

# **Mid Staffordshire NHS Foundation Trust Critical Care Unit Proposal in Response to the Trust Special Administrators Draft Proposals**

**29<sup>th</sup> September 2013**

**Paper prepared by (on behalf of the Critical Care Unit):**

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## Executive Summary:

Mid Staffordshire NHS Foundation Trust currently has a fully functional Critical Care service providing excellent care for patients who require management of their critical illness during their stay. Critical Care has been a part of the Intensive Care National Audit and Research Centre (ICNARC) for sixteen years and has received consistently exceptionally good governance reports. The unit is peer reviewed through the west midland quality review services; it is a popular unit for staff to work within and junior doctors to rotate through and is definitely a valuable part of the West Midlands Critical Care Network. Critical Care have a dedicated fully staffed team of Nurses led by a Nurse Consultant and also have a 24/7 medical staffing model complete with a separate seven Consultant Intensivist rota who are committed to the service. The Critical Care Consultants have an accomplished and sustainable seven-day per week rota and have been separate from the General Anaesthetists rota for circa eight years.

Critical Care are an integrated and high performing team, who provide Critical Care Outreach services to all in-patient clinical areas; currently including Paediatrics, Maternity, Outpatients and Emergency departments 24 hours a day.

From a financial perspective Critical Care historically have not been a major financial pressure, this can be demonstrated by exceeding the financial trajectory by 300k (in-year, end of month four 2013; appendix 15, page 27). It is understood through peer reviews that Critical Care's recurring venue costs are in line with other units of either a similar or larger size (as there is a liner scale, establishment increases or decreases with patient activity). Within this document it will be conversely argued this financial status will actually be put at risk by the TSA's proposals, whilst alongside increasing patient risk. The encouraging financial position does not include the year on year savings made by the department. This has been demonstrated by either contributing towards the 7% Trust achieved cost improvement programme (CIP) or simply aiming to improve efficiencies locally. These savings have equated to efficiencies of circa 200k to 230k each year.

Critical Care currently serves a caseload of circa 200 medical patients per year comprising over 1700 bed days per annum (based on the same timeframe utilised by the Trust Special Administrators, TSA (Appendix 9, page 21)). This workload means at any one time Critical Care may have 4 medical L3 patients within the unit peaking at 6 ventilated patients (appendix 5, page 17), as they present unsystematically and dependent on their presentation may stay for prolonged periods of time (average length of stay equal to eighteen days for a level 3 patient and four days for a level 2 patient; Appendix, 9 page 21).

Through the various monthly governance meetings the team, as a whole, agree and welcome the likely proposal of future Hospital mergers with the University Hospitals of North Staffordshire (UHNS) and that collaborative management would be desirable. Below the new and anticipated Executive and Corporate structures the Critical Care departments at MSFT agree they should merge with the Critical Care Unit at UHNS and this should provide increased training opportunities and sustainability.

## What does MSFT currently afford to patients regarding Critical Care?

Critical Care services currently provide immediate specialist care and treatment for the acutely ill or critically ill patient and seamless transition to higher acuity levels of care and advanced life support where necessary. A primary function for Critical Care is to provide an indispensable service for Accident and Emergency Department and for acute medical admissions, regardless of their clinical location. Alongside this significant caseload Critical Care is a vital provision to other clinical disciplines such as (but not exhaustive):

- Surgery
- Endoscopy
- Haematology
- Care of the elderly
- Chemotherapy
- Gynaecology
- Orthopaedics
- Respiratory
- Paediatrics
- Specialist Surgical Departments
- Maternity
- Post-operative areas (theatres and Day Ward; including pre theatre patient optimization)
- All other in and out patient areas

Without the Critical Care provision remaining on site, it produces new and unknown clinical risks to all patients within Stafford hospital and this untested clinical model leads the current MSFT through clinical governance to a new and experimental arena.

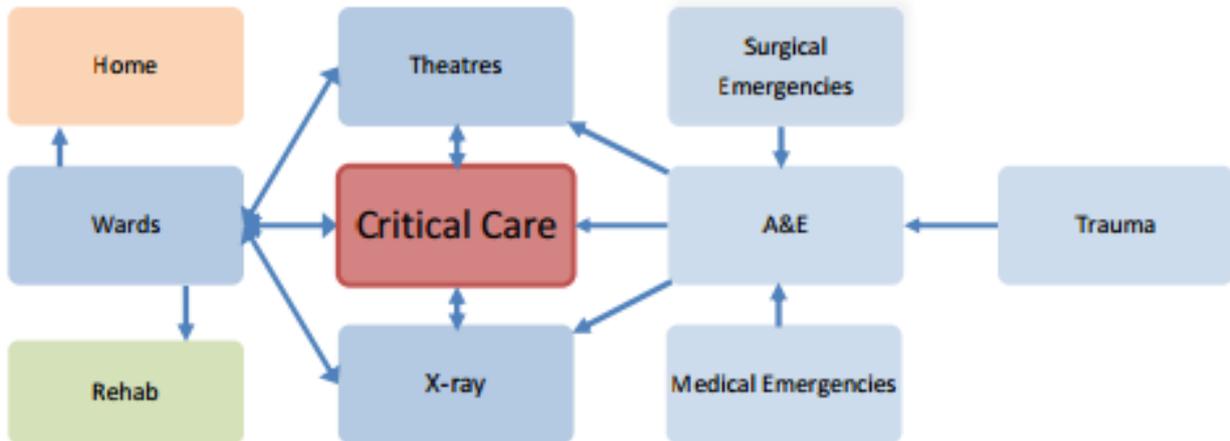
One can certainly argue that national quality standards and peer review measures for services listed above point to the availability of Level 3 critical care service provision on site.

## So what is Critical Care?

“Critical care is a service provided for some of our sickest patients, who require extensive physiological and psychological support and rely on a highly skilled team to care for them. It is a high cost, low volume, demand lead service, essential to an acute Trust for the delivery of core services such as elective surgery and emergency services.”<sup>1</sup>

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<sup>1</sup> The Intensive Care Society (2011)



Critical Interface; the Central Role of Critical Care (Intensive Care Society 2011)

### Critical Care consists of:

- Highly trained specialist Nursing Staff
- Highly skilled Medical Staff including Middle Grade SAS doctors and Consultants
- Advance trained Critical Care Outreach Practitioners
- Specialist equipment and facilities
- Availability 24/7, with a requirement to flex in order to meet service demands.

The establishment of staff produces a significant baseline cost to run a critical care service; which is not dissimilar to the majority of acute care services (circa 70 to 80% Of overhead costs). It is important to note that the delivery of critical care is interdependent on the specialist personnel above and each element cannot be run separately.

The Critical Care Outreach team (CCOT) are an autonomous practitioner 24/7 service provided by nurses with advanced clinical skills and abilities, such as independent prescribing and their services are a standard component of corporate critical care delivery. It could be argued that without Critical Care Consultants and facility, this practitioner service during the next peer review would conclude the CCOT are at immediate risk due to limited supervision and training.

However their roles within the TSA's proposed future services would remain instrumental via identifying and managing the deteriorating medical patient and hence avoiding admission into the Critical Care in many cases by early recognition. This is fundamental role at risk of functioning safely and remaining sustainable without the Critical Care medical leadership, education and support.

## Areas of Concern:

The three areas of concern arising from the TSA draft proposal are:

- Lack of recognition regarding the complexities of recognition and management of the acutely ill medical patients
- The proposed acute critical care stabilisation period
- The increased requirement; unnecessary transferring and increased risk for this large group of patients in their acutest phase of illness. This is converse protocol to that dictated within the care of the acutely ill patient NICE guidelines.<sup>2</sup>

## Care of the acutely ill patients:

Early warning track and trigger systems (NEWS or MEWS, PEWS and MEOWS) are now a fundamental part of managing the acutely ill patient. These are well embedded at MSFT and ought to be a standard across all acute trusts. Critical Care Outreach services from Critical Care are a fundamental part of the response to deterioration in a patient when triggered via one of the above tools. The Critical Care Medical team and Nurse Consultant provide the support and first line management of Outreach. It is very important to have early recognition of deteriorating patients so that appropriate measures are put in place to turn around the course of acute illnesses, or escalate the treatment levels rapidly.

Outreach Practitioners currently provide 250-300 telephoned patient referrals per month, this does not include the numerous non-formal referrals i.e. advice or support for ward nursing and medical teams whilst seeing other patients or via providing routine ward visits. The Critical Care Practitioners are a well-established service and perform a significantly more automatous role than peer organisations and therefore to remove it would produce a retrograde and inequitable step for Stafford patients. The presence of Critical Care throughout the whole care pathway through to and including Level 3 intensive care provides a seamless and full patient pathway to safely manage the patient. Another vital service provided to the whole organisation by these Practitioners is education; this involves routine mandatory training, medical education, simulation education, and courses delivered and coordinated by Outreach such as Acute Illness Management and Sepsis Management.

## Acute Critical Care period:

The management of the initial acute critical care period is vital to the outcome of the patient. Expertise within critical care management for all organ system failures is required not just “intubation and ventilation” as proposed within TSA documents and consultation. The acutely ill patient with sepsis is a classic and frequent example, where national guidelines drive care<sup>3</sup> to be given quickly, with experts administering and guiding the therapy. These patients are inherently unstable and the majority of grossly acute patients could not be transferred in an ambulance with predicable good outcomes. This stabilisation requires a critical care facility where everything is organised. It is noticed

<sup>2</sup> Nice Guideline CG50

<sup>3</sup> Sepsis six national programme (2010)

within clinical practice that the smallest of movements, even minor lateral rotation during a routine turn for pressure areas will result in transient but significantly marked patient deterioration. Sometimes these patients require days of therapy before they could be considered “stable” enough for a non-clinical transfer.

A facility currently known as the Critical Care Unit and expert staff to manage these patients with the relevant equipment and resources are therefore essential. If that clinical facility is in place then transfer becomes unnecessary unless clinically indicated as below.

### **Transferring of the acutely ill patients:**

Where there is a clinical benefit to the acutely ill patient - Level 3 patient then transfer must be considered. This is well recognised for:

- Paediatric level 3 patients – where expertise is centralised to major centres
- A neurosurgery patient as this is not a specialty available on Stafford site.
- The major trauma pathway is already developed and the extended journey times bypassing MSFT are outweighed by specialist service not available on Stafford site.

Transfer itself is inherent with risk and requires expert personnel in the form of Medical and Nursing Staff trained in the transfer of the Critically Ill. Where expertise and capacity is available locally, there is no benefit, only risk, in a transfer to another unit.

A medical example of this is pneumonia; the commonest medical condition presenting to critical care. These cases are admitted through A&E (Ambulance or ambulatory), they are treated by acute physicians but sometimes deteriorate; requiring Critical Care for advanced respiratory and oxygen therapy, sometimes invasive ventilation. They often require 3 weeks of Critical Care stepping down to Level 2 at some point throughout that journey and then back to ward level care when appropriate. We can safely manage with local respiratory specialty help these cases and have done for many years. This model is recommended through the Intensive Care Society numerous documentations.

A further example that we currently manage, but may need transfer in a future model would be acute peritonitis. Even though we can manage all the critical care elements of the treatment, if there are no surgeons or facility on site the patient after a “reasonable” duration of stabilisation, may need a transfer to receive the surgical intervention required at the right time. **It is near impossible prior each patient episode to dictate what a “reasonable time frame” for stabilisation would be.**

Transferring critically ill patients introduces new risks to both current organisations. If key personnel are taken out for a transfer they can be absent from their role sometimes for many hours putting other services and patients at risk for which they might have co-responsibilities.

Other inevitable consequences would be the transfer of “potentially acutely ill” patients. Clinically & ethically the medical teams would develop a tendency towards transfer before the patient become a critically unstable patient and not afterwards. This would have two effects; firstly a large increase on demand for beds of medical cases at UHNS and secondly decreases medical cases at Stafford putting the viability of the overall

service and model at further risk. Another significant risk within the proposed model is the stabilisation of Level 2 patients for transfer you would have to make them a Level 3 as a part of safe transfer protocol (National Standards). This would increase the numbers of level 3 patients (circa 137 patients at risk during the last financial years activity) at the receiving hospital and to the detriment of the individual patient overall. One would argue to escalate this significant cohort of patients into level 3 care would be unethical verses todays model.

Absence of Level 3 care at MSFT would limit the evaluation of patients referred to critical care. Currently the Critical Care team see many patients at the request of other consultants to assess their suitability and for many patients Critical Care would not be the appropriate therapeutic pathway. Working collaboratively with other medical team's means improved end of life pathways, improved optimisation prior to theatre (routine and emergency) or to avoid admissions into higher levels of critical care. Under the TSA's model that selection would not be available and therefore a significant number of patients would have to be placed in critical care and transferred without any direct assessment of appropriateness and their risks of survival. This assessment cannot be done adequately over the telephone; there is no telemedicine model available (trialled and tested) for this risky cohort of patients.

The numbers of beds required under the TSA model for HDU is therefore inadequate as it does not take these factors into account. Nor does the report mention coherently what will occur with the level 1 and 2 areas around the organisation, which are currently supported daily by Critical Care (NIV; observation areas for AMU and A&E; level one/PACU on Ward 6 and ACU)

### **Proactively managing potential changes:**

During transition and under a new model there will clearly be changes within the base specialties and capabilities that are provided within the footprint of Stafford Hospital site. Therefore, with UHNS as one combined division, we propose to undertake regular evaluation of which cases can be safely managed at Stafford and which need to be transferred for specialty support. The ambition is to provide the appropriate care as soon as possible with minimal risk to patients.

Key members of the Critical Care team have consulted with our colleagues at UHNS and around the country. They have visited Kent and Canterbury NHS Trust where a merger of Trusts occurred in 2004 and they have had experience similarities of this type of model.

The Canterbury Consultants, Managers and Medical Director were very clear:

### **The principle should be:**

1. That having an Accident and Emergency department and an acute medical take requires a complete critical care service and unit.
2. Critical Care have demonstrated by experience and ICNARC reports (externally validated), that they can deal safely and completely with the presenting medical cases.

3. Critical Care proposes a Unit with five Nurses on duty allowing flexibility of Level 2 and Level 3 care. Suggest a commissioning of 3 ITU and 4 HDU patients, which equates to an establishment of five Nurses per shift.
4. This is modelled from the flow of medical patients seen over the last 18 months which is not estimated to be vastly different within the proposed new model from the TSA. (Appendix 5 parts A and B; 9; 11 & 13)
5. This is a reduction of current services and therefore a transfer or amalgamation to UHNS providing 2 nurses and 3 beds from our current establishment on this site.

## Translating a new model for Stafford Site:

This equates to Stafford having 4 HDU beds (as currently proposed by the TSA) and 3 Level 3 beds.

- This would keep the medical patient activity, which can demonstrated to be safely managed, at Stafford
- Allow management of acutely ill patients safely without introducing an increased risk
- Allow management of medically difficult post-operative elective surgical cases (such as PACU)
- Allow management of other specialty needs as outlined above without increased risk
- Allow repatriation and transfer to Stafford of medical and surgical patient's primarily long weaning cases to free up acute beds on the major acute site. Such as rehabilitation or level 3 respiratory cases for Stafford locality patients for cardiothoracic and neurological (currently done on an informal arrangement but project increasing numbers)
- Maintain capacity across more sites in the North West Midlands Critical Care network. It is well recognised that critical care activity is increasing by 5% year on year. This is through the population living longer and medical therapies and interventions improving patient's outcome after acute or critical events. A well-documented intervention causing such increases is primary coronary interventions.
- Additional support for A&E.
- Additional support for Paediatrics (whether this is critically ill patients in a ward environment or ambulatory patients in the A&E).

This proposed alternate model would:

- Minimise the risk and problems of transfer.
- Maintain equality for Stafford residents.
- Minimise disruption for Stafford Patients and Families.
- Improve retention and satisfaction of critical care staff.
- Improve acute utilisation of the Acute UHNS Critical Care site

The financial position would also improve as it would:

- Minimise duplication of resource on two sites. Current proposal: for each Level 3 patient generated in Stafford a resource has to be available here and in UHNS as well for transfer to occur.
- Increase utilisation of staff within Stafford and minimize risk to increase staff required in UHNS.
- Minimise equipment duplication and future capital costs as each clinical bed space requires patient monitor systems, ventilators, pumps, dialysis etc (circa 60-70k, plus VAT and servicing revenue – not including the additional equipment required to increase the number of transfers around the organisation)
- Reduce paramedic ambulance requirements and transfer costs (each patient retained saves a minimum of two journeys). Within the current model there would also need to be a pump prime cost to establish more ambulance at circa 200k each ambulance.
- Reduce patient relatives travel costs & time (each 3 week stay in hospital in UHNS would equate to £250 (bus) to £1200 (taxi) per relative. It is also recognised that relatives of those traveling to see their critically ill patients via buses to UHNS need to firstly travel into Stafford centre and then a one hour bus journey (without any delays)
- Reduced transfer of Level 2 or level 1 patient at risk of deterioration. Better use and occupancy of medical unit in Stafford.

Nurse Staffing:

- The Critical Care Division merged with UHNS would manage both sites and nurses would rotate where applicable to maintain skills and their portfolios.
- The human resources requirements would be collaboratively lead by nursing leads (currently on separate sites) with support from HR.

Medical Staffing:

- A merged division would manage both sites with joint governance arrangements.
- The Critical Care Consultants currently at MSFT would rotate to UHNS to maintain skills and portfolio.
- The on-call cover would be maintained at Stafford with the local critical care and anaesthetic consultants and where applicable advice from the UHNS Critical Care Consultant.
- Critical care cover at UHNS could then be supplemented by the current Stafford Critical Care Consultants.

- Future appointments would be joint appointed to meet the need of both site services.
- Middle grade cover to continue at Stafford, training opportunities can continue at Stafford with joint appointed rotational posts to be considered.

### **Is “no change” an option?**

The team as Mid Staffordshire recognise that a “no change” proposal is not an option. Prior to any TSA processes all members of the Critical Care Team were anticipating changes which in essence would lead to an amalgamation with a peer organisation; this is an option that which the whole of the Critical Care team welcome and have no resistance towards.

However it must be considered that future changes to Critical Care services are unlikely to release the revenue which the TSA suspect it might. If the current Critical Care services (level 3) were to be entirely transposed over to UHNS as implied within the TSA report the revenue expenditure would not reduce significantly. Around 80% of annual critical care expenditure on these budgets relates to establishment to remaining 20 % relates to non-pay costs such as equipment consumables (these are gross approximations as the budgets can be reported in numerous different ways).

Alongside the above are revenue costs which are not currently directly demonstrable within the Critical Care budget but neither the less are as essential for any Critical Care service to function. These minimal costs relate to supporting services such as human resources, infection control teams or occupational health. These are also patient focused costs for laboratory samples (blood tests) and radiology (x-rays and CT scans). We recognise that all these overhead costs services are essential. However, all of the above services, either those directly related for those secondarily related, will still need to exist. It does not matter which locality site the future organisations chooses to situate the Critical Care services current delivered at Stafford. There are possible savings by amalgamating “back room“ staff (as the TSA call them) and perhaps even release some savings through downsizing the estates; but these efficacies are unlikely to provide the financial solvency that shutting level 3 at Stafford is perceived to bring. Also Critical Care Servicers are funded through a process called payment by results (PBr); this means that each payments is paid for via the same national tariff all offer organisations use I.e. we get paid for what we do. Given that all Trust should be working towards the same financial template and structure, it is near ludicrous to perceive any ITU as not being able to function in a clear solvency state.

Conversely increasing patient risk, requirement to physically transport more patients through an already heavily congested motorway and the creation of a whole new adult medical model for transferring the critically ill patient, not only increases risk to the individual (without any testing of such model) it also going to be vastly more expensive than the current safe and sustainable model (with the addendums proposed elsewhere in this report).

## **In Summary:**

This report has demonstrated the proposed TSA document for Critical Care has unfavourable outcomes for patients who require level 3 and level 2 critical illness care.

Page | 12

The TSA's proposals provide an inequality for patients in the south of the region verses the north. However it is recognised that transportation for certain patients such as a road traffic incident or someone having a catastrophic myocardial infarction should be taken from their source (road or home) to the definitive location for treatment, which in these examples might be UHNS. However, this national model was never intended to be superimposed on a district general hospital (or a category 3 Critical Care Unit) who are able to deliver the same quality (or better) of care; measurable by quality outcomes (ICNARC) to specific cohorts of patients. To change the current safe and sustainable model without a considered consultation (i.e. a controlled randomised research trial) to minimise risk would be dangerous and potentially not result in any cost savings as alternate models are likely to be equally expensive.

The proposals within this document aim to provide the TSA with an alternate and safer model; whilst retaining expertise, quality and sustainability. In essence these proposals require an alignment of service with UHNS, which would include the Executive and Corporate teams (highlighted by the TSA as "backroom staff"); the policies, guidelines and Critical Care management teams. There would be a rotation of nursing and medical personnel, which will retain experience and credibility. Resulting in a commissioned reduction to the overall size of today's in-patient Critical Care services, thus returning better value for money than the TSA's proposals.

This model has been outlined and discussed with colleagues/experts at UHNS leading their Critical Care services and has gained significant support, whilst we recognise UHNS have separate requirements for up scaling their services (current lack of capacity despite a new PFI build, increasing national level 3 activity (5% year on year increase), unrecognised activity during their business planning for primary coronary interventions and trauma caseloads).

By implementing these proposals the experienced Critical Care team believe that both organisations, the local health economy and more importantly our patients will benefit.

# Appendices:

## Appendix 1:

### The new NHS England Document Service Specification D16 2013-14 (currently in Draft) states:

1. Care within Critical Care to be clinically led by a Consultant in Intensive Care Medicine and staffing to satisfy the standards stated in section 3.2 (Domain 1,4,5).
2. To ensure that Critical Care continues to be provided in the discrete traditional locations of Intensive Care and High Dependency Care Units, recognising that in exceptional circumstances it may extend to other high care hospital settings as part of a preplanned and agreed surge framework.
3. The provider must implement a standardised approach to the detection and response to deteriorating health on general wards with reference to NICE 50[12].
4. Admission to Critical Care must be timely and meet the needs of the patient.
5. Admission must be within 4 hours from the decision to admit.
6. The decision to admit a patient to Critical Care must be made by a Consultant in Intensive Care Medicine.
7. The transfer of a level 3 patient for comparable critical care at another acute hospital (Non-Clinical Transfer) must be avoided.

## Appendix 2:

[Nice Guideline CG50] [<http://www.nice.org.uk/nicemedia/live/11810/35950/35950.pdf> ]

### **Operational Standards and Competencies for Critical Care Outreach.**

<http://www.norf.org.uk/Resources/Documents/NOrF CCCO and standards/NOrF>

### **Operational Standards and Competencies 1 August 2012.pdf**

Page | 15

7.1. Separately rostered Critical Care Outreach team available 24 hours per day, 7 days a week

7.2. Sufficient staff to deliver 24 hours per day, 7 days per week

7.3. Critical Care Outreach team support by sessional commitment from Consultant Intensivist or consultant in Acute Care Medicine. 24 hr access to assistance by Critical Care Medical Staff and Consultants.

7.4. Shared trainee medical staff with critical care units and acute care who have no responsibilities other than those directly related to providing the graded response

7.5. Senior Physiotherapist with sessional commitment to Critical Care Outreach sufficient to follow up patients discharged from critical care and receive appropriate referrals. NOrF Operational Standards and Competencies for Critical Care Outreach

7.6. Allied health professionals (pharmacy, dietetics, speech and language and occupational therapy) available for Critical Care Outreach referrals

## Appendix 3:

### Comprehensive Critical Care

The review of adult critical care services published by the Department of Health in England in May 2000. The report outlined a modernisation programme focusing on the organisation and delivery of critical care.

Table 15. ICNARC NATIONAL Commonest primary diagnoses 2008 to 2012 (n=107,905) [in Bold are conditions likely to be managed in Stafford]  
Rank order (previous)

- 1 (1) **Pneumonia non-surgical 8.6%**
- 2 (2) Aortic or iliac dissection or aneurysm surgical 4.5%
- 3 (3) Large bowel tumour surgical 4.3%
- 4 (11) **Acute renal failure non-surgical 2.9%**
- 5 (5) **Acute myocardial infarction non-surgical 1.9%**
- 6 (13) **Status epilepticus or uncontrolled seizures non-surgical 1.8%**
- 7 (7) **Chronic obstructive pulmonary disease with acute lower respiratory infection non-surgical 1.6%**
- 8 (10) **Asthma attack in new or known asthmatic non-surgical 1.5%**
- 9 (14) Non-traumatic large bowel perforation or rupture surgical 1.4%
- 10 (19) **Acute pancreatitis non-surgical 1.4%**
- 11 (8) Malignant neoplasm of oesophagus surgical 1.4%
- 12 (6) **Primary (diffuse) brain injury non-surgical 1.3%**
- 13 (46) **Rheumatoid or osteoarthritis surgical 1.2%**
- 14 (12) Non-traumatic subarachnoid haemorrhage non-surgical 1.2%
- 15 (17) **Chronic obstructive pulmonary disease (COPD/COAD) non-surgical 1.2%**
- 16 (9) **Self poisoning with tri- and tetracyclic antidepressants non-surgical 1.1%**
- 17 (41) **Diabetic ketoacidosis non-surgical 1.1%**
- 18 (18) Intracerebral haemorrhage non-surgical 1.0%
- 19 (21) Intra-oral or pharyngeal tumour surgical 1.0%
- 20 (15) **Ventricular tachycardia or fibrillation non-surgical 0.9%**  
(Evaluation of the Modernisation of Adult Critical Care Services in England)

## Appendix 4:

### Effect of non-clinical inter-hospital critical care unit to unit transfer of critically ill patients: a propensity-matched cohort analysis

Helen Barratt, David A Harrison, Kathryn M Rowan and Rosalind Raine (2009)

Page | 17

In our analysis the difference in mortality between non-clinical transferred and nontransferred patients was not statistically significant. Nevertheless, non-clinical transfers received, on average, an additional 3 days of critical care. This has potential ramifications in terms of distress, inconvenience and cost for patients, their families, and the National Health Service. We therefore need further evidence, including qualitative data from family members and cost-effective analyses, to better understand the broader effects of non-clinical transfer.

<http://ccforum.com/content/16/5/R179>

Note this was from Critical Care Unit with Critical Care Staff to another Unit with Critical Care Staff.

*Our analysis only included patients transferred between critical care units. However, we know that some patients are transferred directly from the emergency department of one hospital to a critical care unit in another hospital [24]. These patients are not captured by the CMP, but this group is likely to be sicker and less stable clinically.]*

#### Conclusion:

Organisations including the UK Intensive Care Society have recommended that transfers for capacity reasons should only occur as a last resort, in part because of evidence about the risk of adverse events and the difficulties of delivering care outside the critical care setting

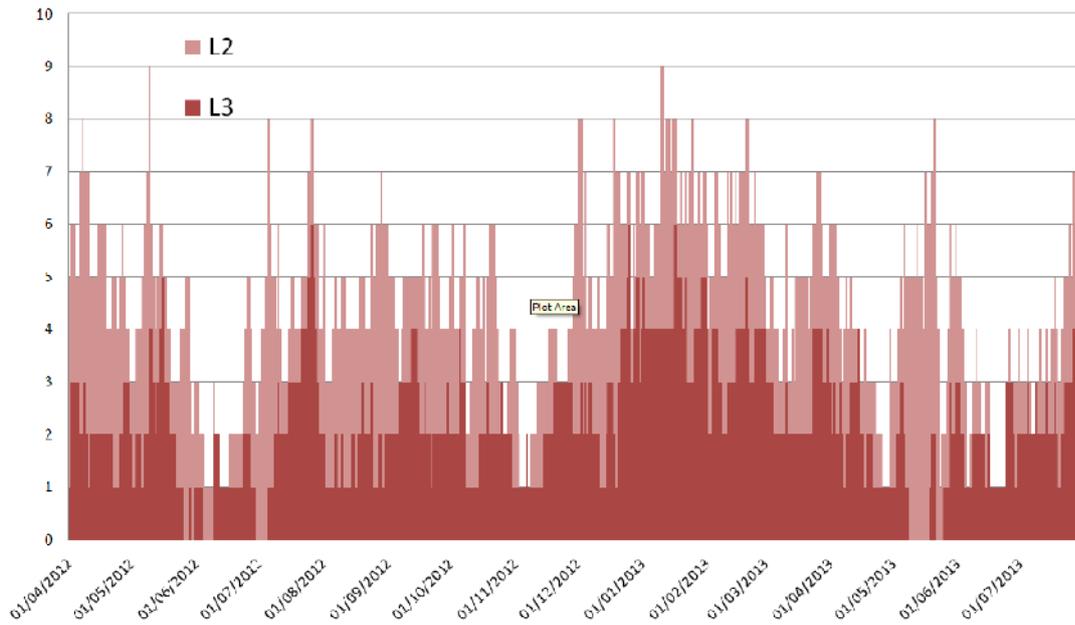
[http://www.netscc.ac.uk/hsdr/files/project/SDO\\_FR\\_08-1604-133\\_V01.pdf](http://www.netscc.ac.uk/hsdr/files/project/SDO_FR_08-1604-133_V01.pdf)

## Appendix 5

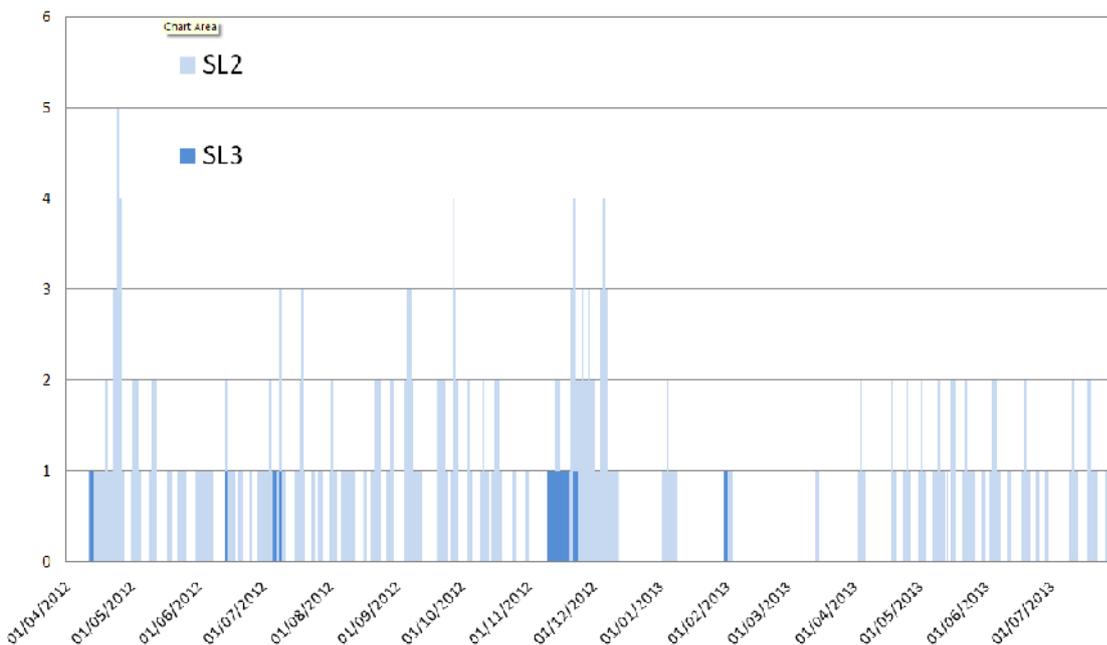
### Stafford Data on Medical and Planned Surgical Admissions to Critical Care.

These graphs show Critical Care Unit occupancy - how many beds occupied on a daily basis by type of patient:

L3 & L2 Medical Patients per Day

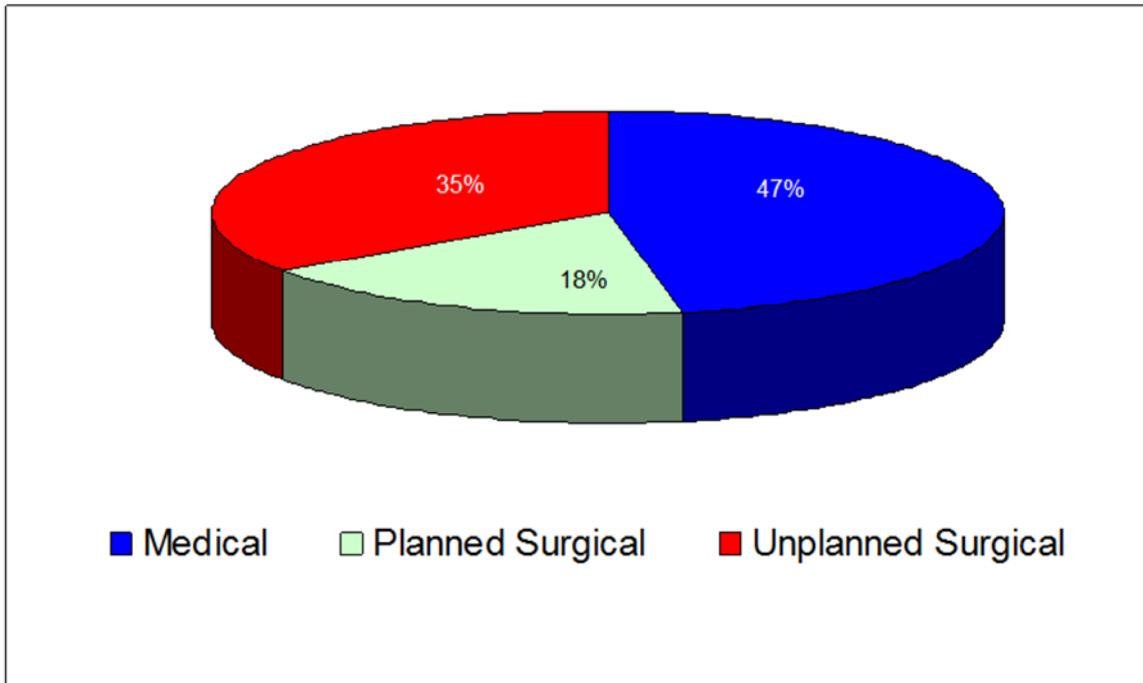


L3 & L2 Planned Surgical Patients per Day



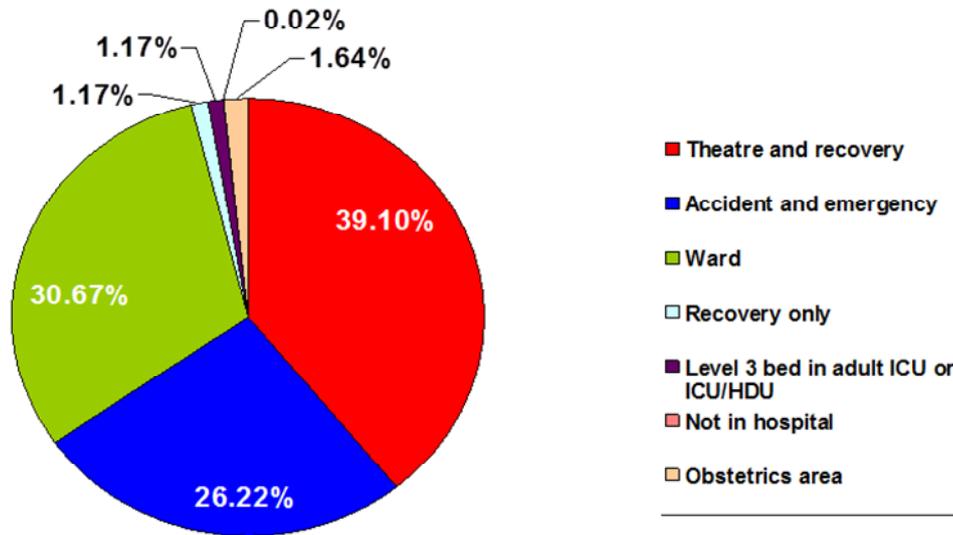
[source CCMDS daily data]

**Appendix 6:**



Pie chart demonstrating the split of activity current received through Critical Care at Stafford.

## Appendix 7:

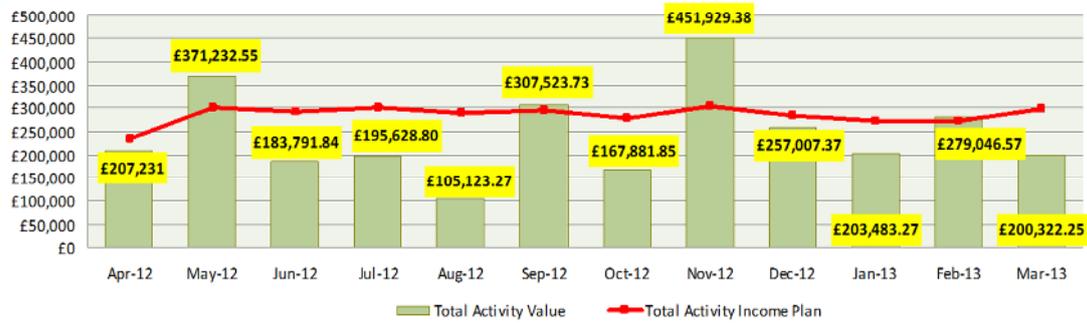


A pie chart demonstrating the source or location for patient admissions. This is the original or primary source and not the secondary source a patient may have been temporarily care for within.

## Appendix 8:

Cumm Total **£2,930,201.88**

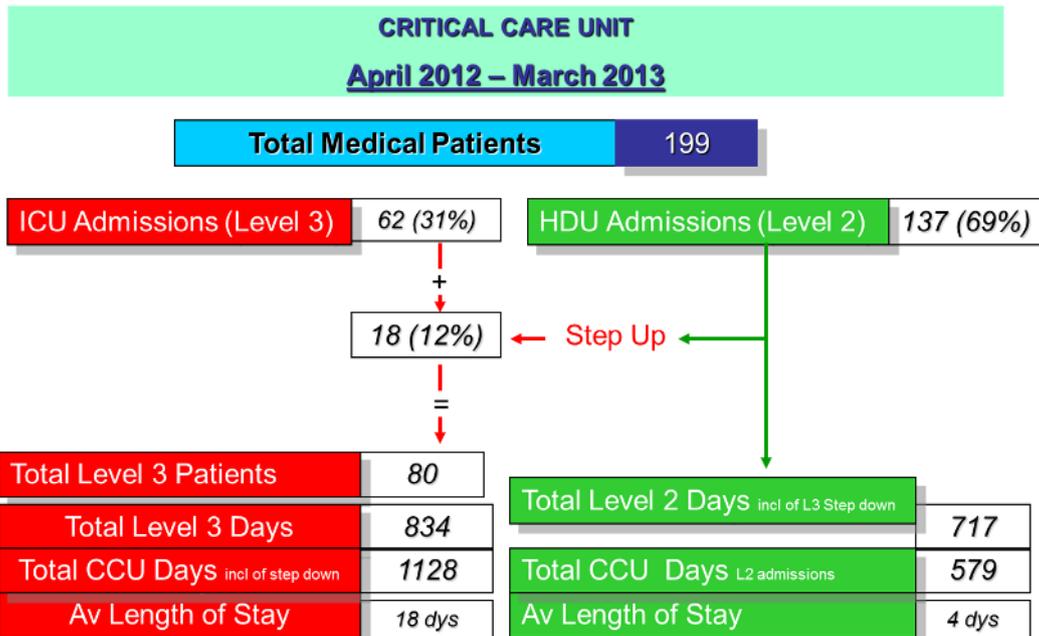
### Critical Care Income



Critical Care's financial position during the same period of time the TSA have utilised for their monitor of activity (i.e. 2012-13 financial period)

## Appendix 9

STAFFORD HOSPITAL



Total medical patient activity for during the previous financial year.

You can notice that only a small proportion of level 2 medical patients are converted to level 3 care. This is expected to be greater within the currently proposed new TSA model.

A significant proportion of dialog associated with this data is contained within the main body of this report.

## Appendix 10:

### Medical Admissions to CCU Discharged 01/04/2012 – 31/03/2013

CCMDS HRG4 LPG 2012_13					
Medical Discharges					
Episode Organs Supported	HRG	Pts	L3_L2 Dys	Tariff	Activity Value
0 organs_ L2 monitoring only	XC07Z	16	38	£254.53	£9,672.14
1 organs	XC06Z	105	447	£844.30	£377,402.10
2 organs	XC05Z	52	707	£1,135.05	£802,480.35
3 organs	XC04Z	19	248	£1,365.79	£338,715.92
4 organs	XC03Z	7	124	£1,534.44	£190,270.56
5 organs	XC02Z	0	0	£1,743.45	£0.00
6 +organs	XC01Z	0	0	£2,257.69	£0.00
0 x Organs + 0 x L3,L2 Dys	UZ01Z	0	0	£0.00	£0.00
		Total Pts	199		1564
					£1,718,541.07

*Medical admissions are admitted to CCU from a variety of Sources A&E; Wards; Obstetrics; Diagnostics etc.*

58% of total income

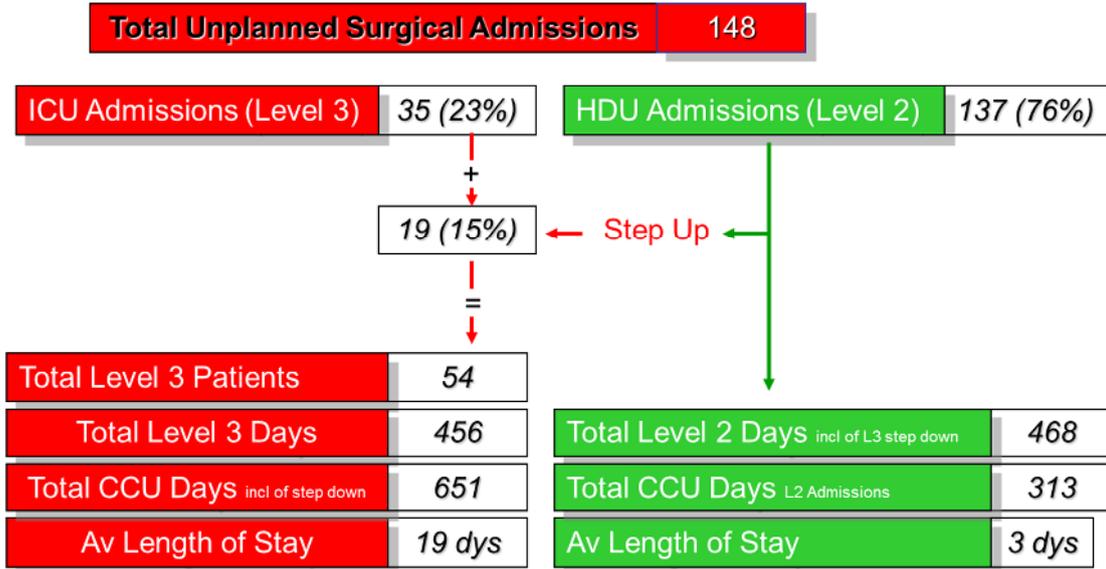
Financial activity associated with appendix 9. This demonstrates the split in activity verses finances.

**Appendix 11:**

MID STAFFORDSHIRE NHS FOUNDATION TRUST  
STAFFORD HOSPITAL

1 Year

**CRITICAL CARE UNIT**  
**April 2012 – March 2013**



Similar data to appendix 9; however this is unplanned surgical activity not medical activity.

## Appendix 12:

### Unplanned Surgical Admissions to CCU

01/04/2012 – 31/03/2013

HRG	Definition	Pts	L3/2 dys	Tariff	Total Value
XC07Z	0 X ORGANS	25	63	254.53	16035.39
XC06Z	1 X ORGAN	70	223	844.3	188278.9
XC05Z	2 X ORGANS	31	255	1135.05	289437.75
XC04Z	3 X ORGANS	14	230	1365.79	314131.7
XC03Z	4 X ORGANS	6	123	1534.44	188736.12
XC02Z	5 X ORGANS	1	15	1743.45	26151.75
XC01Z	6 X ORGANS	0	0	2257.69	0
UZ01Z	UNCLASSIFIED	0	0	0	0
	<b>Total</b>	<b>147</b>	<b>909</b>		<b>£1,022,771.61</b>
L1_L0	Days Lost		55		

Page | 25

34% of  
total income

*Unplanned Surgical Admissions to CCU originate from a variety of sources*

*Theatre; Wards & A&E - Admissions direct from theatre does not always indicate that 'emergency' surgery has taken place.*

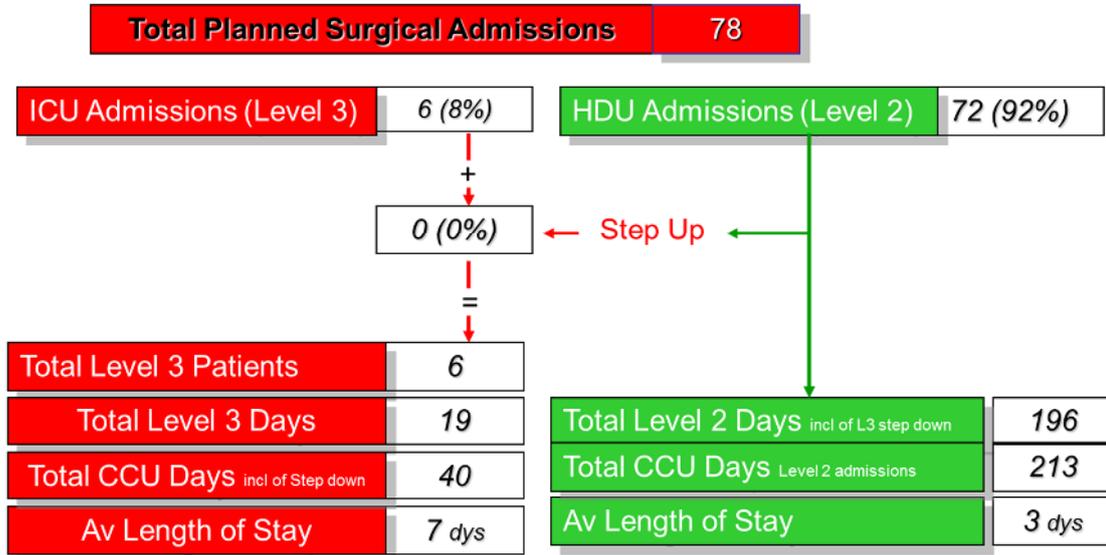
Financial activity associated with appendix 11. This demonstrates the split in activity verses finances.

**Appendix 13:**

MID STAFFORDSHIRE NHS FOUNDATION TRUST  
STAFFORD HOSPITAL

1 Year

**CRITICAL CARE UNIT**  
**April 2012 – March 2013**



Similar data to appendix 9 & 11; however this is planned surgical activity not medical activity.

## Appendix 14:

### Planned Surgical Admissions to CCU

01/04/2012 – 31/03/2013

HRG	Definition	Pts	L3/2 dys	Tariff	Total Value
XC07Z	0 X ORGANS	50	105	£254.53	£26,725.65
XC06Z	1 X ORGAN	24	75	£844.30	£63,322.50
XC05Z	2 X ORGANS	3	21	£1,135.05	£23,836.05
XC04Z	3 X ORGANS	0	0	£1,365.79	£0.00
XC03Z	4 X ORGANS	1	17	£1,534.44	£26,085.48
XC02Z	5 X ORGANS	0	0	£1,743.45	£0.00
XC01Z	6 X ORGANS	0	0	£2,257.69	£0.00
UZ01Z	UNCLASSIFIED	0	0	£0.00	£0.00
		<b>Total</b>	<b>78</b>	<b>218</b>	<b>£139,969.68</b>
L1_L0	Days Lost		35		

4.8% of total income

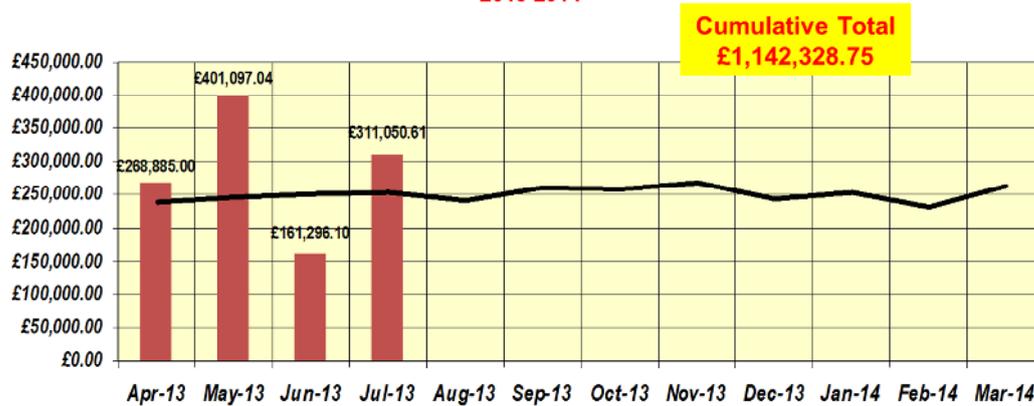
*Patients admitted to CCU on a pre arranged basis (>24hrs notice)  
direct from Theatres, post 'elective' surgery*

Financial activity associated with appendix 13. This demonstrates the split in activity verses finances.

## Appendix 15:

MID STAFFORDSHIRE NHS FOUNDATION TRUST  
STAFFORD HOSPITAL  
CRITICAL CARE UNIT

### CCU Total Activity Value 2013-2014



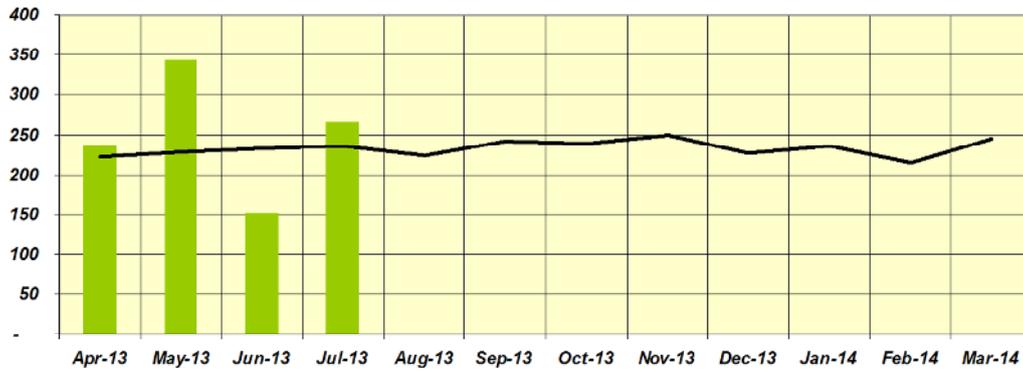
*CCU Activity value is derived by the allocation of HRG by Patient determined by the total number of organ systems supported throughout the CCU episode of care. The total number of Level 3 +Level 2 days are multiplied by the agreed HRG daily tariff.*

Current financial activity, end of financial month 4 (2013) ahead of expected financial trajectory.

## Appendix 16:

MID STAFFORDSHIRE NHS FOUNDATION TRUST  
STAFFORD HOSPITAL  
CRITICAL CARE UNIT

CCU Total Level 3/2 Days by Month  
2013 - 2014



End of financial month 4 (2013) patients by activity.

