

## **Critically Ill Annual Report**

### **ABMU Health Board**

**May 2015**

#### **1.0 Introduction**

We are pleased to present the ABMUHB Critically Ill Annual Report which represents the ongoing challenges we set out in our Delivery Plan for the Critically Ill. This report reflects upon the achievements we have made against the Delivery Plan within the 2014/15 year as well as setting out the opportunities and challenges – new and existing – that we continue to face as an organisation.

The ABMU Health Board produced its first delivery plan in 2013, setting out its priorities for 2013 – 16:

- Ensure mortality screening of all surgical patients forms a part of the pre-op assessment service that is being developed.
- Ensure all acute admissions to hospital are reviewed by a consultant within 12 hours with a clearly documented decision about DNACPR and escalation of care. Which are regularly audited.
- Promotion of the Sepsis screening tool amongst medical staff.
- Identification of Acute Kidney Injury champions to promote early assessment of those at risk of developing AKI.
- Critical Care facilities will be utilised for patients requiring intensive (Level 3) care and /or high dependency (Level 2) care only.
- Reduction in cancelled operations
- To improve patient flow to reduce delayed transfers of care.
- Ensure acute admissions through the emergency department have designated consultants, to ensure ongoing care and improve patient flows.
- All Critical Care patients are managed by dedicated critical care consultants and middle tier doctors
- Ensure alignment of critical care service provision with service reviews and changes
- Ensure adequate number of appropriate trained critical care staff available to transfer patients safely and effectively
- Ensure patients requiring level 1 care such as those who require non invasive ventilation or epidural management, are treated within appropriate environments outside the critical care units.
- To prioritise critical care discharges
- To continue to monitor and report to Board level committees the percentage of discharges achieved within 4 hours
- Monitor cancelled operations and any non clinical transfers due to lack of critical care beds
- To continue to monitor out of hours transfers from critical care environments.
- Ensure adequate provision for the unmet need where patients from outside the organisation are awaiting specialised interventions eg. Pancreatic, plastics, etc.

- To continue to invest in ICNARC and CCMDs data collection to promote benchmarking
- Increase critical care research to enhance recruitment and retention of staff
- Participation through National Institute for Social Care and Research.
- Ensure regular audit to assess progress against measures that indicate effectiveness
- To ensure adequate data clerk time to extend data collection fields and ensure Cardiac Unit ICNARC data is adequately supported.

Considerable progress has been made against these priorities, some examples of that progress are:

- Mortality screening of all surgical patients forms a part of the revised electronic pre-op assessment system to be implemented during the summer of 2015. A P-POSSUM calculator has been built in to the electronic system which calculates morbidity and mortality.
- Critical Care bed capacity in Morriston Hospital increased to 28 beds.
- Zero Level 1 admissions to Critical Care Beds.
- Reduction in cancelled operations where cause is unavailability of Critical Care beds following increased capacity to 28 beds in Morriston Hospital. However it should be noted that demand continues to increase and it is anticipated that this reduction is not likely to be sustained through 2015 without further increase to capacity. Further proposals have been developed in this respect which have been presented within Critical Care's IMTP.
- Appointment of two joint ITU/Emergency Department Consultant posts has improved collaborative working between ITU and ED.
- Inter-Hospital Transfer training is incorporated as a module within the Critical Care staff training programme. There is an identified cohort of staff who have undertaken the All Wales Transfer Course and a trained person is assigned to the rota of each shift in the event of a transfer being required.
- Ongoing monitoring of delayed discharges via daily escalation process involving managers and clinical leaders. Presentation of data by Critical Care to Executive level within the Health Board's Performance Scorecard.

Of course, there is a long way to go to deliver against our priorities in full. In particular the areas in which have not achieved the level of progress aimed for are:

- Reduced delayed transfers of care – patient flow across hospital sites has continued to cause constraints in the discharge of patients from critical care beds.
- In Morriston Hospital, all Critical Care patients are managed by dedicated critical care consultants and middle tier doctors, however a middle tier does not exist in POWH and this is an ongoing shortfall. Proposals are currently in hand to address the gap including interim arrangements for extended consultant cover on the Unit and increased staffing plans thereafter.

However, in delivering critical care services, there are a number of service improvements that we have implemented locally that have had a real impact on patient care. Examples of this include:

- Development of a Follow-Up Clinic for patients in Morriston Hospital
- Secured funding for a substantive Vascular Access Service in March 2015 following a successful pilot which identified improvements in patient treatment and timeliness of discharge.
- Joint Consultant Posts developed between Critical Care and the Emergency Department – these have been successful in improving links between areas and in the development of joint pathways for acute admissions.
- Ongoing investment in the Advanced Critical Care Practitioner (ACCP) role, current trainee's are expected to complete the qualification during 2015.

## Overview

There are four Critical Care Units in ABMU Health Board, General ITU, Cardiac ITU, Burns ITU at Morriston Hospital and General ITU at the Princess of Wales Hospital.

There is also a four bedded HDU at Singleton Hospital which is able to admit level 2 patients. This unit also occasionally admits Level 3 patients pending transfer to Morriston ITU. Neath Port Talbot Hospital does not have HDU or ITU facilities. The established beds and physical bed capacity is show in Figure 1 beneath.

Figure 1

### ABMU Health Board – Critical Care Beds

Hospital	Established Level 2	Beds ITU	Total	Physical Capacity
Morriston General ITU	-	28	28	28
Morriston Cardiac ITU	-	8	8	8
Morriston Burns ITU	-	3	3	10
POWH General ITU	-	8	8	9
Singleton Level 2 unit	4	-	4	4
<b>Total</b>	4	47	51	59

### Singleton Hospital

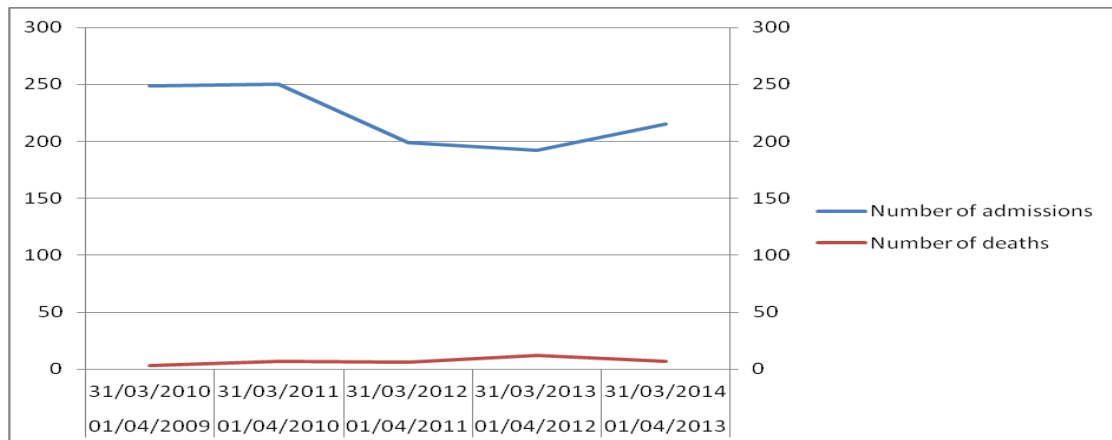
Changes to the medical management of the unit in Singleton Hospital have been discussed and agreed in 2014/15 to become fully effective in October 2015. The Unit is to be renamed from a HDU to “Enhanced Medical Unit”, managed by medical teams outside of Critical Care. The revised arrangements for the Unit make it suitable for the management of Level 1 patients and a specific set of Level 2 patients only:

1. Basic respiratory
  - a. More than 50% inspired oxygen
  - b. Frequent physiotherapy to remove secretions
  - c. Non invasive ventilation/CPAP
2. Basic cardiac. All of these criteria
3. Advanced cardiac
  - a. Multiple intravenous vasoactive and/or rhythm controlling drugs where these are required for acute general medical illness (e.g. a patient with sepsis and coincident AF requiring amiodarone and an inotrope) and only under the direction of the Critical Care Consultant. Patients with a primary cardiac diagnosis leading to the need for advanced cardiac care will be managed in the CCU in Morriston Hospital.
4. Renal/Neurological/Dermatological. None of these criteria

## **The Burns Service- Morriston Hospital Swansea**

### **Activity**

**To year ending 31.3.14**



Please note, the small increase in mortality over the 2012-13 period also coincides with an increase in average Baux and Belgium scores (measures of injury severity).

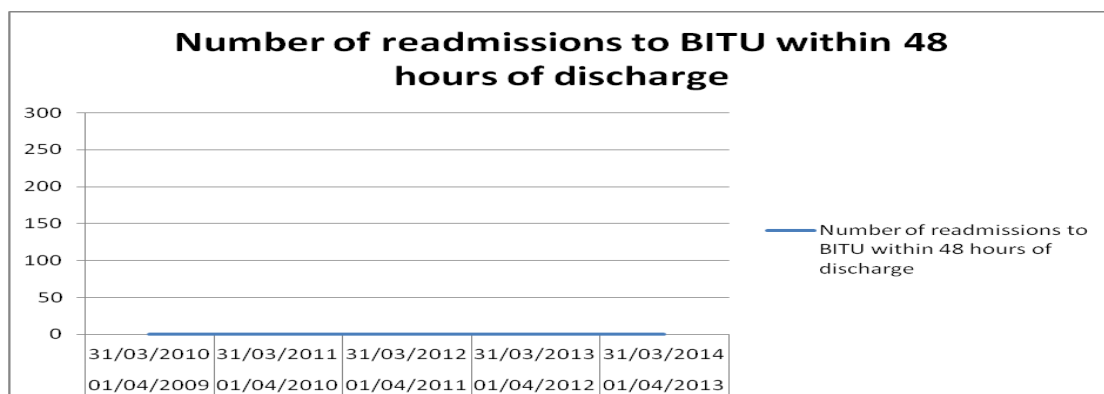
### **Delayed transfers of care**

Auditing of DTOC has been commenced and has now been in place since September 2014. Annual figures therefore not yet available (for inclusion in next update). However, preliminary results suggest that there is only a problem with DTOC to the adult ward. This was initially due to lack of cubicle space for patients with multi resistant infections, but more recently due to utilisation of beds on Powys ward by non burned patients. No recorded DTOC to the paediatric ward.

### **Premature discharges**

Defined by unplanned readmissions within 48 hours of discharge from burns ITU

To year ending 31.3.14:



## **Summary of the priorities to 2016 – Burns Specific**

### ***Delivering appropriate effective ward based care - The right patient***

The priorities are:

- Ensure all acute admissions to hospital are reviewed by a consultant within 12 hours. We are currently compliant with this for all level 3 patients, but the maximum time for level 2 and below remains at 14 hours.
- Burns ITU is a multidisciplinary service. We consider it essential that level 3 patients are reviewed by both burn surgeon and burn intensivist/anaesthetist within 12 hours of admission.
  - We are currently compliant with this and will continue to audit.
- Continue to audit documentation of DNACPR and treatment limitation plans.

### ***Timely admission to burns ITU - The right patient receiving the right care at the right time***

The priorities are:

- Utilise Burns ITU facilities for patients requiring burns critical care or burns high dependency care only.
- Burn injured patients are relatively stable in the first few hours following injury and therefore the earlier the transfer to definitive care takes place, the better it is for the patient.
  - The SWUK burns ODN considers retrieval of burn injured patients by a burns retrieval team unnecessary and potentially detrimental due to delays in transfer.

### ***Effective burns critical care provision and utilisation -The right care***

The priorities are:

- To ensure that critically injured burns patients continue to be managed by dedicated burns surgeons and burns anaesthesia/intensive care specialists.
- At present the anaesthetists (both consultants and middle grades) also have responsibility for emergency plastic surgery out of hours. We must ensure that the burns service always takes priority.
- Access to all members of the Burns MDT at the appropriate times in the patient pathway.
- Improved access to Speech and Language Therapy Services required.
- Improved access to specialist pharmacy services required.
- Improved access to training for nursing staff, to attain specialist qualifications in critical care nursing.
- Improved access to NVQ training for Healthcare Support Workers.

***Timely discharge from burns ITU - The right patient receiving the right care at the right time***

The priorities are:

- To continue to audit DTOC of patients from Tempest burns ITU to Powys ward (adult low dependency burn ward).
- There have been no DTOC to the Dyfed ward (paediatric low dependency burn ward) during the period of audit.
- Discharge co-ordinator required every day.

***Improving information and research***

The priorities are:

- To continue to participate in the national burns injury database (iBid)
- To participate in ICNARC: business case required and in progress.

## **Cardiothoracic Services – Cardiac ITU – Morriston Hospital**

Morriston Hospital provides planned and unplanned Cardiothoracic Surgical Services to a population of approximately 900,000 people across Mid and West Wales. The majority of patients are from the ABM and Hywel Dda Health Board areas with some from Powys, RCT, Vale of Glamorgan and South Gwynedd, dictated by local cardiology service patterns.

The service is commissioned to provide 728 major cardiac procedures and 312 thoracic procedures annually. The service has not been able to meet the demand for cardiac surgery per annum for a number of years resulting in increased waiting times for surgery.

A significant challenge of long waiting times is the increased rate of waiting list mortality for cardiac cases. Whilst outcomes for those receiving surgery

Following the Royal College of Surgeons review of Cardiac Surgery in Wales during 2012/13 the Health Board commissioned its own external review in 2013.

### **External Review**

During 2013 the Health Board commissioned an external review of Cardiac Surgery at Morriston chaired by an ex NHS Chief Executive, Stephen Ramsden and conducted by a panel comprising of a cardiac surgeon, cardiac intensivist, cardiologist, perfusionist, senior nurse and patient representative.

The Review published its report in September 2013. The review was critical of behaviours, relationships, workforce levels (especially intensivist/anaesthetic and senior critical care nursing) and the physical environment particularly critical care. The external Review made 36 recommendations for improvement which the Health Board accepted and established revised leadership arrangements from December 2013 to operationally manage the service and deliver the transformational agenda outlined in the Action Plan.

The External Review team returned to assess progress against the action plan in September 2014 and published its finding in November 2014. It felt that 17 actions had been addressed, 16 partially addressed and 2 not addressed. In addition, 10 further actions aimed at efficiency and quality were outlined.

The Review noted that significant progress had been made with regard to attitudes, values and behaviours with tangible steps forward with regard to end of life care and decision making, escalation and de-escalation protocols, theatre briefing and checklisting and throughput and efficiency.

The unaddressed actions related to the expansion of the critical care unit to include the collocation of CITU and HDU and the associated workforce investments required to deliver the contract were not yet in place.



## Activity and Waiting Times Background

The below table indicates the number of cardiac cases completed per annum in preceding years and the year to date

	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Notes	Baseline
2011/2012	188	150	216	219	Inc 31 prem £	820
2012/2013	172	196	155	129	Inc 55 prem £	728
2013/2014	162	142	138	147		728
2014/2015	139	188	179			650
<b>Average</b>	<b>165</b>	<b>169</b>	<b>172</b>	<b>165</b>		
Average last 6 quarters:		156				

Whilst the thoracic contract has been delivered, the cardiac contract has not consistently been delivered. The resulting in the use of premium rate activity to aim to manage waiting times pressures has not resolved demand and this resulted in 98 patients waiting longer than 36 weeks for surgery at the start of 2014/15.

The significant factor effecting throughput was the availability of critical care beds to support theatre activity.

## 2014/15 Plans and Achievements

### Re-Review

A significant focus of the Directorate has been to develop and implement the Organisational Development plan for the service alongside service deliver to address shortcomings highlighted in the first External Review.

### Capital Business Case – Critical Care

A business case for capital investment has been developed for consideration by the Welsh Government to upgrade and enhance critical care services for cardiac.

Whilst this included options to collocate CITU and HDU as per the external review recommendations limitations of buildability and availability of capital meant that the preferred option as to expand the CITU by 4 beds and use these beds flexibly as level 3 and 2 beds.

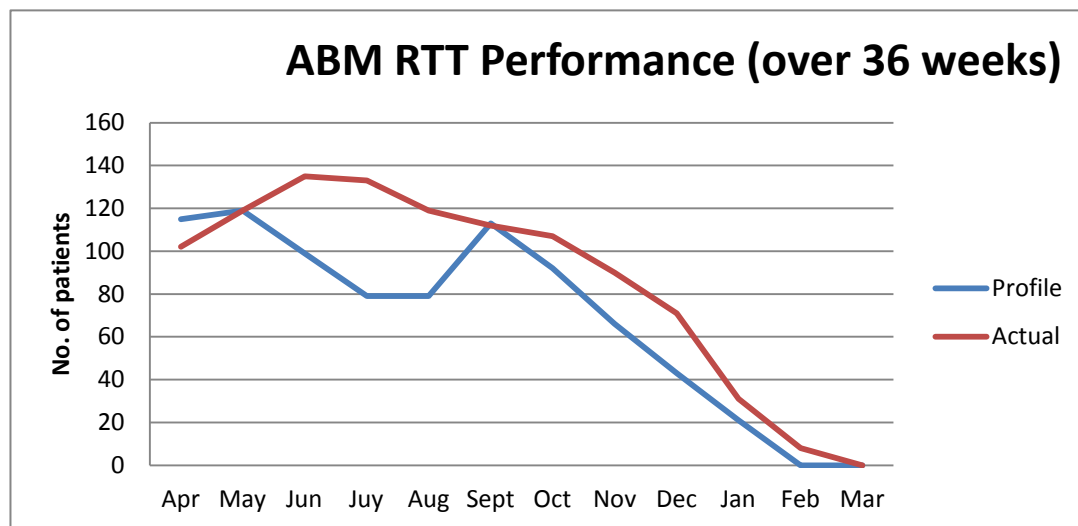
The Welsh Government Infrastructure Investment Board (IIB) supported the case in March 2015 and formal approval has now been received from the Minister for Health and Social Services.

## Activity and Waiting Times

Significant progress has been made within the cardiac surgery service in terms of activity and waiting times reductions during 2014/15.

Against an agreed target of 650 cases the service will perform 681 major cardiac operations and 27 TAVI procedures.

Waiting times performance is illustrated in the following chart whilst not on profile has achieved required reductions over the period.



## Outsourcing

In addition to the cases carried out in Morriston during 2014/15 an additional 78 cases were needed to meet recurrent demand and up to an additional 100 cases to reduce waiting times were required.

The commissioners of the service WHSSC commissioned Royal Brompton Hospital in London to offer surgery to long waiting patients from the ABM catchment area. Significant efforts and arrangements have been established to support patients and their families who have accepted outsourcing to include names local nurse coordinators in Carmarthen (Hywel Dda) and Bridgend (ABM), transport and accommodation and local clinics by the Brompton surgical team pre and post operatively.

Outsourcing ceased in March 2015 with lower numbers treated than anticipated due to the over performance of Morriston during the year above 650 cases.

## **Summary of the priorities to 2016 – Cardiothoracic Service Specific**

### **2<sup>nd</sup> Action Plan**

To maintain and develop resolution to the items in the action plan that require service improvement or operational change approaches outside the capital scheme and required workforce investment.

#### **TAVI service development**

The unit has provided TAVI (Transcatheter aortic valve implantation) procedures for 3 years. TAVI is not fully commissioned in Wales however, it is an innovative less invasive procedure resulting in surgery being an option for patients whom would not be suitable for conventional surgery and faster recovery times and shorter ITU stays post operatively.

The lack of formal commissioning has limited service development. WHSSC have now commissioned the service fully and therefore significant work is required to improve planning and coordination of lists, clinics and activity and waiting times.

#### **Capital Development**

Following formal approval of the BJC for the CITU expansion precontract processes will commence in May 2015 and start on site in September 2015.

The scheme is phased into four components:

1. enabling and ancillary accommodation
2. construction of 4 additional beds
3. revised supporting clinical accommodation
4. refurbishment of existing clinical accommodation

During phases 2-4 the unit will function on 6 beds, a reduction of 2 from at present. Options are being developed to mitigate against this impact. This disruption will take place for 6 months in total.

Alongside the capital development a workforce enhancement programme is planned and significant focus and momentum is required

#### **Activity and Waiting Times**

During 2015/16 the Health Board has committed to delivery 650 cardiac cases in Morriston. The additional 78 cases to meet the contract will be carried out by Cardiff and Vale Health Board in agreement with WHSSC.

These plans will have to ensure that waiting times are maintained at the current levels as a minimum.

#### **ICNARC**

In response to the external review an ICNARC clerk has been appointed along with the support to join the database. The cardiac service to date does not have replicable data capture of this nature and this is a significant step forward in the ability to understand and manage the service efficiency and effectiveness.

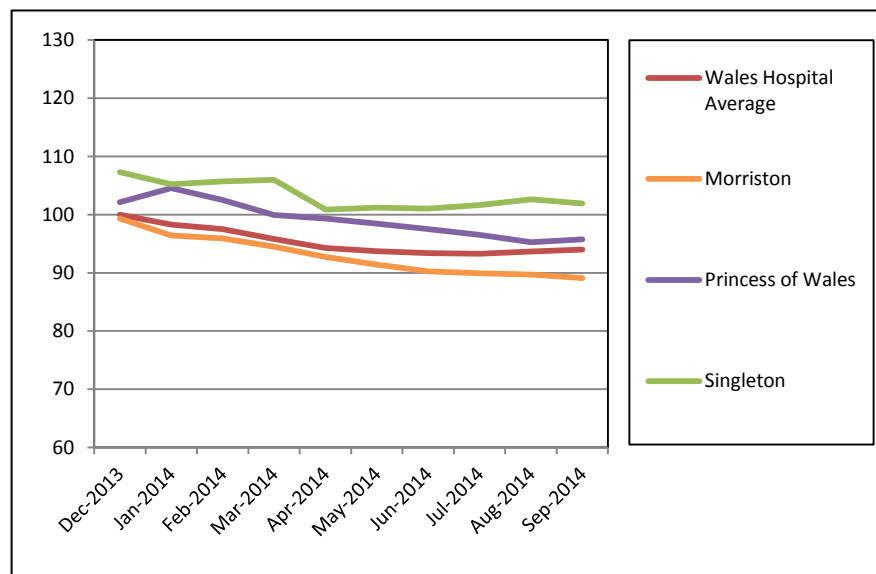
## 2.0 Hospital Mortality, General Critical Care Mortality and Delayed Transfer of Care in ABMU Health Board

We are using three outcome indicators to measure and track how well services for the critically ill are doing over time. These are:

- Hospital Mortality (risk adjusted mortality index)
- Critical Care Mortality
- Percentage Delayed Transfer of Care (from Critical Care)

### Outcome One – Hospital Mortality

*Graph 1: ABMU Health Board Mortality*

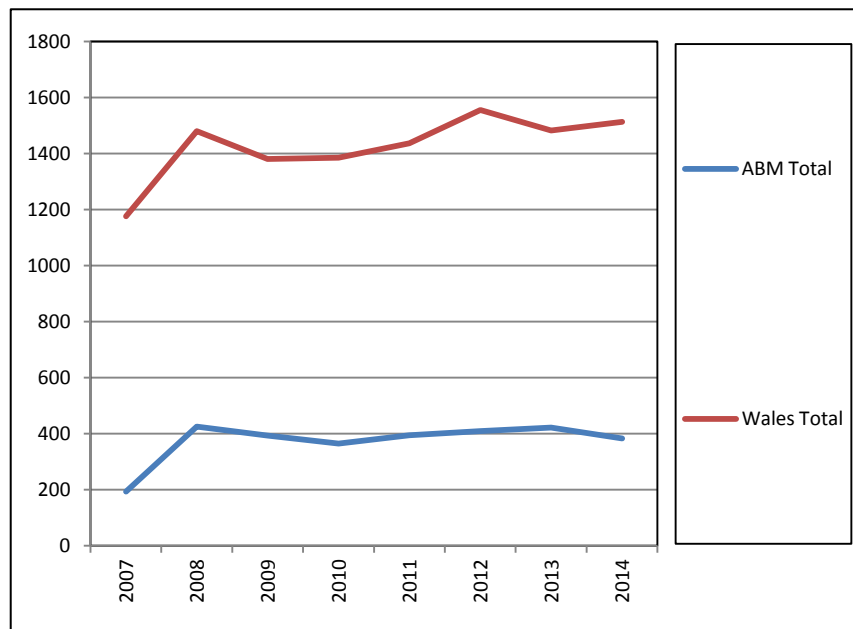


- The Health Board's Risk Adjusted Mortality Index (RAMI) for the 12 month period up to August 2014 was 99, lower than the Welsh mean and as expected.
- Crude mortality rate for February to January 2014 is 1.92%. the rate for December 2014 and January 2015 has been higher this winter than we have seen since the winter of 2010/11. Despite this the number of mortality reviews triggering a stage 2 review have not increased.
- Overall in hospital deaths have been reducing for sometime until December 2014 . There were 1038 deaths in the period December 14 to March 15 which is over 180 more deaths than the same time period for the last 2 years. The increase is in Emergency Medicine cases across all age bands.

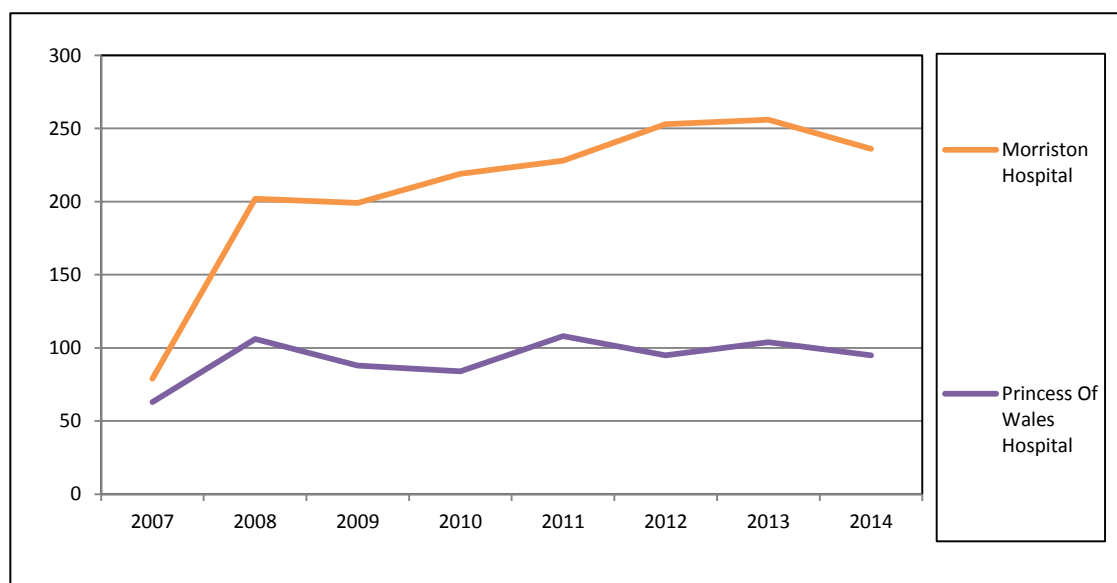
## Outcome Two – Critical Care Mortality (General)

Mortality rates within ABMU Health Board critical care units have remained fairly constant over the past 3 years. The Graphs (2 and 3) below reflect that relatively constant picture in terms of mortality.

*Graph 2: ABMU Health Board Critical Care Mortality*

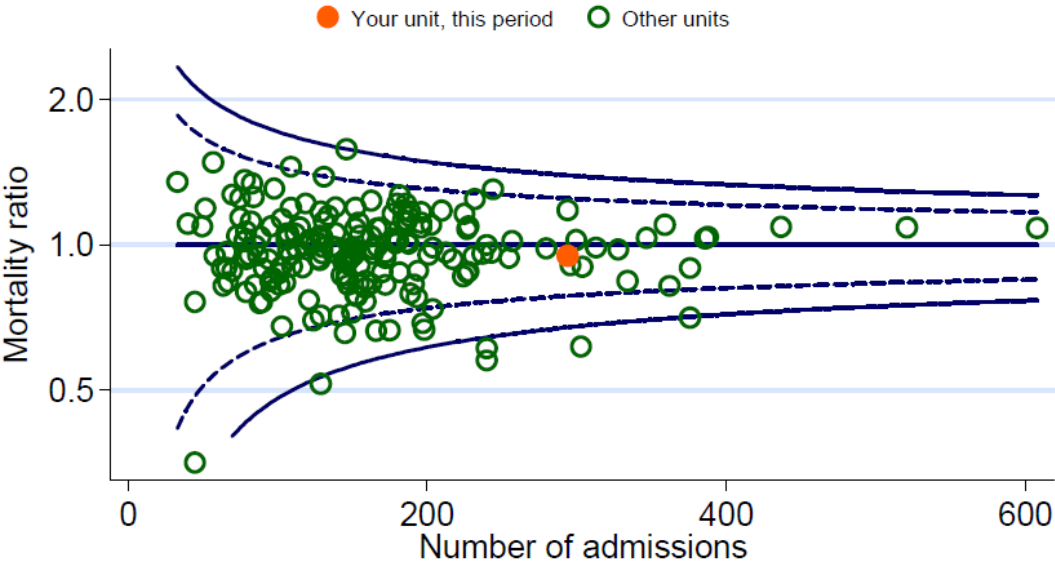


*Graph 3: Critical Care Mortality by Hospital – No. of patients died in Critical Care Units*

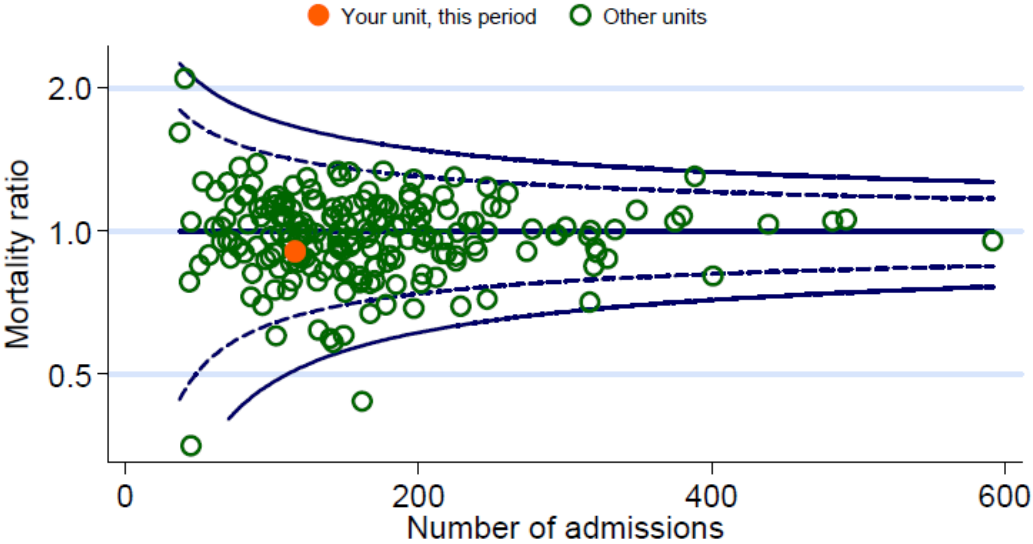


Although this mortality information is useful in a broad context, in-hospital SMR data and the following funnel plots provide a better measure of care although they may also be influenced by unmeasured events.

Morrison Hospital Mortality Funnel Plot:



Princess of Wales Hospital Mortality Funnel Plot:

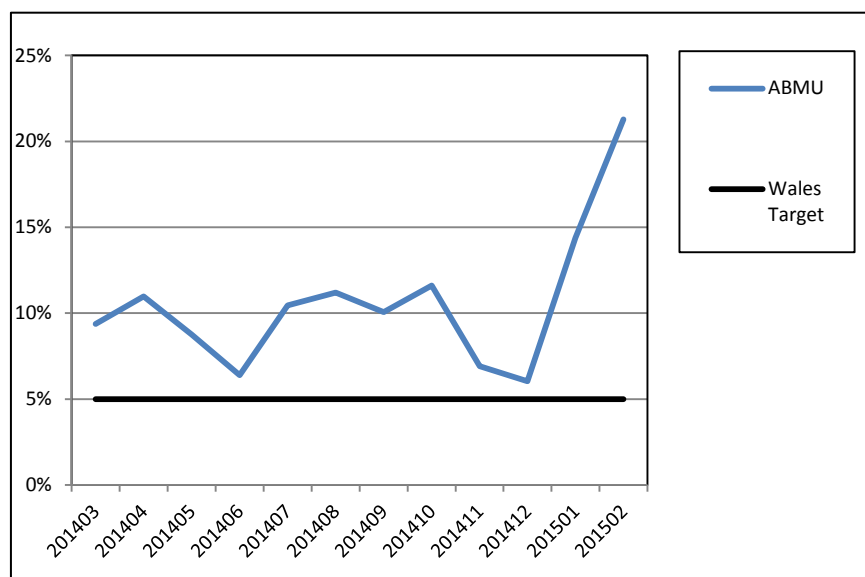


## Outcome Three – Percentage Delayed Transfer of Care

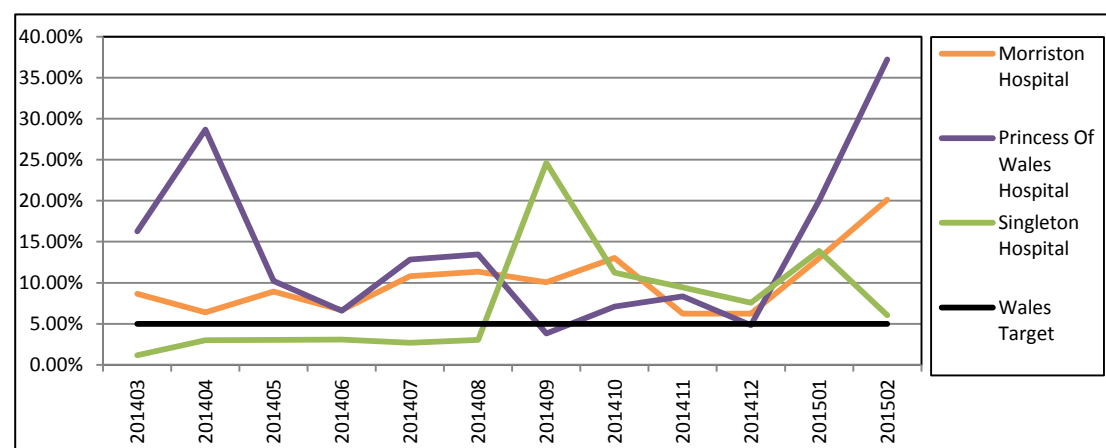
The Minister for Health and Social Services announced his intention on the 22<sup>nd</sup> July 2014 to develop a new measure aimed at reducing Delayed Transfers of Care (DTOC) from critical care given this critical and high cost resource remains under pressure. From October 2014, all Health Boards were challenged to deliver a 10% reduction in DTOC each quarter from critical care units, until the total per cent of hours lost per quarter does not exceed 5% of critical care bed occupancy.

The following graphs demonstrate the levels of DTOC within ABMUHB.

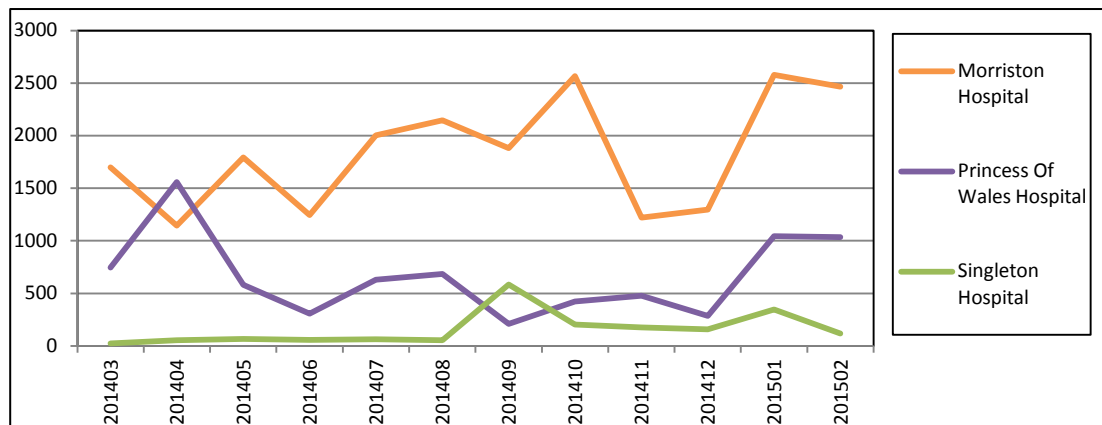
*Graph 4: ABMU Health Board % Delayed Transfer of Care from General Critical Care*



*Graph 5: % Delayed Transfer of Care from General Critical Care by Unit/Hospital*



Graph 6: Hours Lost to Delayed Transfer of Care from General Critical Care



Graphs 4, 5 and 6 above clearly demonstrate an increase in the volume of delayed discharges from our General Critical Care units, reflecting the high level of activity across the wider hospital and demand on bed capacity.

It is recognised that we are not achieving the target reduction set by the Minister for Health and Social Services. Every effort is applied by the General Critical Care teams to progress delayed discharges and to highlight their impact on other patients and finances. Part of our ongoing effort to manage DTOCs includes a daily escalation process involving Critical Care Consultants, Senior Nurses and Senior Managers to ensure delayed discharges from critical care units are prioritised appropriately. This process escalates DTOCs to hospital site management teams and Executives / On-Call staff to enable prioritisation.

Although the Health Board saw an initial reduction in the number of elective surgery cancellations due to unavailability of an ITU bed during the first half of 2014/15, this was not sustained through the year. This is largely due to increasing pressures affecting patient flow across the wider hospital which impacted on the ability to discharge patients in a timely way from ITU areas. This correlation between patient flow, Critical Care DTOCs and General Critical Care capacity saw cancellations to elective surgery increase through the last 6 months of the year.



## 4.0 Our Approach to services for the Critically Ill

“Together for Health – a delivery plan for the critically ill” was published by the Welsh Government in 2013 and provides a framework for action by Local Health Boards and NHS Trusts working together with their partners. It sets out the Welsh Government’s expectations of the NHS in Wales in delivering high quality critical care ensuring the right patient has the right care at the right time. It therefore focuses on maximising efficiency and effectiveness, tackling variation in access and reducing inequalities in service provision across five themes.

The Delivery Plan sets out action to improve outcomes in the following key areas between now and 2016:

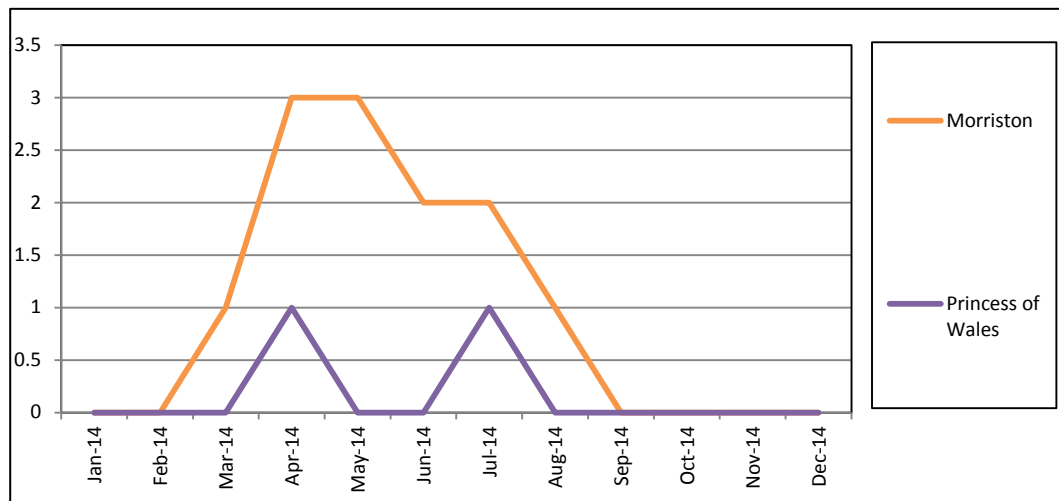
- *Delivering appropriate, effective ward based care*
- *Timely admission to Critical Care*
- *Effective Critical care provision and utilisation*
- *Timely discharge from Critical Care*
- *Improving information and research*

In 2014, we published our Delivery Plan for the Critically Ill. The Plan is designed to enable us to deliver on our responsibility in delivering high quality critical care ensuring the right patient has the right care at the right time. It therefore focuses on maximising efficiency and effectiveness, tackling variation in access and reducing inequalities in service provision. The following NHS assurance measures will be used to ensure that this plan is delivered and effective outcomes achieved.

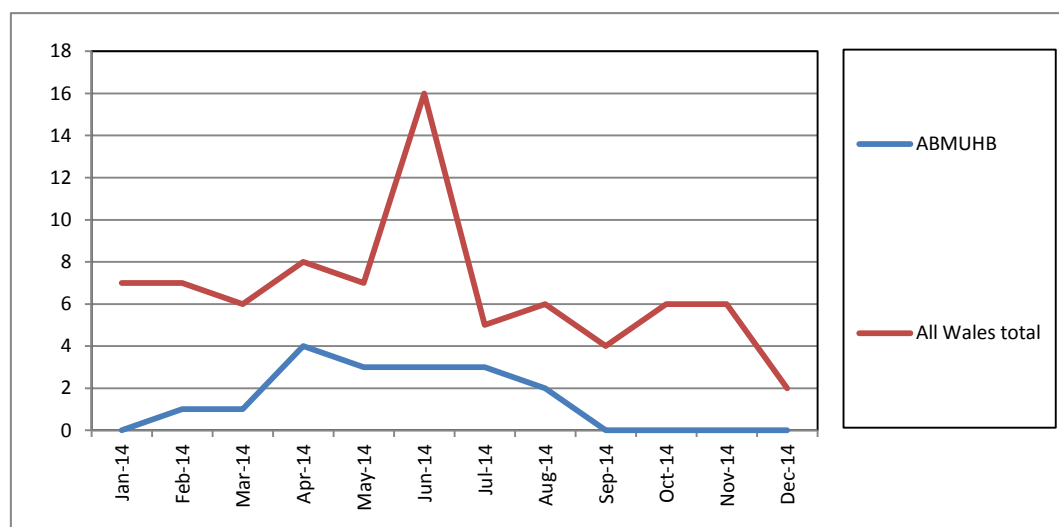
## 5.0 Delivering appropriate, effective ward based care

Patients, for whom critical care is appropriate, need to be identified in a timely manner so they have the best chance of a good outcome. We have one assurance measures in this area – the percentage of readmissions to General Critical Care Units within 48 hours of discharge.

*Graph 7 - % readmissions within 48 hours to General Critical Care:*



*Graph 8 – All Wales / ABMUHB % readmissions within 48 hours to General Critical Care:*



As Graphs 7 and 8 above suggest, the level of readmission to General Critical Care units in both Morriston and at the Princess of Wales Hospital is very low with a combined number between both sites in 2014 of just 14 readmissions. In part, the low rate of readmission is maintained through the Outreach Teams at these sites, who provide post-ITU support to wards caring for recently discharged patients.

## 6.0 Timely admissions to General Critical Care

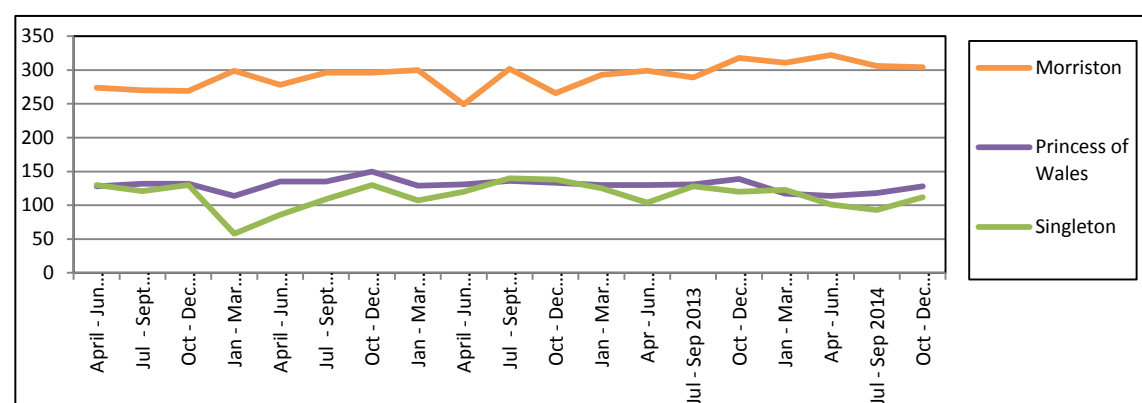
Patients, for whom critical care is appropriate, are admitted, to an appropriately staffed critical care unit in a timely manner so they have the best chance of a good outcome.

We have two assurance measures in this area. They are:

1. Non clinical transfers due to lack of bed or equipment –  
The Health Board have seen an ongoing pattern of increasing demand for its services, including within General Critical Care areas. With a particular increase in the number of days the service is having to overspill into theatre recovery areas. We utilise our theatre recovery areas in the event of our units being full and therefore have no non-clinical transfers which arise due to lack of beds or equipment.
2. General Critical Care activity – number of admissions to a critical care unit -

The number of admissions to General Critical Care in ABMUHB in April -December 2014 made up 21.4% of admissions to General Critical Care Units across Wales. This is a reduction in comparison with the 2013/14 period which saw ABMUHB admissions at 25% of the All Wales number of admissions.

*Graph 9: Number of admissions to General Critical Care Units by Hospital*



Our activity information in respect of Morrison Hospital as shown in Figure 2 below demonstrates that whilst our number of admissions increased only slightly, our use of recovery as an environment to accommodate patients has significantly increased.

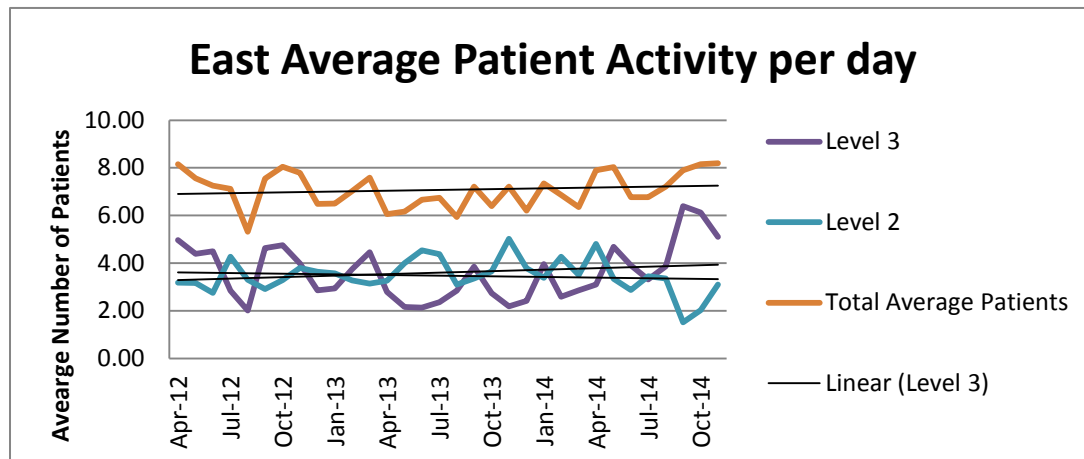
*Figure 2. Morrison Activity Data Comparison*

01/04/13-31/03/14	
Patients Admitted	1217
Ave LOS	8.1 days
Actual Bed Days Used Recovery	178
No. Of days ITU used Recovery	87
Cancelled electives due to no ITU Bed	43

01/04/14-31/03/15	
Patients Admitted	1236
Ave LOS	8.4 days
Actual Bed Days Used Recovery	377
No. Of days ITU used Recovery	145
Cancelled electives due to no ITU Bed	42

At the Princess of Wales Hospital, activity changes during 2014 have seen an increase in demand with more patients being received overall as well as an increase in patient dependency, with increased numbers of Level 3 patients and a reduction in Level 2, as demonstrated by the below graph (10).

*Graph 10 – Princess of Wales ITU patients by Level*



This increase in demand and bed pressures within the hospital in 2014 resulted in increased delayed transfers of care and a number of discharges of delayed patients that took place outside of recommended transfer times.

Discussion has previously been held over the feasibility of opening Bed 9 at POWH. As further demand is anticipated in line with the trend across the preceding years, Bed 9 usage will increase and therefore a solution to maintaining its usage is under consideration.

## 7.0 Effective critical care provision and utilisation

Critical care patients should receive care in environments with staff and resources appropriate to their level of care, compliant with the standards in the strategic vision.

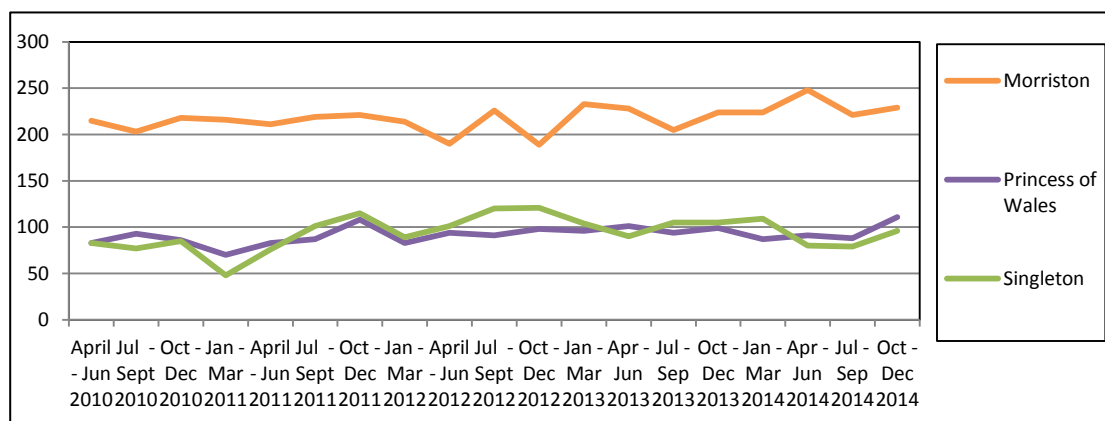
Patients in critical care should receive evidence based care in the form of high compliance with care bundles, national guidance and care pathways or other forms of standardised, high quality care. Patients should receive the right level of care in the right environment.

We have three assurance measures in this area:

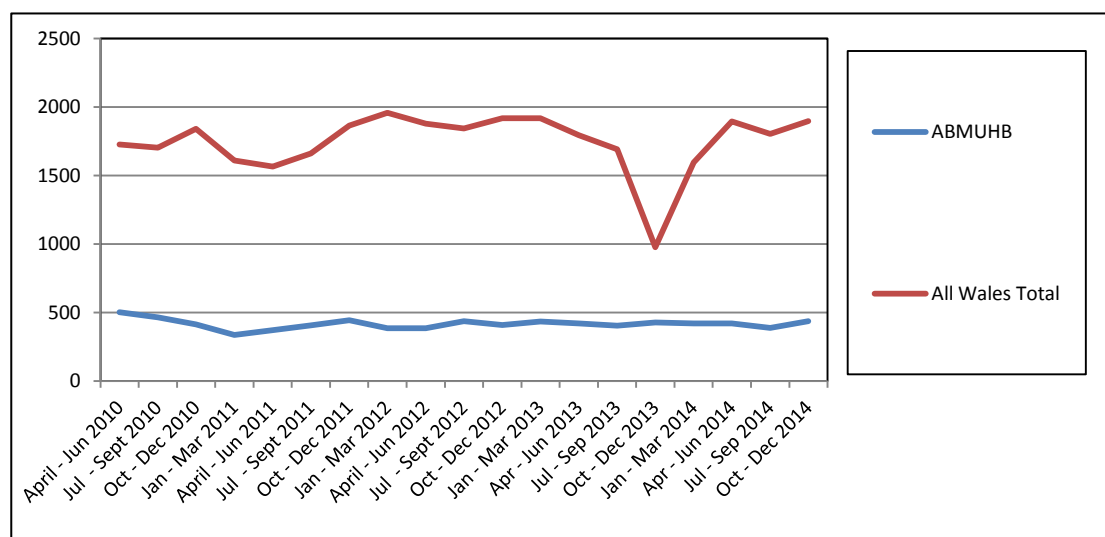
- Unplanned admissions to General Critical Care

Responding to unplanned admissions reflects our emergency demand. Their unpredictability presents a continual challenge in accommodating even the best-planned elective work as well as in planning needs around staffing and other resources.

*Graph 11. Unplanned admissions to ABMUHB General Critical Care Units (inc. Singleton)*



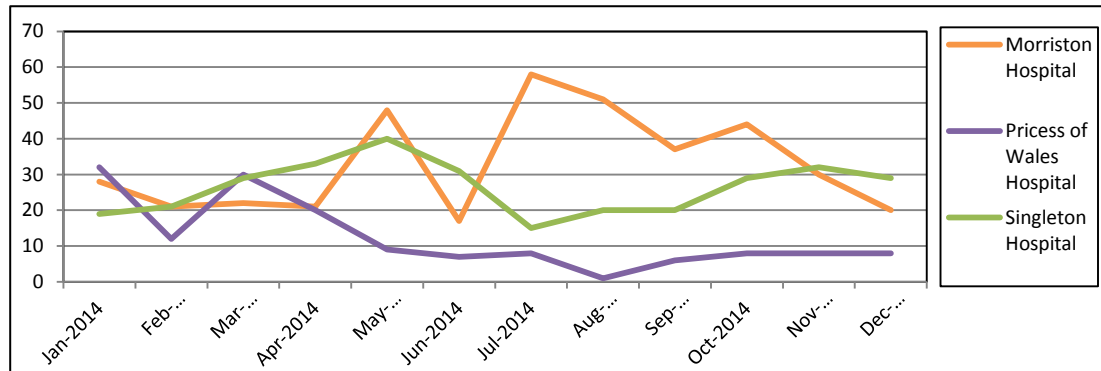
*Graph 12. Unplanned admissions to General Critical Care – ABMUHB & All Wales*



- Total General Critical Care minimum data set-recorded admissions for level 1 care

Graph 13, beneath, shows that the number of days which patients are within our General Critical Care units when they only require Level 1 care continue to reduce.

*Graph 13. CCDMS Admissions for L1 care*

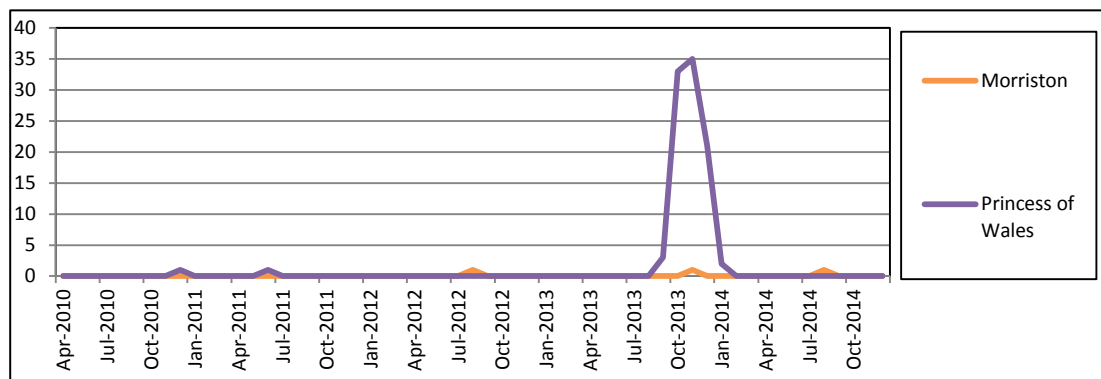


- Number of General Critical Care minimum data set admissions for level 1 care "episodes where L2+L3=0"

Graph 14, beneath, demonstrates that the Health Board continues admissions for appropriate patients requiring Level 2 or Level 3 care within its General Critical Care units.

Note – The peak shown at in Graph 13 in respect of the Princess of Wales Hospital is erroneous and due to data entry failures between August 2013 and February 2014.

*Graph 14. Number of General Critical Care Minimum Data Set (CCMDS) admissions for Level 1 care "episodes where L2+L3=0" by Unit/Hospital*



The Health Board continues to maintain full compliance with NICE CG50 and ongoing actions relate to continual audit to ensure this continues. We have also maintained good compliance in the aspects of NICE CG83 which relate to General Critical Care and in that respect our follow-up clinic continues to provide patients with the appropriate opportunities to discuss elements of their critical care treatment and progress in recovery.

## 8.0 Timely discharge from critical care

Patients should be discharged from critical care in a timely manner so they have the best chance of early rehabilitation. Patients requiring critical care will have improved access due to improved flow through the units.

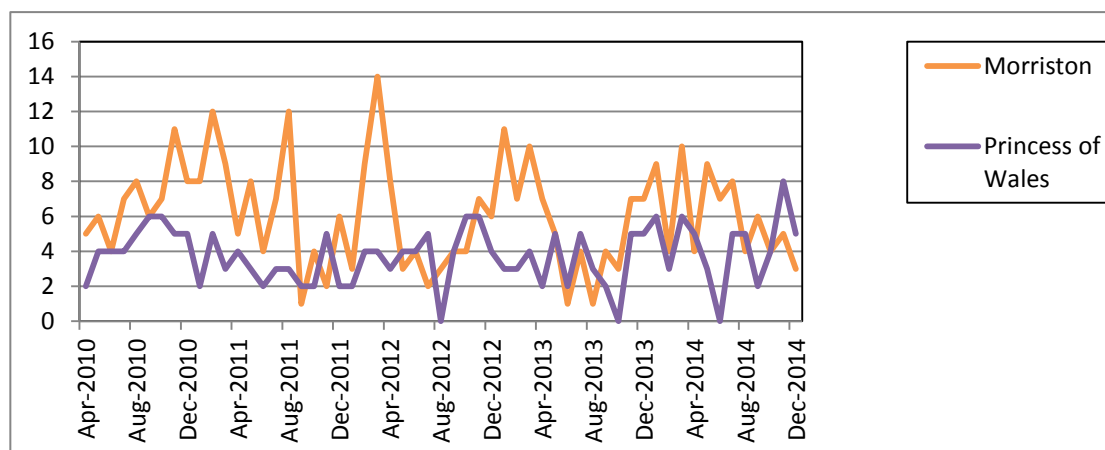
We have three assurance measures in this area. They are:

- Number and % of out of hours discharges

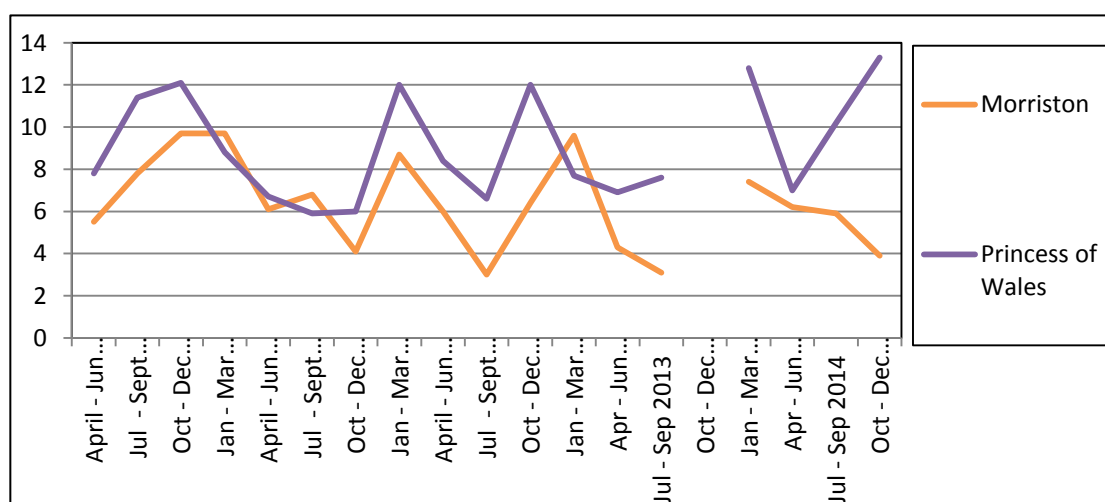
Graphs 15 and 16 below demonstrate the discharges that take place in the out of hours period – between 22:00 and 06:59. It is recognised that such transfers are far from ideal and are avoided unless the patient's condition deteriorates, necessitating a transfer out of hours, or the operational demands of the organisation make such a transfer unavoidable.

Although a reduction in the number and percentage of out of hours transfers is evident at Morriston Hospital, the position at the Princess of Wales Hospital in 2014/15 demonstrates the difficulties of wider hospital pressures seen during the year which is prominent in percentage terms due to the far smaller number of beds.

*Graph 15. Number of Out of Hours Discharges from General Critical Care - Episodes between 22:00 and 06:59*



*Graph 16. % Out of Hours discharges from General Critical Care*



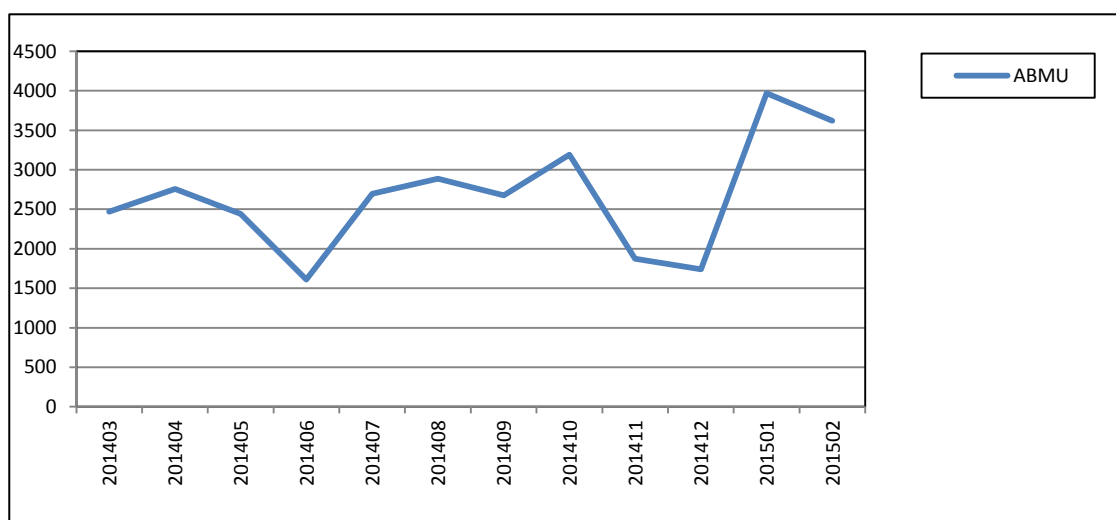
- Hours lost to delayed transfer of care from General Critical Care

As explained earlier on in this report, the Minister for Health and Social Services introduced a new measure challenging Health Boards to deliver a 10% reduction in DTOC each quarter, until the total per cent of hours lost per quarter does not exceed 5% of critical care bed occupancy.

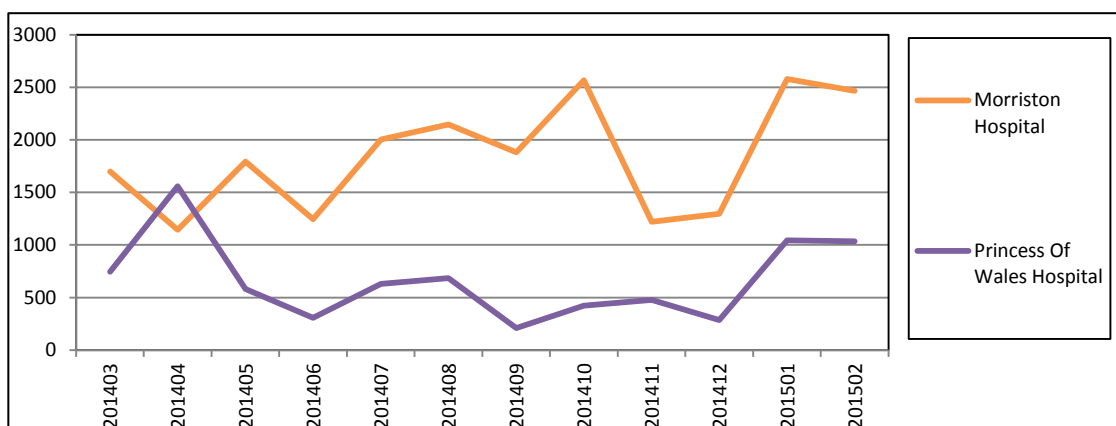
Within ABMUHB, this reduction target has not been met. Both graphs (17 and 18) below demonstrate an increase in the number of hours lost due to delayed transfers of care from our General Critical Care Units, in particular these peaked over the winter season.

Escalation processes, as described earlier, are in place to prioritise the discharge of patients from our units. In addition, information on lost hours within critical care is included within the monthly performance meeting with key Executive Directors.

*Graph 17. ABMUHB Total hours lost to delayed transfers of care – Morriston/POWH & lower-level unit in Singleton*



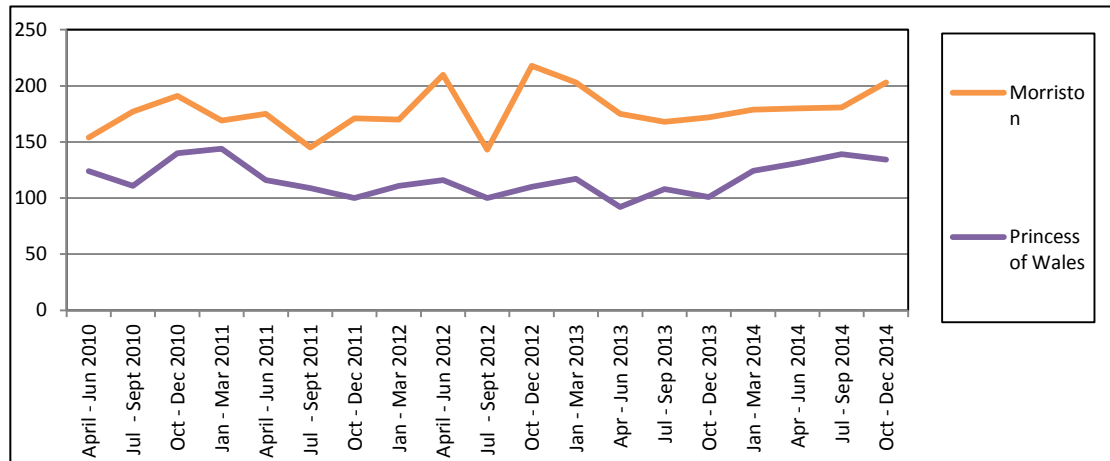
*Graph 18. General Critical Care Units only – Morriston & POWH hours lost to delayed transfers of care*



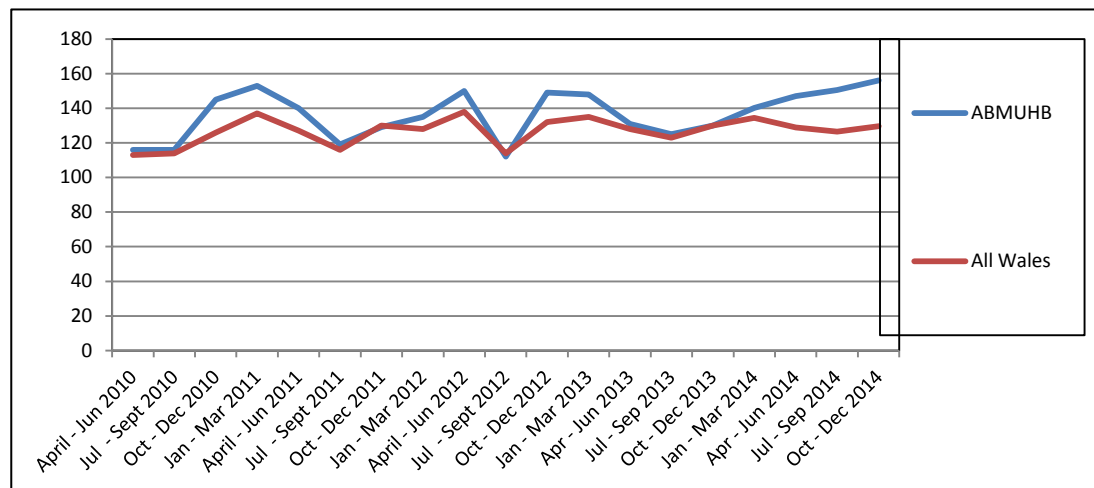


- Average length of stay  
Lengths of stay in ITU have slightly increased during 2014/15 which is in line with a small increase noted during the year in the number of long stay patients at both Morriston and Princess of Wales Hospitals.

Graph 19. Average length of stay in General Critical Care Unit (hours)



Graph 20. Average length of stay in General Critical Care Unit (hours) – comparison ABMUHB / All Wales average



## **9.0 Improving information and research**

Information systems should support high quality care and performance, clinical audit and review to drive service improvement. Critical care research in Wales should be supported as a means to improve clinical standards as well as increasing the profile and role of critical care.

Participation in National Clinical Audits relating to critical care is a mandatory requirement which Local Health Boards must ensure is achieved. We participate fully in such audits to support the effective monitoring of critical care and share our outcome data to allow effective benchmarking through our ongoing support and investment in ICNARC and CCMDs data collection.

The Swansea Critical Care Research Group has continued to see successes in 2014/15. Initially set up in May 2013, over the last year we have developed close links with the NISCHR Clinical Research Centre and the South West Wales Research Network. The NISCHR CRC team have supported us in a number of our research studies this year and are looking to continue this work in the future.

We have also developed close links with Swansea University, collaborating on a number of new studies with the College of Medicine, School of Health Sciences and the Department of Psychology.

Following on from the success of previous years, a total of five abstracts were accepted for the International Symposium on Critical Care and Emergency Medicine in Brussels in March 2014. All abstracts were presented at the conference and have been subsequently published in the international journal Critical Care.

We have also successfully participated in a number of international, multi-centred studies which will establish Swansea on the International Critical Care Research map. This is our best year yet, with completion of the following studies:

- Intensive Care Foundation / James Lind Appliance Research Priority study (Round 2). The aim of this UK study was to establish both clinicians and patients / carers' opinions on future priorities in Critical Care research.
- Medical Emergency Team: Hospital Outcomes after a Day (METHOD) study. The aim of the International METHOD study was to describe the clinical outcomes achieved by Rapid Response Systems, Medical Emergency Teams and Critical Care Outreach Services.
- The LUNGSAFE study. This was an international study aimed at investigating the incidence and current management of Acute Respiratory Distress Syndrome in Critical Care Units across the world.
- Stress Ulcer Protection (SUP) study. This international study was completed to investigate the current incidence and management of stress ulcers in Critical Care Units in Europe.
- The Welsh Intensive Care Society Ventilator Associated Pneumonia surveillance study.

- CEPOD Sepsis study. This UK study was designed to identify and explore avoidable and remediable factors in the process of care for patients with known or suspected sepsis.

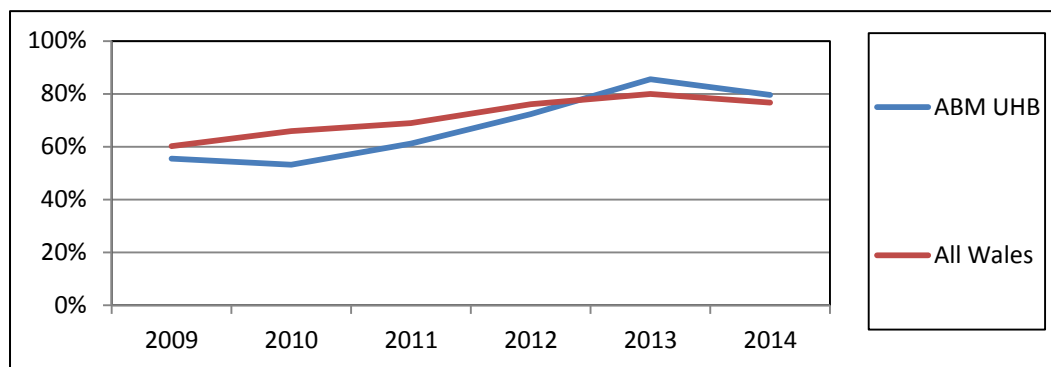
Our Critical Care Follow-up Clinic has also led to a number of new studies, one of which has found that sepsis is a risk factor for depression in survivors of Critical Illness. Our findings were presented at the Welsh Intensive Care Society summer meeting in June 2014.

We also undertook a study investigating the effect of a six week supervised rehabilitation programme study for survivors of Critical Illness. This was a randomised controlled trial in which we were investigating whether a six week supervised rehabilitation programme can improve cardiovascular fitness, balance, strength and psychological outcomes in survivors of critical illness.

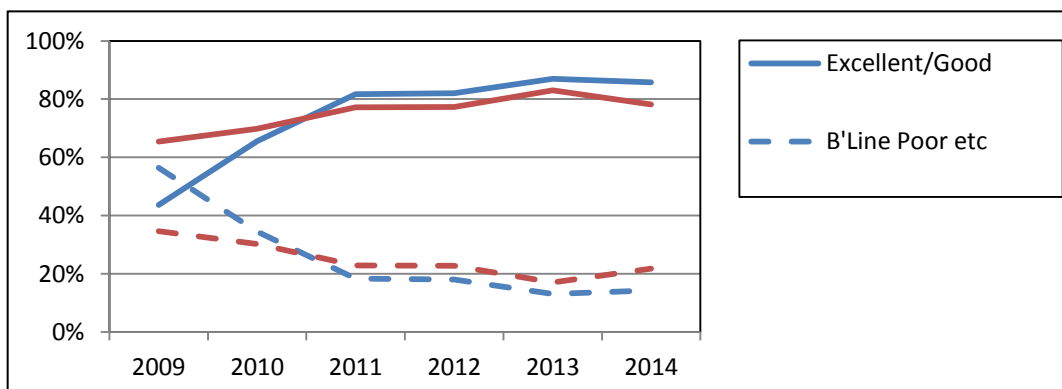
Our Research Group Lead published a number of papers in leading international emergency medicine and critical care journals. Including a study investigating the effects of pre-injury anti-platelet use in chest trauma outcomes, a study looking at the surprising protective effect of smoking on outcomes in chest trauma patients and a large multi-centre study in which a risk score was developed to assist in the management of chest trauma patients.

Further, we continue to submit transfer forms routinely for quality review. The below graphs demonstrate our ongoing commitment to high quality transfers.

*Graph 21. % of Transfer forms received – ABMUHB / All Wales comparison*



*Graph 22. Transfer Assessment grades – graded Excellent/Good or Poor*



## **10.0 Patient and carer feedback**

### Follow Up Clinic

The General Critical Care Follow-up Clinic is the only Consultant-led multi-disciplinary clinic for survivors of critical illness in Wales. The NICE<sup>83</sup> Rehabilitation Guidelines and the Department of Health in their review of Critical Care Services recommend that each Critical Care Unit should run a Follow-up Clinic for ICU survivors. Our clinic in Morriston Hospital now runs on a weekly basis and has been running successfully for over 5 years.

From our experience and previous research, survivors of critical care have multiple on-going problems which are difficult to manage and often not addressed by current systems of care. The aim of the clinic is to holistically treat these patients and return them to an acceptable quality of life.

Data collection based on patient questionnaire results have shown that 20% suffer with post-traumatic stress syndrome as a result of their hospital admission and critical illness, 40% suffer with either depression or anxiety and 50% of follow up patients have on-going pain and mobility problems which they described as moderate to severe.

Some of the positive actions taken in this clinic include:

- a) 20% of patients seen in clinic were referred to the supervised rehabilitation programme run by the ICU physiotherapy team.
- b) 15% of patients were referred to see a physiotherapist as an outpatient.
- c) 56% of patients were referred for further investigations such as x-rays or blood tests.
- d) 43% of patients needed changes to their medication since discharge home from hospital.
- e) Over 15% of patients had their follow-up appointments with other medical teams expedited.

We are also completing a number of studies using the information collected in the clinic. This will not only benefit our patients but also those units who trying to set up a similar service.

### Collection and sharing of Patient Experience Feedback

We are working closely with the Health Board's Patient Experience and PALS departments to develop appropriate mechanisms for capture of patient experience tailored to Critical Care. Across the Health Board, a feedback system "SNAP11" has been rolled out across all sites including Critical Care. This provides the opportunity for feedback to all visitors and patients aside from the ongoing regular feedback which takes place within our Units.

We have been working to present Patient/Carers stories on a regular basis and this year saw the first presentation of a patient story which was delivered to the Morriston General Critical Care Governance Meeting. This powerful method of conveying an experience was well received by the Critical Care team and the example is being shared upward through the Health Board's meeting structures.

## **11.0 Conclusion and focus for the next 12 months and beyond**

ABMUHB Critical Care areas continue to experience intense and sustained pressure with continually increasing activity levels in current and preceding years.

Investment within ABMUHB in Critical Care capacity during 2013 showed benefits in the reduction of elective cancellations but the continued escalation in demand has now outstripped the benefits of this and exposes risks with respect to quality and the assurance of safe care.

To this effect we have asked for further support in progressing plans with:

1. Enhanced Nursing, Physiotherapy, Dietetics and Pharmacy provision.
2. Splitting of the existing ITU in Morriston into 2 smaller units (11 beds/17 beds). This action is essential in order to address immediate difficulties in nurse retention and recruitment. In addition, the core standards for Critical Care suggests the division of larger units into smaller and more manageable units, splitting the unit is more in-keeping with the recommended unit size.
3. Support in the recruitment of ITU medical staff at all levels:
  - a. Consultant - recruitment of consultants to enable a 2<sup>nd</sup> On-Call Rota and ensure safe weekend cover.
  - b. Fellow Posts
  - c. Trainee's
4. Continue ACCP Trainee Recruitment.

In addition, our Critical Care Delivery Plan presents the actions which we aim to progress during the next 12 months. These align with the following priorities for 2015/16 which reflect the needs of the local population.

### **Delivering appropriate, effective ward based care - *The Right Patient***

The priorities for 2015-16 are:

- Critical Care facilities will continue to be utilised for patients requiring intensive (Level 3) care and /or high dependency (Level 2) care only.
- To improve patient flow to reduce delayed transfers of care.
- Ensure mortality screening of all surgical patients forms a part of the pre-op assessment service that is being developed.

### **Timely Admissions to Critical Care – *The Right Patient receiving the Right Care at the Right Time***

The priorities for 2015-16 are:

- Sustain the achieved level of reduction in cancelled operations.
- Progress plans for increase in critical care capacity in order to achieve a sustainable reduction in cancelled operations

## **Effective critical care provision and utilisation – *The Right Care***

The priorities for 2015-16 are:

- Recruitment of medical and nursing staffing – look at innovative ways of recruiting in collaboration with Universities etc.
- Ensure alignment of critical care service provision with service reviews and changes
- Ensure adequate number of appropriate trained critical care staff available to transfer patients safely and effectively
- Ensure patients requiring level 1 care such as those who require non invasive ventilation or epidural management, are treated within appropriate environments outside the critical care units.

## **Timely Discharge from Critical Care - *The Right Patient receiving the Right Care at the Right Time.***

The priorities for 2015-16 are:

- To reduce the number of hours lost to DTOC by 10% every quarter until we reach a position of no more than 5% of bed occupancy lost to DTOC.

## **Improving information and Research**

The priorities for 2015-16 continue to be:

- To continue to invest in ICNARC and CCMDs data collection to promote benchmarking
- Ongoing increase of critical care research to enhance recruitment and retention of staff
- Participation through National Institute for Social Care and Research.
- Ensure regular audit to assess progress against measures that indicate effectiveness.
- To ensure adequate data clerk time to extend data collection fields.

**Delivery Theme 1. Delivering appropriate, effective care – The Right Patient receiving the Right Care at the Right Time**

**Patients, for whom critical care is appropriate, are identified in a timely manner so they have the best chance of a good outcome.**

**Patients for whom critical care is not appropriate are discussed and agreed pre-referral to critical care so they have the best chance to the correct outcome.**

Priority	Action required	Lead	Due date	Progress
Ensure all acute admissions to hospital are reviewed by a consultant within 12 hours with a clearly documented decision about DNACPR and escalation of care.	7 day working initiative contained within Health Board IMTP – to progress actions to achieve this.	Divisional Medical Directors	Ongoing	A new Management structure is being created and the Divisional Medical Directors will be in place by October 2015
	To continue reviewing all deaths on ITU to identify issues of suitability of ITU treatment.	Lead Clinician, ITU	No End Date	
	Implementation of the All Wales DNAR Policy.	Divisional Medical Directors	April 2016	
	Continue with the Health Board's Mortality Review process.	AMD Patient Safety	Ongoing	
	Metric to be developed to enable data capturing appropriate discussion to be collected in real time / audit of notes to identify whether compliant and ongoing training of medical staff in documentation.	Medical Director Department	Ongoing	

**Clinicians to instigate and record a discussion regarding escalation of treatment with all appropriate unscheduled care patients and families on admission to include decision re DNACPR.**

Priority	Action required	Lead	Due date	Progress
	<p>Audit of DNAR forms via Resuscitation Service Manager</p> <p>The RESUS committee continue to audit cardiac arrests.</p> <p>Audit clinical notes to identify whether end of life pathways have been considered / rejected.</p> <p>As above, Mortality review process.</p>	Resus. Service Manager	No end date	

**Implement NICE CG50**

Priority	Action required	Lead	Due date	Progress
Fully compliant	Continue with existing audit process	HoN / Corporate Nursing Team	No end date	



**All surgical patients should be screened for risk of mortality pre-operatively.**

Priority	Action required	Lead	Due date	Progress
Ensure mortality screening of all surgical patients forms a part of the pre-op assessment service that is being developed.	Implementation of revised service model for Pre Operative assessment which includes launch of Electronic-POA system where the P-POSSUM calculator has been built in to the electronic system which calculates morbidity and mortality.	Clinical Lead Anaesthetist (POA)	September 2015	Trialling of system and final revisions currently underway.

**All Local Health Boards to review their level 2 capacity to accommodate all patients with > 10 % mortality risk post-operatively.**

Priority	Action required	Lead	Due date	Progress
Ensure mortality screening of all surgical patients forms a part of the pre-op assessment service that is being developed.	Linked to point above regarding revision of Pre Operative Assessment model and the Health Board's Critical Care Capacity Plan.	Clinical Lead Anaesthetist (POA) / ADGM / ACD Critical Care	Capacity review complete.  Full revision of POA model - September 2015	Complete.

**All Local Health Boards to participate fully RRAILS. All acutely unwell patients are screened for sepsis and appropriate care pathway delivered where indicated.**

Priority	Action required	Lead	Due date	Progress
<p>RRAILS has been implemented fully within the Health Board.</p> <p>Sepsis training has been delivered across the Health Board. The Health Board is working with the 1000 Lives Improvement Team Sepsis Lead.</p> <p>The Health Board has set up a "Spotting the Sick Patient" Steering Group. A Project Team were established in Singleton Hospital to review the NEWS scoring and Sepsis screening process.</p>	<p>To continue to promote RRAILS concept in its entirety and monitor progress.</p> <p>Ongoing training for medical staff and audit to identify non-compliance with training.</p> <p>Steering Group to complete review of NEWS/Sepsis Screening process.</p> <p>Following review, new pathways and protocols to be developed and rolled out across the Health Board.</p>	<p>CD's &amp; HoN's</p> <p>AMD Patient Safety</p> <p>AMD Patient Safety</p>	<p>No end date</p> <p>No end date</p> <p>July 2015</p> <p>December 2016</p>	

**Ensure all acute admissions are assessed for the risk of developing acute kidney injury.**

Priority	Action required	Lead	Due date	Progress
Identification of Acute Kidney Injury champions to promote early assessment of those at risk of developing AKI.	<p>Development of a protocol for the Health Board has been overtaken by an All Wales “pilot” which is currently in progress for such a protocol in Cwm Taf and ABHB. Action will therefore be to implement the model being piloted once confirmed.</p> <p>Other initiatives progressing, including:</p> <ul style="list-style-type: none"> <li>(a) AKI Action plan</li> <li>(b) Implementation of the all Wales LIMS for Laboratory Medicine which will mean full alignment of ABMU with national Welsh AKI electronic warning protocols.</li> </ul>	AKI Champion / CD's	<p>Review June 2015</p> <p>December 2014</p> <p>End March 2015</p>	Complete and ongoing review of “live” document.

**Delivery Theme 2. Timely Admissions to Critical Care – The Right Patient receiving the Right Care at the Right Time**

**Patients, for whom care is appropriate, are admitted, to an appropriately staffed critical care unit in a timely manner so they have the best chance of a good outcome.**

**Each Local Health Board must assess what level of critical care it can safely provide in each hospital ( see Appendix 1 of Delivery plan and audit each unit using the quality requirements audit tool)**

Priority	Action required	Lead	Due date	Progress
Critical Care facilities will continue to be utilised for patients requiring intensive (Level 3) care and /or high dependency (Level 2) care only.	To ensure delayed transfers of care remain high on the agenda.	ACD Critical Care / ADGM	Ongoing	Escalation mechanism in place which ensures involvement of senior management team / Senior Nurse and ITU consultants working alongside site management teams in decision-making over capacity on a daily basis.
	To continue to identify any delayed admissions due to capacity.			
	Revision of the Term of reference for the Health Board's General, Cardiac & Burn Critical Care Steering Group which receives concerns around critical care delivery.	DGM CSS	Complete	
	Capacity Plans have been presented highlighting service gaps and these are included within the Critical Care IMTP.	ACD Critical Care / ADGM CSS	Complete	

**Ensure systems are in place to provide prompt access to critical care and, if not available on site, to quickly and safely transfer patients.**

Priority	Action required	Lead	Due date	Progress
Critical Care facilities will continue to be utilised for patients requiring intensive (Level 3) care and /or high dependency (Level 2) care only.	Business Continuity Plans identify additional capacity – annual review of these.	ACDs Critical Care / ADGM / Lead Nurse	Annual Review	Complete Jan/Feb 2015
Progress plans for increase in critical care capacity in order to achieve a sustainable reduction in cancelled operations	Linked to above actions in respect of Capacity Planning / IMTP.			

<b>Critical care facilities will be utilised for patients requiring intensive ( Level 3) care and/or high dependency ( Level2) care only.</b>				
Priority	Action required	Lead	Due date	Progress
To reduce the number of hours lost to DTOC by 10% every quarter until we reach a position of no more than 5% of bed occupancy lost to DTOC.	Continue to report the delayed discharges to the: <ul style="list-style-type: none"> <li>Executive Team</li> <li>Directorate Teams of the delayed patients</li> <li>Site Management Teams</li> </ul>	CSS Senior Team at Escalation  Performance Review Process	No End Date	Escalation Protocol reviewed regularly and is flexed-up to increase priority / frequency of cross-site meetings as required.
<b>Develop mechanisms to monitor delayed admissions to critical care and the impact of the delay; for example, out of hours discharges.</b>				
Priority	Action required	Lead	Due date	Progress
As previous section	Robust monitoring mechanisms already in place.			

Reduce cancelled operations due to lack of critical care beds.				
Priority	Action required	Lead	Due date	Progress
Sustain the achieved level of reduction in cancelled operations.	<p>Continue use of Escalation Process as set out above.</p> <p>Regular meetings with Executive Lead around admission to Critical Care where refused admission may lead to cancellation.</p> <p>Request to all surgeons to communicate with colleagues not to ensure over-burdening of days of the week with elective activity where there are gaps elsewhere in the week.</p>	<p>CSS Senior Team</p> <p>CD's</p>	No End Date	
Reduce non-clinical transfers due to lack of critical care beds.				
Priority	Action required	Lead	Due date	Progress
N/A	None – there are no non-clinical transfers			

<b>Delivery Theme 3. Effective critical care provision and utilisation – Right Patient receiving the Right Care at the Right Time</b>				
<b>Critical care patients receive care from dedicated critical care medical staff in critical care units which are aligned to the hospitals acute services.</b>				
<b>Critical care patients will receive evidence based care in the form of compliance with care bundles, national guidance and care pathways, etc.</b>				
<b>Patients will receive the right level of care in the right environment.</b>				
<b>Ensure that critical care patients are managed by dedicated critical care consultants and middle tier doctors, as outlined in Appendix 1.</b>				
Priority	Action required	Lead	Due date	Progress
<p>Recruitment of medical and nursing staffing – look at innovative ways of recruiting in collaboration with Universities etc.</p> <p>Ensure alignment of critical care service provision with service reviews and changes</p> <p>Ensure adequate number of appropriate trained critical care staff available to transfer patients safely and effectively</p>	<p>Compliant across all but POWH sites where Middle Tier cover is not in place. This is contained within IMTP and as a result of Deanery concerns, further measures for cover introduced during March 2015.</p> <p>Review of medium and long term options for medical staffing at POWH.</p>	Lead Critical Care Consultant POWH	<p>March 2015</p> <p>End April 2015</p>	Interim increase in medical cover.



<b>The sub-consultant level doctor should have no other responsibilities except for resuscitation within the hospital.</b>				
Priority	Action required	Lead	Due date	Progress
Ensure adequate number of appropriate trained critical care staff available to transfer patients safely and effectively	Ongoing support for completion of training for current ACCP trainee's.  Further ACCP recruitment in 2015/16.  Review of capacity for ACCP trainee's in POWH.	Clinical Leads, Critical Care Morrison / POWH	September 2015	
<b>Work with 1000 Lives Plus to implement service improvements whilst monitoring compliance with care bundles, national guidance, etc.</b>				
Priority	Action required	Lead	Due date	Progress
Ensure alignment of critical care service provision with service reviews and changes	Ongoing representation of Critical Care within 1000 lives programmes via identified lead.	Dave Hope	No End Date	In place, Lead provides updates departmentally.

**Minimise number of level 1 patients admitted to critical care units (as criterion 10).**

Priority	Action required	Lead	Due date	Progress
Ensure patients requiring level 1 care such as those who require non invasive ventilation or epidural management, are treated within appropriate environments outside the critical care units.	Maintain no level 1 admissions.			

Increase provision or enhancing services to care for level 1 patients outside of critical care where appropriate.				
Priority	Action required	Lead	Due date	Progress
Ensure patients requiring level 1 care such as those who require non invasive ventilation or epidural management, are treated within appropriate environments outside the critical care units.	Ongoing support of Outreach Services – inclusion of expansion options within Critical Care IMTP.	CD's / DGM's	Throughout 2015	Critical Care has pressed for regular meetings with Swansea Locality to progress NIV beds to reduce NIV admissions to Critical Care beds.
	Provision of Level 1 services across hospital sites to be progressed.			Critical Care piloted Venous Access Project and has secured funding to set up a Lines Service which with further support care outside of Critical Care.
	Progress development of Lines Service.			Plastic Level 1 Unit being used flexibly for surgical cases involving plastics

**All critical care transfers should be graded good or excellent in quality.**

Priority	Action required	Lead	Due date	Progress
N/A	Ongoing training of staff to ensure good compliance with transfer guidelines and standards.	Critical Care Transfer Leads	Monthly data provided via network	Audit data fed back to MDT meetings and GBCCCSG to identify learning points and provide actions to improve compliance were required.

<b>Delivery Theme 4. Timely Discharge from Critical Care – The Right Patient receiving the Right Care at the Right Time.</b>				
<b>Patients are discharged from critical care in a timely manner so they have the best chance of early rehabilitation.</b>				
<b>Patients requiring critical care will have improved access due to improved flow through the units.</b>				
<b>95% of patients will be discharged within 4 hours of being ready for discharge and the bed being requested.</b>				
Priority	Action required	Lead	Due date	Progress
To reduce the number of hours lost to DTOC by 10% every quarter until we reach a position of no more than 5% of bed occupancy lost to DTOC.	<p>Data provided monthly.</p> <p>Escalation Process in place as detailed above includes constant communication between bed management / site management / critical care leads and directorate management team.</p> <p>Patients discharged out of hours are subject to reporting via Datix system.</p>	Critical Care Lead Consultants / Lead Nurses	No End Date	

<b>Monitor and report to Board level committees the percentage of discharges achieved within 4 hours.</b>				
Priority	Action required	Lead	Due date	Progress
To reduce the number of hours lost to DTOC by 10% every quarter until we reach a position of no more than 5% of bed occupancy lost to DTOC.	Ongoing reporting via GBCCCSG / Performance Review / Performance Scorecard  Benchmarking of other HB's management of delayed discharges.	DGM / ADGM / HoN / ACD's Critical Care	No End Date	
<b>Develop mechanisms to undertake ongoing assessment of impact of DToCs: to patients whose discharge is delayed and to those who are prevented from accessing critical care due to lack of critical care bed.</b>				
Priority	Action required	Lead	Due date	Progress
To reduce the number of hours lost to DTOC by 10% every quarter until we reach a position of no more than 5% of bed occupancy lost to DTOC.	Review of ICNARC reporting.  Ongoing reporting arrangements of delayed discharges.	ACD's / Clinical Leads	No End Date	Reviews as required where delayed discharges result in cancellation of operations.

<b>Work with Welsh Ambulance Service Trust to monitor and ensure timely inter-hospital transfers with agreed Standard Operating Procedures.</b>				
Priority	Action required	Lead	Due date	Progress
N/A	Transfer protocols in place which are in-keeping with All Wales Standard.			

## Delivery Theme 5. Improving information and Research

**Information systems to support high quality care and performance, clinical audit and review to drive service improvement. Critical Care research in Wales should be supported to drive forward improvements in care and outcomes.**

**Local Health Boards must use effective ways of finding out patient's views and using these to plan and deliver better critical care. (NB this includes an annual survey of carers using the ICS carer's questionnaire).**

Priority	Action required	Lead	Due date	Progress
<p>To continue to invest in ICNARC and CCMDs data collection to promote benchmarking</p> <p>Ongoing increase of critical care research to enhance recruitment and retention of staff</p> <p>Participation through National Institute for Social Care and Research.</p> <p>Ensure regular audit to assess progress against measures that indicate effectiveness.</p> <p>To ensure adequate data clerk time to extend data collection fields.</p>	<p>Close working with Health Board's Patient Experience teams and PALS departments to develop appropriate mechanisms for capture of patient experience. Implementation of SNAP11 across all sites in 2015 – including Critical Care.</p> <p>Follow Up Clinic within Morriston Hospital's Critical Care Unit has identified patients who share their views.</p> <p>Patient/Carers stories in development for presentation.</p>	<p>Patient Experience / Lead Nurses / ADGM</p> <p>ACD, Critical Care</p> <p>Lead Nurse / ITU Governance Manager</p>	<p>August 2015</p> <p>Ongoing</p> <p>From April 2015</p>	



<b>Ensure 100% participation in mandatory national clinical audits, report key findings to the Local Health Boards and ensure that findings are acted on.</b>				
Priority	Action required	Lead	Due date	Progress
As all above	Ongoing participation in NICE 50 / 83	Lead Clinicians / Lead Nurses	No End Date	
<b>Full participation in ICNARC condition management programme (NB this means complying with timeframes for submitting and validating data).</b>				
Priority	Action required	Lead	Due date	Progress
As all above	Compliant with Data Submission requirements.  Validation of Data to be reviewed.  Regular feedback of data from both Morriston and POWH to GBCCCSG.	Clinical Leads for ICNARC – Linda Middleton Morriston / Richard Self POWH	No End Date  June 2015	
<b>Full participation in the National Critical Care Minimum Dataset.</b>				
Priority	Action required	Lead	Due date	Progress
	NO ACTION REQUIRED – FULLY COMPLIANT			