

# National Survey of Critical Care Outreach Services in Wales 2011

Endorsed by:



**NORTH WALES CRITICAL CARE NETWORK**



## Section A: General Information About Your Hospital

We are interested in finding out about the delivery of services in your hospital.

1. Hospital Name:

2. Does your hospital have any of the following? (Please tick all boxes that apply)

A general Intensive Care Unit (ICU).....

A general High Dependency Unit (HDU) .....

A combined HDU/ICU .....

3. Please indicate whether or not each of the following operates in your hospital:

(Please encircle yes or no in all of the boxes provided)

	Operates?
Acute Pain Team (i.e. a multi-disciplinary team whose role is the management of acute pain)	Yes / No
Nutrition Team	Yes / No
Non-invasive ventilation service on the general wards	Yes / No
Tracheostomy care on the general wards	Yes / No
Overnight ventilation facility in theatre or recovery	Yes / No
Resuscitation policy or Not for Resuscitation (NFR)/Do Not Attempt Resuscitation (DNAR) orders	Yes / No
Hospital At Night programme (i.e. a multi-disciplinary team whose role is the management of patients out-of-hours)	Yes / No
Sepsis Nurse	Yes / No
ALERT or similar course for ward staff	Yes / No

4. Please confirm the number of adult critical care beds in your hospital: (N.B. 3T refers to tertiary centre facilities that offer an appropriate level of care to patients experiencing multi-organ failure who require prolonged support)

	Number of Beds
The total number of <b>specialist</b> critical care beds (Levels 2, 3 and 3T)	
The total number of <b>general</b> critical care beds (Levels 2, 3 and 3T)	
Number of <b>specialist Level 2</b> beds	
Number of <b>general Level 2</b> beds	
Number of <b>specialist Level 3</b> beds	
Number of <b>general Level 3</b> beds	
Number of <b>specialist Level 3T</b> beds	
Number of <b>general Level 3T</b> beds	

5. Are any of the bed allocations referred to in question 4 flexible? (For e.g. Can a Specialist Level 3 bed be used for patients with General Level 3 needs?)

Yes

No

## Section B: Critical Care Outreach Service (CCOS) Activities

Below is a grid listing each of the broad components of what is termed Critical Care Outreach Service (CCOS) activity.

6. For each activity please indicate if this is currently provided in your hospital:

(Please encircle yes or no in all of the boxes provided)

Activity	Currently Provided?
Formal use of 'Early Warning' or 'Track and Trigger' or any system of mandated response by ward staff to a level of physiological abnormality (e.g. EWS, MEWS, PARS, NEWS)	Yes / No
Telephone 'hotline' advice from critical care staff for adult (Level 1) wards	Yes / No
Direct bedside clinical support from critical care staff on adult wards	Yes / No
Informal bedside teaching by critical care staff on adult wards	Yes / No
Formal educational courses delivered by critical care staff outside of critical care	Yes / No
Assist with appropriate, timely discharge/transfer of patients from critical care to adult wards	Yes / No
Follow-up of patients discharged from Level 2/3/3T facilities to adult wards supporting the continuing recovery of patients	Yes / No
Referral to other specialist services	Yes / No
Post hospital discharge follow-up from Level 2/3/3T facilities in dedicated outpatient clinics	Yes / No
Audit and evaluation of Critical Care Outreach Service activity	Yes / No

## Section C: Evolution and Aims of Your Critical Care Outreach Service

7. In what year was the Critical Care Outreach Service initially established in your hospital?

Year

Don't Know

8. What is the name of your Critical Care Outreach Service?

9. Does your CCOS cover any other hospitals within your Health Board?

Yes

No

*If yes, please name the hospital(s)*

10. We are interested in the aims of your Critical Care Outreach Service when it was first established and the current aims of your service. Please rank the following aims in order of importance, with 1 as the most important and 7 as the least important. *If you do not know the aims of CCOS when it was first established please tick the following box and rank current aims only:*

Aims of CCOS when first established – Don't Know

Aims of Critical Care Outreach Services	Ranking When First Established	Current Ranking
Timely identification of patients with impending critical illness		
To avert admissions to critical care or to ensure timely admissions to critical care		
To avoid readmissions to critical care		
To enable discharges from critical care		
To share critical care skills with staff working outside of critical care areas		
To support ward-based care through education at the bedside		
To support ward-based staff through formal teaching		

11. Does your service currently have any additional aims to those listed above?

Yes

No

*If yes, please specify below*

## Section D: Critical Care Outreach Service Staffing and Hospital Coverage

We are interested in the composition and coverage of your Critical Care Outreach Service.

For every staff grade listed below, please indicate if the post is currently funded and staffed by encircling yes or no.

If yes, indicate the total amount of dedicated time available to the CCOS. For medical staff please indicate the number of sessions (½ days) per week. For all other staff please indicate the number of whole time equivalents (WTE).

If staffing has changed during the year please give the maximum value.

If a post is currently funded but remains unfilled, please do not include.

### 12. Medical staff: Please give the total number of sessions (half day) per week

	Funded & Staffed?	Total Number of Sessions Per Week
Consultant	Yes / No	
Non-Consultant Career Grade	Yes / No	
Junior Doctors	Yes / No	

### 13. Nursing Staff: Please give the total number of whole time equivalents (WTEs)

	Funded & Staffed?	Total Number of WTEs
Band 8c	Yes / No	
Band 8b	Yes / No	
Band 8a	Yes / No	
Band 7	Yes / No	
Band 6	Yes / No	
Band 5	Yes / No	

### 14. Other Staff: Please give the total number of whole time equivalents (WTEs)

	Total Number of WTE's
Allied health professionals <i>(Please specify position &amp; grade)</i>	
Other staff (e.g. clerks) <i>(Please specify position &amp; grade)</i>	

15. What number of adult wards within your hospital are currently covered by the Critical Care Outreach Service?

Number of Adult Wards Covered by CCOS

16. Please indicate whether the Critical Care Outreach Service currently covers any other departments in your hospital (e.g. A&E, Paediatrics). *If Yes, please specify.*

Other departments covered by CCOS? <i>(If Yes, please specify in rows below)</i>	Yes / No

## Section E: Educational Preparation of Critical Care Outreach Service Staff

17. Do you have an in-house training programme to develop staff working in the Critical Care Outreach Service?

Yes

No

18. Do you expect medical staff working for the Critical Care Outreach Service to have critical care experience?

Yes

No

N/A

→ *If N/A, skip to question 20*

19. Are there any baseline qualifications that medical staff working for the Critical Care Outreach Service are expected to have?

Yes

No

*If yes, please briefly specify*

20. Do you expect nurses working for the Critical Care Outreach Service to have critical care experience?

Yes

No

N/A

21. Are there any baseline qualifications that nurses working for the Critical Care Outreach Service are expected to have?

Yes

No

N/A

*If yes, please indicate what these qualifications are (Please tick all boxes that apply)*

- Basic Life Support (BLS) .....
- Hospital Life Support (HLS) .....
- Intermediate Life Support (ILS) .....
- Paediatric Advanced Life Support (PALS) .....
- Advanced Life Support Provider (ALS) .....
- Advanced Life Support Instructor (ALS) .....
- Acute Life-Threatening Events: Recognition & Treatment (ALERT) .....
- Care of the Critically Ill Surgical Patient (CCrISP) .....
- Teaching qualification (e.g. Teaching and Assessing, PGCE) .....
- General Intensive Care Course (ENB 100) .....
- Other (Please specify below) .....

## Section F: Availability of the Current Critical Care Outreach Service

22. On what days of the week are the following services provided? (Please tick one box on each row)

Service	7 days a week	Mon-Friday only	Other selected days only (Please specify)	Not provided
Follow-up of discharged level 2, 3 or 3T patients on adult wards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Telephone 'hotline' advice for adult wards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Direct bedside clinical support for adult wards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

23. How many hours per day are the following services provided? (Please tick one box on each row)

Service	24 hours a day	12-23 hours a day	Up to 11 hours a day	Not provided
Follow-up of discharged level 2, 3 or 3T patients on adult wards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Telephone 'hotline' advice for adult Wards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Direct bedside clinical support for adult wards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Section G: Post Critical Care Discharge Follow-up on Adult Wards

We are interested in finding out which patients are routinely followed up by the CCOS. **Please note:** Levels 2, 3 and 3T below refer to the maximum level of care required by patients during their entire stay in a Critical Care area.

24. Does the Critical Care Outreach Service provide follow-up (i.e. a visit from a member of the CCOS) for Level 2 patients discharged from critical care to adult ward areas?

Yes

No

N/A

*If yes, which patients are followed up? (Please tick one box only)*

All .....

Minimum stay of 2-3 nights .....

Minimum stay of 4 nights or more .....

Other (Please specify below) .....

25. Does the Critical Care Outreach Service provide follow-up (i.e. a visit from a member of the CCOS) for Level 3 patients discharged from critical care to adult ward areas?

Yes

No

N/A

*If yes, which patients are followed up? (Please tick one box only)*

All .....

Minimum stay of 2-3 nights .....

Minimum stay of 4 nights or more .....

Other (Please specify below) .....

26. Does the Critical Care Outreach Service provide follow-up (i.e. a visit from a member of the CCOS) for Level 3T patients discharged from critical care to adult ward areas?

Yes

No

N/A

*If yes, which patients are followed up? (Please tick one box only)*

All .....

Other (Please specify below) .....

27. Approximately how many patients were followed-up by CCOS after discharge from critical care to adult ward areas last month?

Number Last Month

N/A



28. Is post critical care discharge follow-up completed by means of a regular ward round by members of the CCOS?

Yes

No

N/A

If yes, how often are these ward rounds performed? (Please tick one box only)

Daily, 7 days per week .....

Daily, on week days only .....

Twice weekly.....

Other (Please specify below) .....

29. Are there established criteria for discontinuing post critical care discharge follow-up?

Yes

No

N/A

## Section H: Activation of the Critical Care Outreach Service

We are interested in whether there is a system in place in your hospital to monitor patients on adult wards which might ultimately result in a 'call out' to the Critical Care Outreach Service.

30. Is there a scoring/track and trigger system or 'calling criteria' to identify patients with established or impending critical illness?

Yes

No  ➔ If No, skip to question 35

If yes, which one(s) do you use? (Please tick all boxes that apply)

Original Early Warning System (EWS).....

Modified Early Warning System (MEWS) .....

VitalPAC Early Warning Score (ViEWs) .....

National Early Warning Score (NEWS).....

Patient at Risk Score (PARS) .....

Medical Emergency Team (MET) or PERT calling criteria .....

Other (Please specify below) .....

**31. Which elements does the scoring/trigger system include? (Please tick all boxes that apply)**

- Temperature .....
- Respiration rate .....
- Heart rate .....
- Blood pressure .....
- Urine output .....
- Consciousness Level (e.g. AVPU) .....
- O<sub>2</sub> Saturations .....
- Pain score .....
- Cause for concern .....
- Other (Please specify below) .....

**32. Which specialties are using a scoring/trigger system in your hospital? (Please tick one box only)**

- All adult wards .....
- Adult medical wards only .....
- Adult surgical wards only .....
- Other (Please specify below).....

**33. In the wards where the scoring/trigger system is used, which patients is it used on? (Please tick one box only)**

- All patients .....
- Selected patients only (Please specify below) .....

**34. How often is the scoring/trigger system completed (approximately)? (Please tick one box only)**

- Hourly .....
- Two hourly .....
- Four hourly .....
- Twelve hourly .....
- Whenever routine observations are performed on individual patients .....
- Other (Please specify below) .....

## Section I: Response and Referral Processes

We are interested in the initial response to patients on adult wards identified as being 'at risk'.

**35. Do you have a specified initial response pattern or algorithm for patients identified as being 'at risk'?**

Yes  No  ➔ *If No, skip to question 40*

*If yes, please state the year that it was first introduced* Year  Don't Know

**36. According to your algorithm, which member of staff should be notified initially when a trigger occurs? (Please tick all boxes that apply)**

House Officer/Foundation Year 1 .....   
Senior House Officer/Foundation Year 2 .....   
Parent Team Registrar (SpR) .....   
Parent Team Consultant .....   
ICU SpR .....   
Nurse in charge of the ward .....   
Senior Nurse/Modern matron .....   
Member of Critical Care Outreach Service .....   
Other (Please specify below) .....

**37. Please give an approximate number of patients on adult wards identified as 'at risk' last month on the basis of the scoring/trigger system used**

Number last month  Don't Know

**38. Do you keep a record of the number of these 'at risk' patients who are seen by CCOS?**

Yes  No

*If yes, please give an approximate number of these patients seen by CCOS last month*

Number last month

**39. Is there an agreed initial target response time for patients on adult wards identified as 'at risk' on the basis of the scoring/trigger system used?**

Yes  No

*If yes, please specify the time in minutes.....*  Minutes

## Section J: Independent delivery of care by CCOS staff

**40. Does the Critical Care Outreach Service provide any of the following for patients directly referred to the Outreach Service (not to the ICU residents) by the parent specialty /primary team? (Please tick all boxes that apply)**

- Clinical assessment .....
  - Clinical advice and recommendations to the parent team .....
  - Direct clinical intervention in support of the parent team .....
  - Direct clinical intervention independent of the parent team .....
  - Liaison with the critical care medical team for advice and support  
and possible transfer to critical care unit.....
  - Other (Please specify below) .....
- 

## Section K: Interventions performed by CCOS staff

**41. Are Critical Care Outreach Service staff involved in the following interventions? (Please tick all boxes that apply)**

Interventions	Perform Intervention	Make recommendations
Arterial blood gases		
Venous cannulation		
Venepuncture investigations		
ECG		
Central line insertion		
Changes in oxygen therapy		
Changes in fluid management		
Insertion of nasogastric tube		
Initiation of non-invasive ventilation		
Adjustment to medication		
Adjustment to feeding/nutrition		
Adjustment to pain management		
Early Sepsis Bundle		
Initiation of DNAR/NFR decision		
Chest x-ray		
Changes in patient positioning		
Initiation of colloid/blood transfusion		
Initiation of vaso-active infusions		
Other (Please specify)		

## Section L: Educational Activities of the Critical Care Outreach Service

42. Do members of the Critical Care Outreach Service provide training in care of the critically ill to other hospital staff?

Yes

No

*If yes, please indicate the type of training (Please tick all boxes that apply)*

Informal bedside teaching in response to a deteriorating patient .....

Informal group teaching in response to a deteriorating patient .....

Training in care of tracheostomies, CVP lines etc. as part of follow-up care .....

Formal in-house competency based training .....

ALERT course (or equivalent) .....

CCrISP course .....

Course in developing High Dependency skills .....

Formal teaching of student nurses/medical students .....

Other (Please specify below) .....

43. Approximately how many days per year does the Critical Care Outreach Service spend in total, delivering formal training programmes? (Please include the contribution of all members of the CCOS team. E.g. if one full-day training session is co-delivered by two members of the CCOS team every year, this would amount to a total of 2 days per year)

Days per year.....

## Section M: Links with other specialist services

We are interested in whether those working for the Critical Care Outreach Service are part of a dedicated CCOS or whether they are also involved in other clinical roles.

44. Is the whole of the Critical Care Outreach Service formally integrated with another specialist support service e.g. the acute pain team, the resuscitation team?

Yes

No

*If yes, please specify which service*

45. Are any members of the Critical Care Outreach Service also members of other specialist teams?

Yes  No

If yes, please specify the service and the grade of the team member (e.g. Acute Pain Team, Nurse Specialist Band 6)

Service	Grade of Team Member

46. Is there direct referral between the Critical Care Outreach Service and other specialist support services (or vice versa) without requirement for informing the medical team(s) involved?

Yes  No

If yes, please tick all boxes that apply

- Acute pain service .....
  - Nutrition team .....
  - Physiotherapy service .....
  - Other (Please specify below).....
- 

### Section N: CCOS activity and outcome auditing

47. Is information collected on the activities of your Critical Care Outreach Service or on patient outcomes?

Yes  No  → If No, skip to question 49

If yes, what information is routinely collected? (Please tick all boxes that apply)

- Clinical activities .....
  - Educational activities .....
  - Patient outcomes .....
  - Other (Please specify below) .....
- 

48. Who collects the data? (Please tick all boxes that apply)

- Audit clerk .....
  - Clinical staff from the CCOS team .....
  - Other (Please specify below) .....
-

## Section O: Funding of the Critical Care Outreach Service

49. How is the Critical Care Outreach Service funded? (Please tick one box only)

Allocation from Critical Care budget .....

Allocated separate funding .....

Other (Please specify below) .....

50. Has any equipment been purchased exclusively for the use of the Critical Care Outreach Service?

Yes

No

Don't Know

If yes, please name the equipment:

51. Does the Critical Care Outreach Service use equipment purchased by other specialties? (For e.g. monitoring equipment purchased by Critical Care departments)

Yes

No

If yes, please name the equipment:

**Section P: Future plans for existing services**

**52. Do you anticipate changes to the overall structure and staffing of the Critical Care Outreach Service within the next 6 months?**

Yes

No

*If yes, please specify (Please tick all boxes that apply)*

Increase in staffing .....

Reduction in staffing .....

Increase in hours of operation .....

Reduction in hours of operation .....

Increase in number of wards covered .....

Reduction in number of wards covered .....

Integration with other services .....

Separation from other services .....

Other (Please specify below) .....



**Please add any comments you wish to make:**

We hope to share survey data with the National Outreach Forum and the Critical Care Networks in Wales. Please tick the following box if you are willing for us to share the information you have provided:

**Many thanks for taking the time to complete this questionnaire.**

**Please return the questionnaire, with a copy of your scoring system and algorithm if possible in the pre-paid envelope enclosed.**

**No individual hospital will be identified in published reports of this study.**