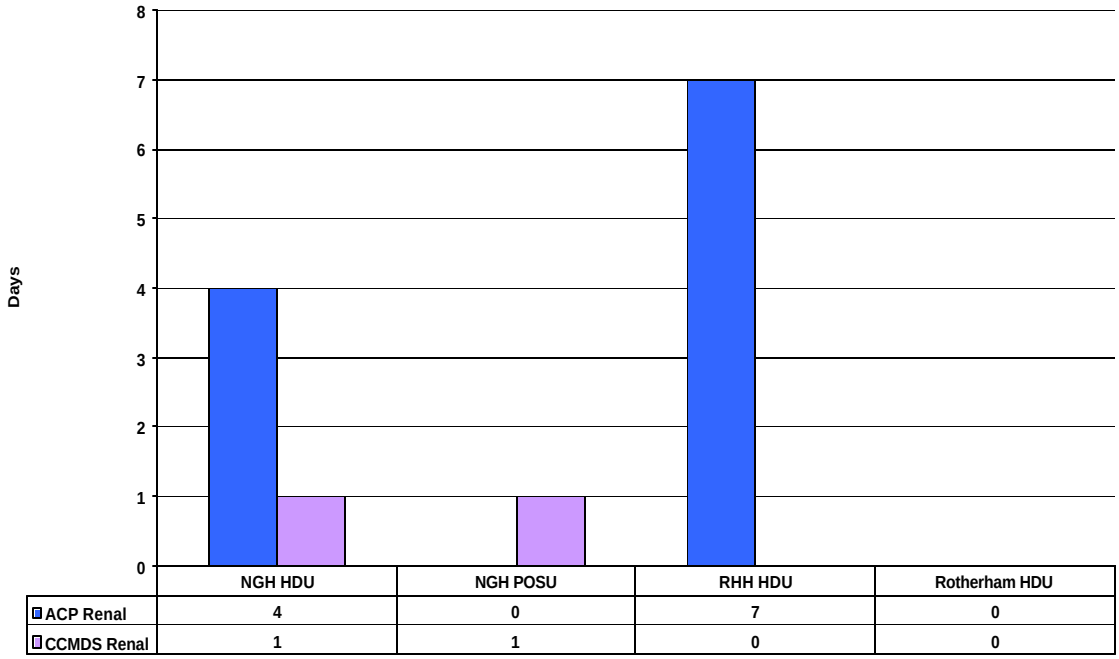


Chart 11

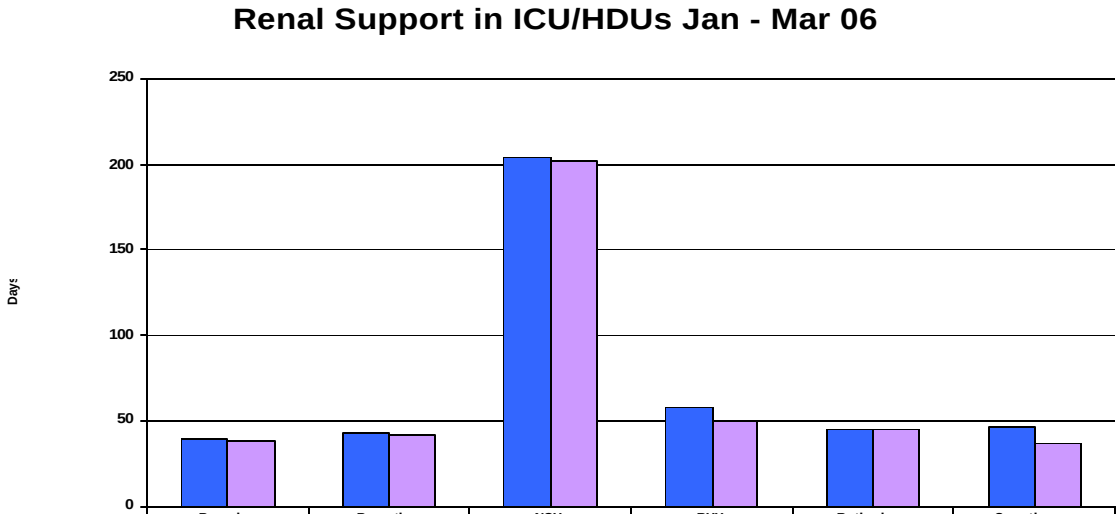


Chart 12

Chesterfield ICU reflects the improved data collection with CCMDS .Their ACP data was extracted from their Riyadh database which they recognise is incorrect. Overall both datasets are fairly similar.

2.3.5. Neurological Support Days

Definition

ACP Neurological	CCMDS Neurological
Central nervous system depression sufficient to prejudice the airway and protective reflexes	Central nervous system depression sufficient to prejudice the airway and protective reflexes, **excepting that caused by (therapeutic) sedation prescribed to facilitate mechanical ventilation.**
Invasive neurological monitoring e.g. ICP, jugular bulb sampling	Invasive neurological monitoring e.g. ICP, jugular bulb sampling
	Severely agitated or epileptic patients requiring constant nursing attention and/or heavy sedation

Table 6

Clarification has been added within the CCMDS regarding patients sedated to facilitate ventilation and another variable has been added regarding the agitated or epileptic patient.

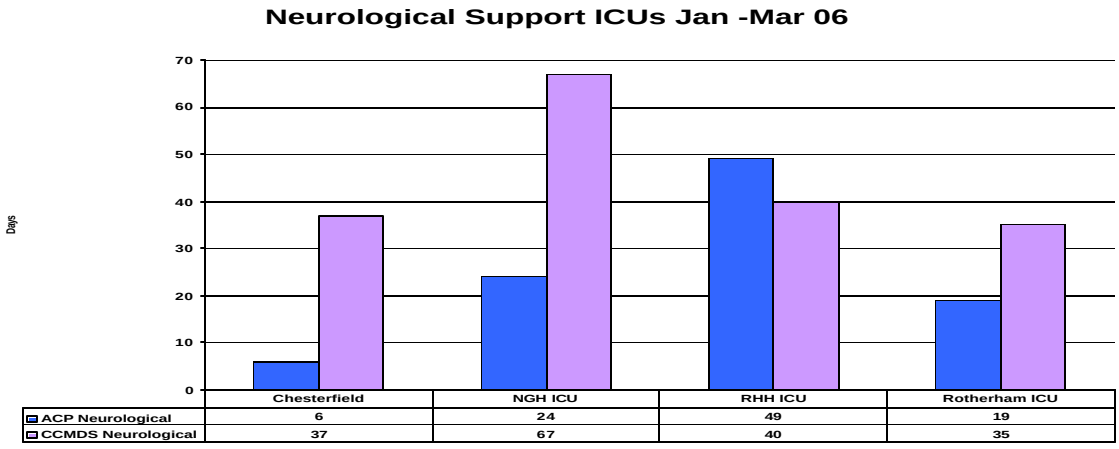


Chart 13

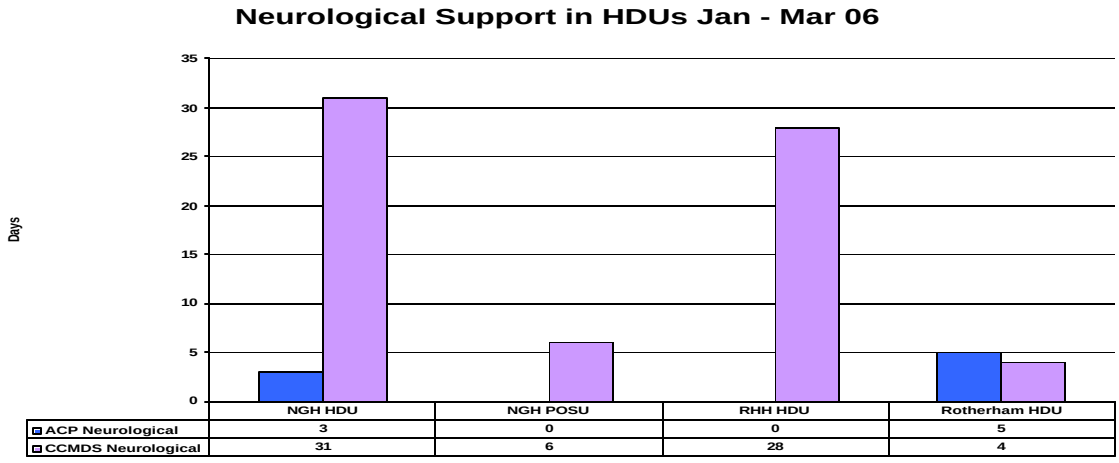


Chart 14

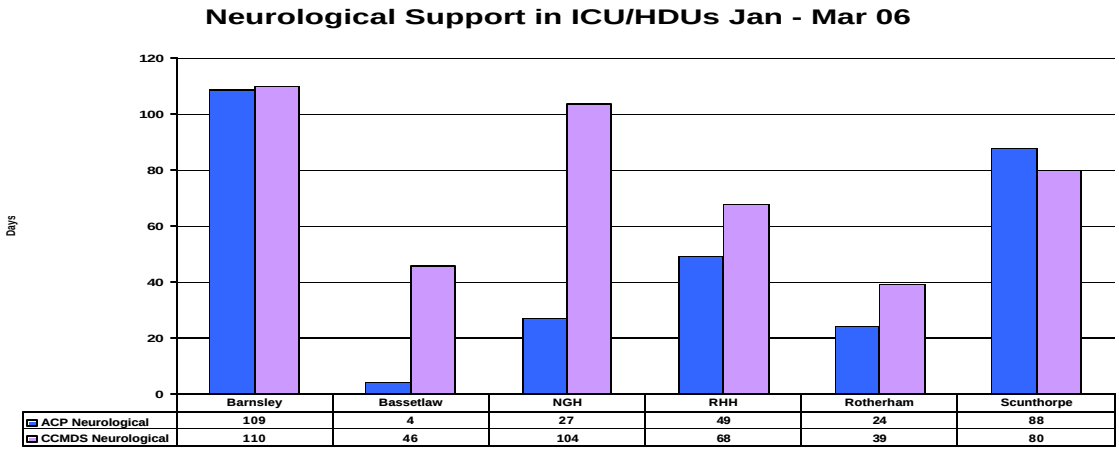


Chart 15

The extra definition within the CCMDS adding in severely agitated or epileptic patient requiring constant nursing attention and/or heavy sedation has led to an increase in this organ support. However this organ support was generally under reported within the ACP data set.

2.3.6 Gastrointestinal Support Days

This was not included within the ACP dataset and will not be used as part of the PBR organ funding but is included for completeness.

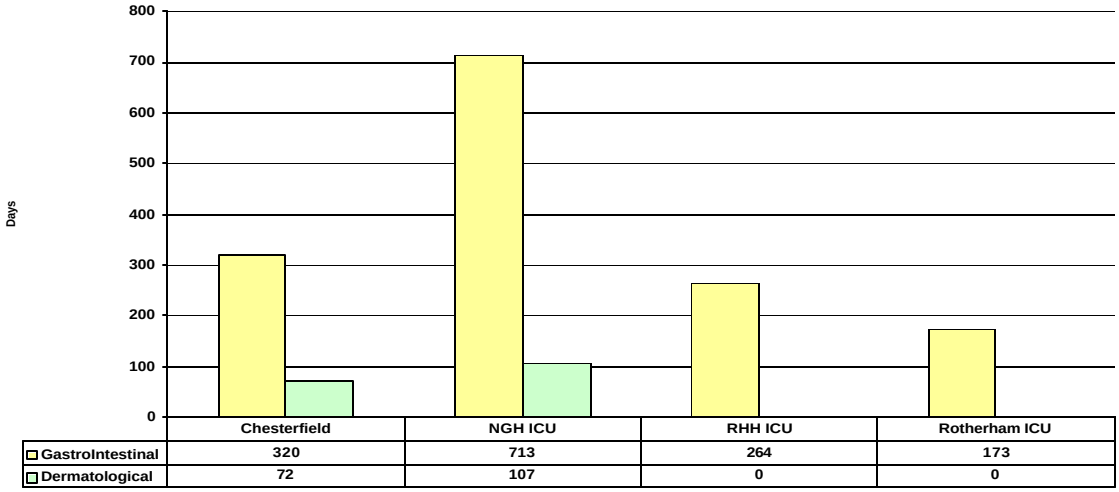
Definition
Feeding with parenteral or enteral nutrition (implies methods of feeding other than normal oral intake)

2.3.7. Dermatological Support Days

This is a new organ support not included within the ACP dataset.

Definition
Indicated by one or more of the following:-
Patients with major skin rashes, exfoliation or burns (e.g. greater than 30% body surface area affected).
Use of multiple large trauma dressings (e.g. multiple limb or limb and head dressings)
Use of complex dressings (e.g. open abdomen or large skin area greater than 30% of body surface area)

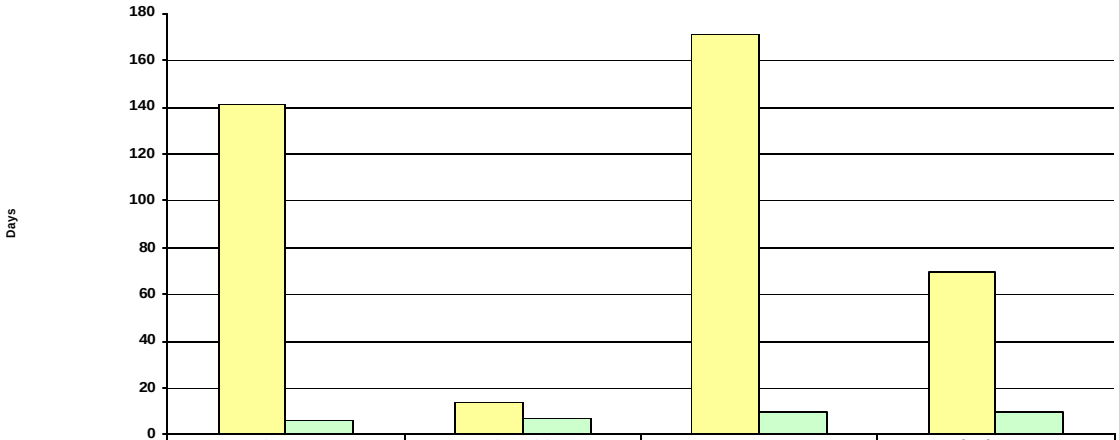
CCMDS Gastro-intestinal and Dermalogical Support in ICUs Jan - Mar 06



	Chesterfield	NGH ICU	RHH ICU	Rotherham ICU
GastroIntestinal	320	713	264	173
Dermatological	72	107	0	0

Chart 16

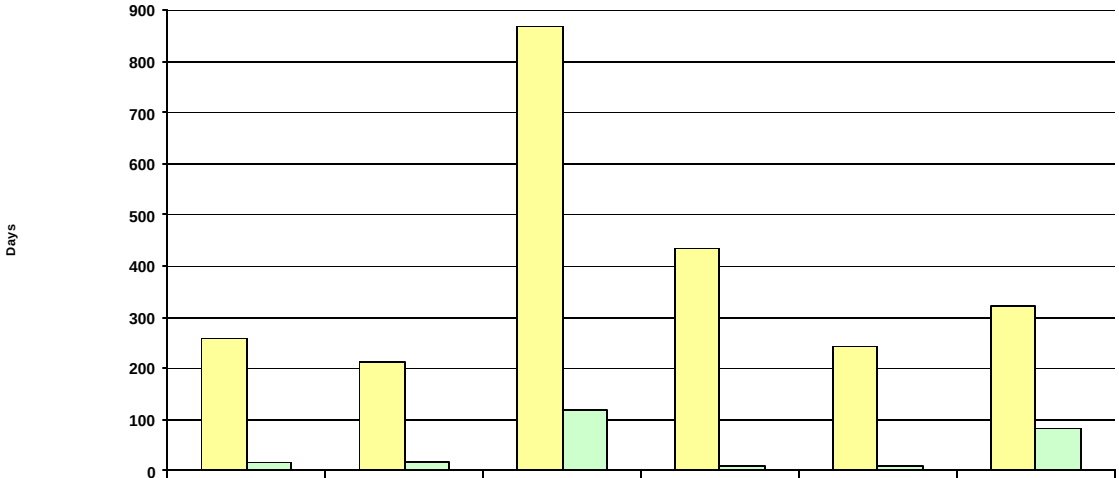
CCMDS Gastro-intestinal and Dermatological Support in HDUs Jan - Mar 06



	NGH HDU	NGH POSU	RHH HDU	Rotherham HDU
GastroIntestinal	141	14	171	70
Dermatological	6	7	10	10

Chart 17

CCMDS Gastro-intestinal and Dermatological Support in ICU/HDUs Jan - Mar 06



	Barnsley	Bassetlaw	NGH	RHH	Rotherham	Scunthorpe
GastroIntestinal	258	214	868	435	243	322
Dermatological	16	18	120	10	10	83

Chart 18

As these were new fields there was nothing to compare it with but the figures do not look surprising.

2.3.8. Level Days

Definitions

ACP Level 2 (High Dependency Days)	CCMDS Level 2 (High Dependency Days)
Single organ system monitoring and support, excluding advanced respiratory support	Patients needing single organ system monitoring and support. (patients in need of advanced respiratory support as the only major organ system supported due to an acute illness would normally satisfy the criteria for level 3)
General observation and monitoring: more detailed observation and the use of monitoring equipment that cannot safely be provided on a general ward. This may include extended post-operative monitoring for high-risk patients	Patients needing a greater degree of observation and monitoring. Observation and monitoring that cannot be safely provided at level 1 or below, judged on the basis of clinical circumstances and ward resources.
	Patients needing extended post-operative care: Extended postoperative observation is required either because of the nature of the procedure and/or the patient's condition. Included in this group would be patients needing short-term i.e. less than 24 hours, routine postoperative ventilation who are otherwise well with no other organ dysfunction, e.g. fast track cardiac surgery patients.
Step down care: patients who no longer need intensive care but who are not well enough to be returned to a general ward.	Patients moving to step-down care (i.e. from a higher level).
	Patients needing pre-operative optimisation: Requiring invasive monitoring and treatments to improve organ function
	Patients with major uncorrected physiological abnormalities: These physiological abnormalities, if uncorrected, are likely to indicate a patient requiring at least level 2 care. Patients with lesser degree of abnormality or other physiological abnormalities may also require level 2 or 3 care.

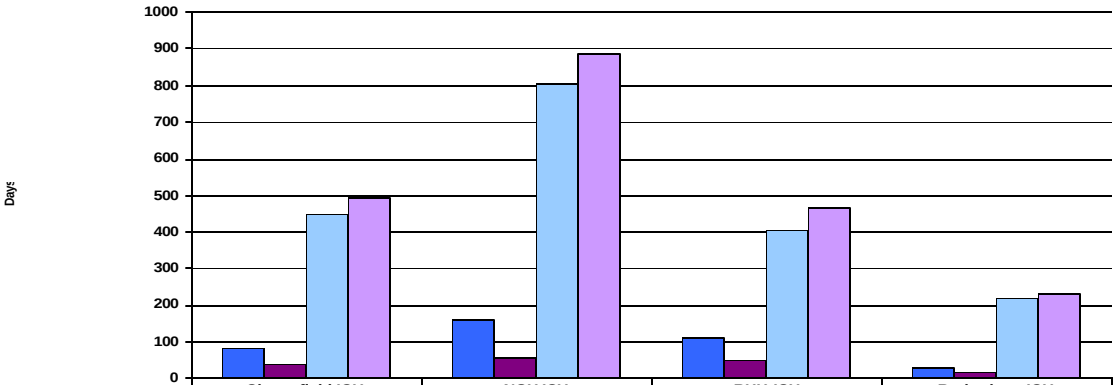
Table 7

ACP Level 3(Intensive Care Days)	CCMDS Level 3 (Intensive Care Days)
Advanced respiratory system monitoring and support alone	Patients needing advanced respiratory monitoring and support: Excluded from this group would be patients needing short term, i.e. less than 24 hours, routine postoperative ventilation who are otherwise well with no other organ dysfunction, e.g. fast tract cardiac surgery patients. If ventilatory support exceeds 24 hours, or other significant organ dysfunction develops, these patients now need level 3 care.
Two or more organ systems being monitored and supported, one which may be advanced respiratory support	Patients needing monitoring and support for two or more organ systems, one of which may be basic or advanced respiratory support.
Patients with chronic impairment of one or more organs systems sufficient to restrict daily activities (co-morbidity) and who require support for an acute reversible failure of another organ system.	Patients with chronic impairment of one or more organs systems sufficient to restrict daily activities (co-morbidity) and who require support for an acute reversible failure of another organ system.

Table 8

The levels of care are taken from the 'Levels of Critical Care for Adult patients, Intensive Care society, 2002. When it is not obvious from organ support which level a patient requires it may be that these definitions have been used as part of Other Contributory Factors to assign a level day.

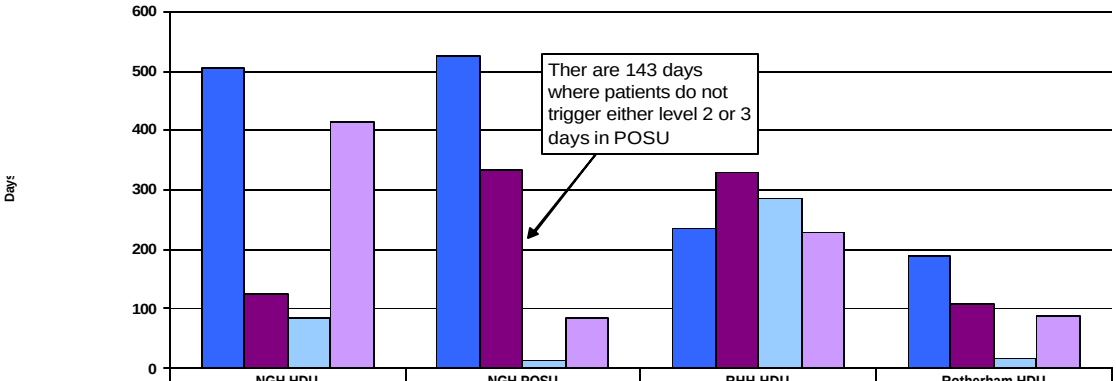
HDU (level 2) and ICU (Level 3) Days in ICU Jan - Mar 06



	Chestefield ICU	NGH ICU	RHH ICU	Rotherham ICU
ACP HDU level	83	160	113	31
CCMDS HDU level	37	56	50	16
ACP ICU level	447	806	403	217
CCMDS ICU level	493	886	466	232

Chart 19

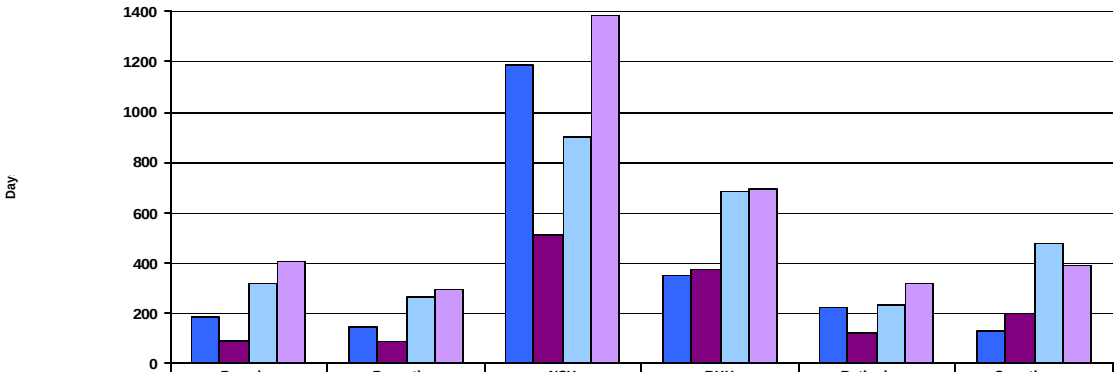
HDU (Level 2) Days and ICU (Level 3) Days in HDU Jan - Mar 06



	NGH HDU	NGH POSU	RHH HDU	Rotherham HDU
ACP HDU level	505	526	235	190
CCMDS HDU level	125	335	328	108
ACP ICU level	85	14	284	18
CCMDS ICU level	414	85	228	89

Chart 20

HDU (Level 2) Days and ICU (Level 3) Days Jan - Mar 06 in ICU/HDUs



	Barnsley	Bassetlaw	NGH	RHH	Rotherham	Scunthorpe
ACP HDU level	186	148	1191	348	221	134
CCMDS HDU level	93	90	516	378	124	198
ACP ICU level	317	268	905	687	235	477
CCMDS ICU level	408	298	1385	694	321	390

Chart 21

In ICUs small differences in split of days only a slight decrease in level 2 reflected in the rise of level 3 days. HDUs the NGH and Rotherham show an increase in Level 3 days POSU at the NGH were mainly level 2 days however 143 days were neither level 2 nor 3. ICU/HDUs combined reflected an increase in Level 3 beds. The NGH showed a large increase in level 3 beds, Scunthorpe was the reverse.

2.3.9. Other Contributory Factors

Within the levels of Care definitions are certain criteria which are not covered by organ support definitions however they can be used to define the Level of Care a patient should be receiving. If a patient is covered by these criteria but does not have any organ support (as classed by the definitions previous) then Other Contributory Factors can be ticked which will generate a Level 2 day.

Definitions

- Patients needing pre-operative optimisation
- Patients needing extended post-operative care (Major elective surgery; Emergency surgery in unstable or high-risk patient; Increased risk of postoperative complications/interventions/monitoring; Intermediate surgery in patient >70 yrs or ASA III or IV).

- Patients needing a greater degree of observation and monitoring
- Patients moving to step-down care
- Patients with major uncorrected physiological abnormalities (Respiratory rate >40 or <30 breaths/min for > 6 hrs; Heart rate > 120 beats/min; Temperature 35°C> 1 hour; Hypotension systolic BP, <80mmhg for > 1 hr; Glasgow Coma Score <10 and at risk of acute deterioration)

The following Other Contributory Factors when scored which will generate a Level 3 day

Patients with chronic impairment of one or more organs systems sufficient to restrict daily activities (co-morbidity) and who require support for an acute reversible failure of another organ system e.g Severe Ischaemic Heart disease and major perioperative haemorrhage, COPD requiring home oxygen presenting with sepsis related to immunosuppression, angina on mild exercise and broncho-pneumonia requiring CPAP.

Other Contributory Factors and Short-term Respiratory Support in ICUs Jan - Mar -06

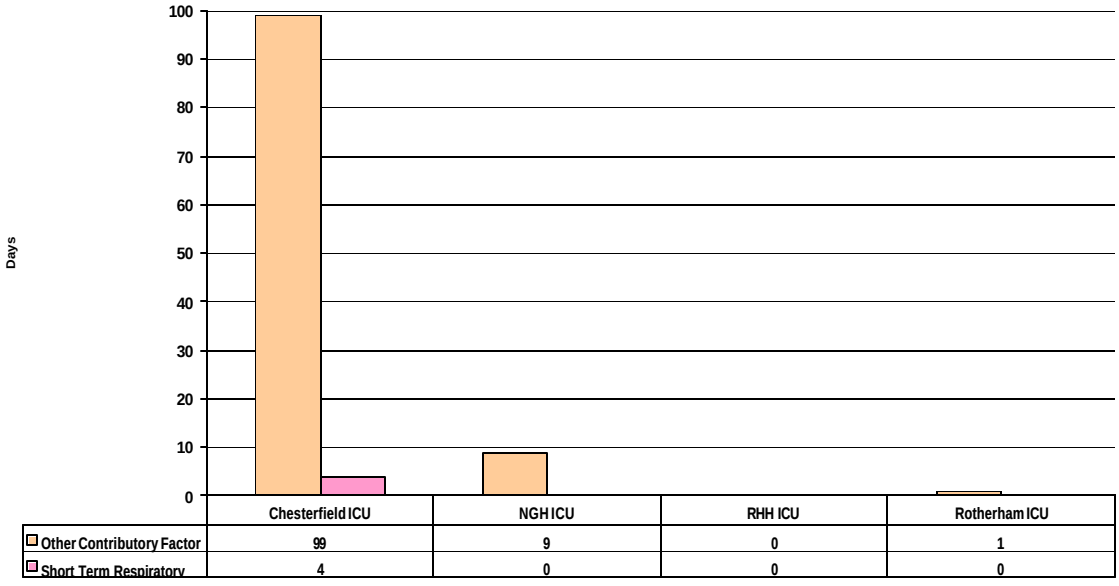
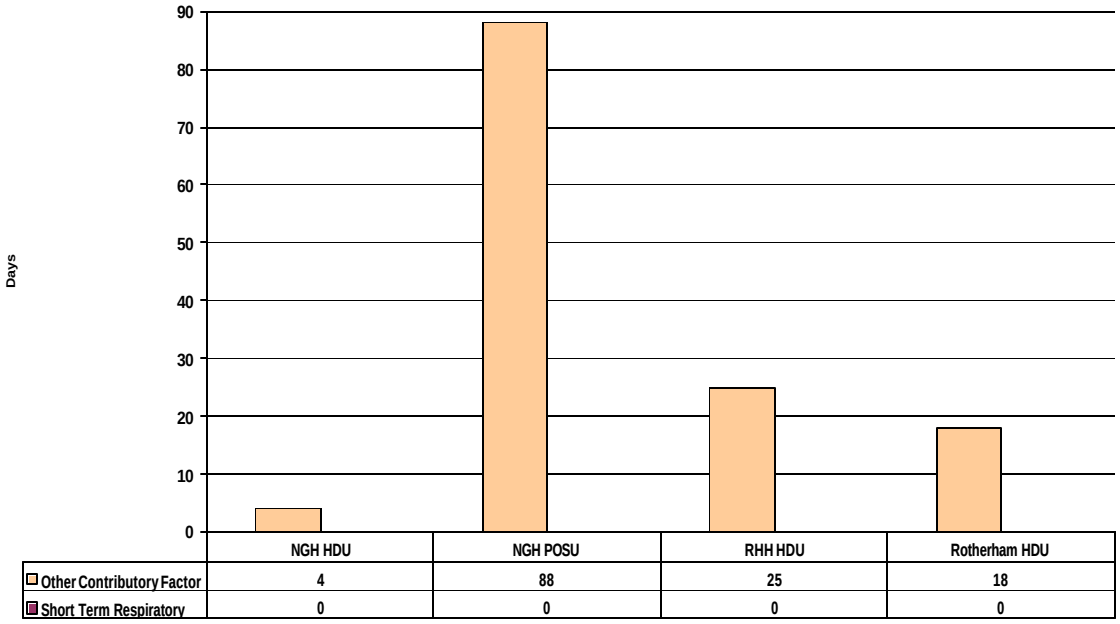


Chart 22

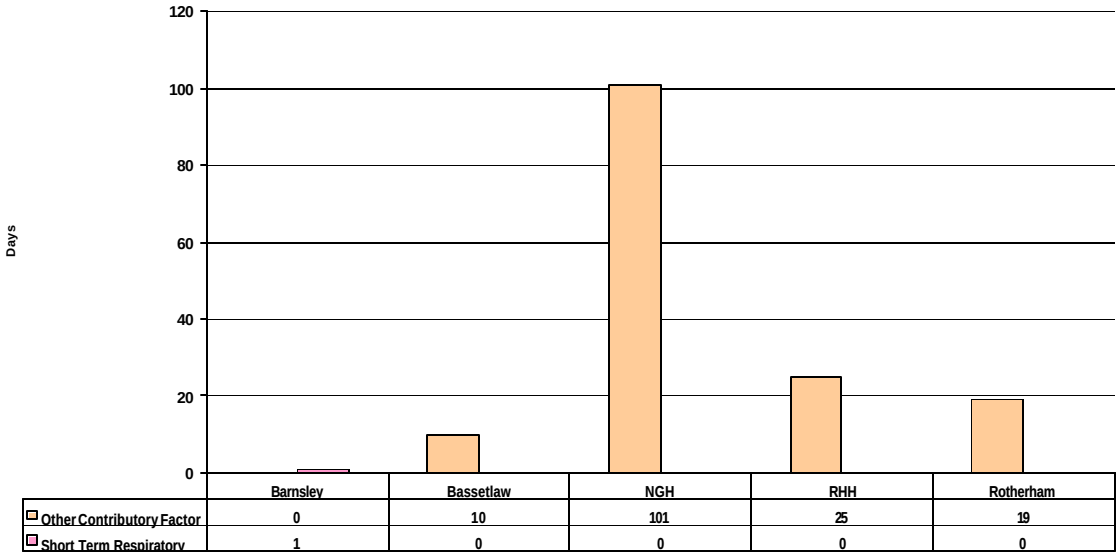
Other Contributory Factors and Short Term Respiratory Support in HDUs Jan - Mar 06



	NGH HDU	NGH POSU	RHH HDU	Rotherham HDU
Other Contributory Factor	4	88	25	18
Short Term Respiratory	0	0	0	0

Chart 23

Other Contributory Factors and Short Term Respiratory Support in ICU/HDUs Jan - Mar 06



	Barnsley	Bassetlaw	NGH	RHH	Rotherham
Other Contributory Factor	0	10	101	25	19
Short Term Respiratory	1	0	0	0	0

Chart 24

In ICUs Chesterfield had 99 days in which only one organ failure together with the Other Contributory factor made the patient a level 3. NGH POSU as would be expected was the main area in which the Other Contributory factor was scored to enable a Level 2 day.

3. CONCLUSIONS

3.1 Key Conclusions from the Data Analysis

Respiratory – There was very little differences between the two scoring systems.

Cardiovascular – this was the category which showed the greatest change mainly due to the broadening of the definitions into basic and advanced. The inclusion of the definitions within basic cardiovascular care:- the inclusion of the presence of either a CVP and/or arterial line for monitoring generated a large increase in the number of patients who now met the criteria for cardiovascular support.

Renal – Virtually no difference between the scoring systems as the definition has remained constant.

Neurological – There is some increase in the CCMDS due to the new definition on severely agitated or epileptic patients being included.

Gastro-intestinal – Although part of the CCMDS this organ support will not be used in the calculation for Payment by Results but was included for completeness. The results are as would be expected.

Dermatological – This is a new organ support within CCMDS so there was no ACP data to compare it with however the figures do not look surprising. Audit of the CCMDS has demonstrated that this can often be missed as not documented on unit charts.

Level days - In ICUs there were small differences in split of days only a slight decrease in level 2 reflected in the rise of level 3 days. Within HDUs the NGH and Rotherham show an increase in Level 3 days POSU at the NGH were mainly level 2 days however 143 days were neither level 2 nor 3. Combined Units reflected an increase in Level 3 beds. The NGH showed a large increase in level 3 beds, Scunthorpe was the reverse.

Other Contributory Factors - In ICUs Chesterfield had 99 days in which only one organ failure together with the Other Contributory factor took the patient to level 3 care. NGH POSU as would be expected was the main area in which the Other Contributory factor was scored to enable a Level 2 day.

4 RECOMMENDATIONS

Data Validity

The majority of organ support days come from the cardiovascular and respiratory days. Units need to be particularly vigilant in ensuring the accuracy of this information. A number of "Basic Cardiovascular" days missed, which could easily result if a CVP line or arterial line is not noted, could potentially put a unit at significant financial risk. Similarly units might put themselves in the position of being accused of 'gaming' if basic respiratory days get scored as advanced respiratory inappropriately on HDU's.

Training.
On going training of staff is vital. Errors, such as the inappropriate use of the "Other Contributory factor for level 1(2) day", can provide major bias. This is consequential upon the broad definition. Particular attention needs to be paid to this area.

Data collection process
An overview of the different processes in place for data collection in Network units could be helpful in determining which systems are most robust.

Jeremy Groves

Chair
NTCCN Audit Working Group
Chesterfield Royal Hospital
December 2006

Gary Mills
Director of MERCS

5. APPENDICES

Appendix 1

ACP DATA SET

1. Augmented Care Period Number
2. Augmented Care Period Local Identifier (Optional)
3. Start Date (Augmented Care Period)
4. Augmented Care Period Source
5. Intensive Care Level Days
6. High Dependency Care Level Days
7. Augmented Care Location
8. Number of Organ Systems Supported
9. Speciality Function Code
10. Augmented Care Planned Indicator
11. Augmented Care Outcome Indicator
12. Augmented Care Period Disposal
13. End Date (Augmented Care Period)

Appendix 2

CCMDS Dataset

1. NHS NUMBER
2. LOCAL PATIENT IDENTIFIER
3. SITE CODE (OF TREATMENT)
4. CODE OF GP PRACTICE (REGISTERED GMP)
5. TREATMENT FUNCTION CODE
6. PERSON BIRTH DATE
7. POSTCODE OF USUAL ADDRESS
8. CRITICAL CARE LOCAL IDENTIFIER
9. CRITICAL CARE START DATE
10. CRITICAL CARE START TIME
11. CRITICAL CARE UNIT FUNCTION
12. UNIT BED CONFIGURATION
13. CRITICAL CARE ADMISSION SOURCE
14. CRITICAL CARE LOCATION SOURCE
15. CRITICAL CARE ADMISSION TYPE
16. ADVANCED RESPIRATORY SUPPORT DAYS
17. BASIC RESPIRATORY SUPPORT DAYS
18. ADVANCED CARDIOVASCULAR SUPPORT DAYS
19. BASIC CARDIOVASCULAR SUPPORT DAYS
20. RENAL SUPPORT DAYS
21. NEUROLOGICAL SYSTEM SUPPORT DAYS
22. GASTRO-INTESTINAL SYSTEM SUPPORT DAYS
23. DERMATOLOGICAL SYSTEM SUPPORT DAYS
24. LIVER SUPPORT DAYS
25. ORGAN SUPPORT MAXIMUM
26. CRITICAL CARE LEVEL 2 DAYS
27. CRITICAL CARE LEVEL 3 DAYS
28. CRITICAL CARE DISCHARGE STATUS
29. CRITICAL CARE DISCHARGE DESTINATION
30. CRITICAL CARE DISCHARGE LOCATION
31. CRITICAL CARE DISCHARGE READY DATE
32. CRITICAL CARE DISCHARGE READY TIME
33. CRITICAL CARE DISCHARGE DATE
34. CRITICAL CARE DISCHARGE TIME