

Peer review of critical care pharmacy services

Introduction

These quality standards have been developed to support the critical care pharmacists in ensuring a high quality of care across the Networks that form the Midlands Critical Care Networks. The three regions include the Birmingham and Black Country, Central England and the North West Midlands.

The standards aim to be:

- Open, transparent, fair and equitable
- Standardised and consistent across the “patch”
- Supported by a number of accepted referencing documents

No single set of standards exists that encompasses the whole pharmacy service provided to critical care. These standards have been developed from GPICS,(1) the DH report ‘Adult critical care: specialist pharmacy practice’,(2) the Birmingham and Black Country Critical Care Network peer review documentation and the American College of Clinical Pharmacy.(3) Overall these describe the ideal service provided to critical care by pharmacy.

The emphasis of the peer review process is not to find blame, but rather to identify areas of strong and weak practice.

The benefit of pharmacy involvement in critical care has been well documented. A paper from 2002 reviewed the literature pertaining to clinical pharmacy in North America and provided a summary of benefits that had been identified.(4) More recently a study has been conducted in UK critical care units, PROTECTED-UK, which describes the work of clinical pharmacists on critical care.(5-7) A survey, conducted in 2015, describes the pharmacy workforce demographics for critical care,(8) and an earlier one in 2014 describes the activity of pharmacist prescribers in critical care.(9)

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Hospital / Unit Name _____ Date of visit _____

Part One - Demographics of previous financial year or equivalent

Unit	Type	Level 3 or L3 equivalent	Level 2	Total
	Number of Operational beds			
	Specialty – tick all that are appropriate	Cardiac <input type="checkbox"/> Neuro <input type="checkbox"/> General <input type="checkbox"/> Medical <input type="checkbox"/> Paeds <input type="checkbox"/> Surgical <input type="checkbox"/> Burns <input type="checkbox"/> Other _____		
Workload	Throughput - Number of admissions (please state time period used)			
	Activity - Number of patient bed days (or equivalent data)			
Pharmacy	Normal opening time of pharmacy:			
Drug expenditure	<i>List the top 20 drugs spend - in order (snapshot only)</i>			
	Top 20	Name	Cost – previous financial year or equivalent)	
	1			
	2			
	3			
	4			
	5			
	6			
	7			
	8			
	9			
	10			
	11			
	12			
	13			
	14			
	15			
	16			
	17			
	18			
	19			
20				
Other drug cost data routinely presented?	Provide detail; How is this presented and who is it presented to?			
Total Annual Drug Expenditure				

Part Two - Consolidated Standards

Fundamental Staffing Standards			Evidence Required	Self-Assessment Compliance Y/N	Trust Comments	Review Team Compliance Y/N	Review Team Comments
1		Acute Trusts should fund at least 0.1 WTE specialist clinical pharmacist (8a or above) for each single Level 3 bed and for every two Level 2 beds. Dedicated time for critical care patients with few other commitments outside the ITU area See GPICS for further explanation	List Grade and WTE allocated to critical care				
2	Working pattern	Daily sessional support to critical care should be provided and ideally available 7 days per week. A minimum service should be provided 5 days per week (Monday – Friday).	List frequency and duration of sessional support Staffing rota Ward list				
3	Level 3 Patients	A competent critical care pharmacist should be an integral part of the Critical Care team. This person should also provide advice and support to pharmacy and clinical colleagues working at all levels of critical illness, and be the key pharmacist liaising with the outreach team. If the pharmacist has the minimum competencies (Foundation Level), then they must have access to a more senior specialist critical care pharmacist (for advice and referrals)	Discussion with staff RPS/UKCPA credentialing				
4	Level 2 Patients	The pharmaceutical care for the Critical Care patient should be provided by either a competent specialist critical care pharmacist or another experienced pharmacist working in close collaboration.	Discussion with staff RPS/UKCPA credentialing				
5	Level 1 Patients	Patients are often seen in non-critical care areas. It is essential that all clinical pharmacists have the basic skills to care for level 1 patient's. The critical care specialist pharmacist has a key role in optimising this care by educating and supporting colleagues	Discussion with staff				

Fundamental Pharmacist Activities		Evidence Required	Self-Assessment Compliance Y/N	Comments	Review Team Compliance Y/N	Review Team Comments
6	Sufficient pharmacy technician staff to provide supporting roles e.g. MMT, Technician top-up service, frequency?	Discussion with staff Staff rota/list				
7	Agreed arrangements for units to ensure: a. Availability of non-stock drugs within 1 hour b. Availability within 1 hour of additional stock items at times of peak demand	Discussion with staff Protocol/ Policies				
8	Outside normal working hours, access should be available to a pharmacist for advice and medication	SOP Protocol/Policies Discussion with staff				
9	Evaluation of drug therapies for appropriate indications, dosage, interactions, allergies	Discussion with staff Written evidence Review charts				
10	Monitor patients pharmacotherapeutic regimen for effectiveness and Adverse Drug Events (ADE's); intervene as needed	Discussion with staff Written evidence Review charts				
11	Review patient drug history and complete medicines reconciliation to optimise maintenance drugs	Discussion with staff Written evidence Review charts/notes				
12	Use medical records as recorded means of communicating with other healthcare professionals and to document specific pharmacotherapeutic recommendations	Discussion with staff Written evidence Review charts/notes				
13	Provide drug information when indicated	Discussion with staff Written evidence Review charts				
14	Contribute to and maintain departmental policies and procedures related to safe and effective use of drugs in Critical Care	Policies/procedures				
15	Provide consultation to relevant hospital committees relating to critical care pharmacotherapy issues	Meeting minutes				
16	Ensure effective and efficient cost-containment of drugs budget and identify cost improvements, which are communicated to relevant critical care staff.	Budget evidence of cost control/saving				
17	Contribute to quality assurance and audit programmes to enhance pharmaceutical care	Discussion with staff Written evidence Audit				
18	Critically evaluate newly published evidence and share the information with critical care colleagues	Discussion with staff Journal evidence Membership				
19	Deal with the implementation of national guidance relating to	Discussion with staff				

	critical care e.g. NICE	Written evidence				
20	Is involved in unit clinical governance meetings or equivalent	Meeting minutes				
21	Makes regular ward rounds as member of multi-disciplinary team providing pharmacotherapeutic management for all critical care patients	Staff rota Discussion with staff Written evidence				
Desirable Pharmacist Activities		Evidence	Self-Assessment Compliance Y/N	Comments	Reviewing Team Compliance Y/N	Reviewing Team Comments
22	Liaise with dietician/nutrition team to ensure optimal nutrition regimen	Discussion with staff Written evidence				
23	Identify Adverse Drug Events, assist in their management and develop process improvements to reduce drug errors and preventable ADE's	Discussion with staff Written evidence				
24	Delirium Screening – interventions should include both Pharmacological and non-pharmacological considerations and highly trained pharmacists who should provide assessments and strategies for patients identified as suffering from delirium	Discussion with staff Written evidence				
25	Provide drug therapy related education to Critical Care team and strategies to support non-medical prescribers in critical care.	Education programmes				
26	Provide formal instructional and educational lectures for health care professionals	Education programmes				
27	Coordinate the development and implementation of drug therapy protocols and/or critical care pathways to optimise benefits of drug therapy	Protocol/pathway evidence				
Optimal Pharmacist Activities		Evidence	Self-Assessment Compliance Y/N	Comments	Reviewing Team Compliance Y/N	Reviewing Team Comments
28	Participate in research design and data analysis where applicable	Research evidence				
29	Actively involved in critical care pharmacotherapy research	Research evidence				
30	Assist Critical Care Clinicians in discussions with family/patients in making informed decisions regarding treatment options	Discussion with staff				
31	Provide formal accredited educational sessions	Education programmes				
32	Develop and implement pharmacy staff training programmes for personnel working in Critical Care	Training programmes				
33	Independently investigate or collaborate with other Critical Care clinicians to evaluate the impact of guidelines and/or protocols for drug administration and management of common diseases	Discussion with staff Written evidence				

34	Is proactive in designing, prioritising and promoting new pharmacy programmes and services	Discussion with staff Written evidence				
35	Report results of clinical research to relevant local, regional and national groups	Discussion with staff Written evidence Meeting minutes				
36	Publish in peer-reviewed pharmacy and medical literature as a result of research involvement	Publications				
37	Participate in unit's morbidity and mortality reviews	Discussion with staff Written evidence				

Fundamental Pharmacy and Hospital Services		Evidence	Self-Assessment Compliance Y/N	Comments	Reviewing Team Compliance Y/N	Reviewing Team Comments
38	<p>Systems are in place to:</p> <ul style="list-style-type: none"> a) create and maintain patient drug profile b) easily obtain patient laboratory data c) alert healthcare professionals to drug allergies d) alert healthcare professionals to drug-drug, drug-nutrient interactions <p>If you have an electronic system you can:</p> <ul style="list-style-type: none"> e) alert healthcare professionals to maximum dosage limits <p>N.B if electronic system used for all of above they should be integrated.</p>	<p>Discussion with staff</p> <p>Demonstration</p>				
39	Quality assurance systems are in place to verify accuracy of manual drug administration records	<p>Discussion with staff</p> <p>Written evidence</p> <p>Policies</p>				
40	Drug storage space on Critical Care is regularly assessed to identify where efficiency can be improved upon	<p>Discussion with staff</p> <p>Written evidence</p> <p>Logs</p>				
41	Drug procurement, storage, inventory and distribution are under the supervision of the pharmacist	<p>Discussion with staff</p> <p>Written evidence</p>				
42	The Pharmacy department is represented on relevant Trust committees	<p>Meeting minutes</p>				
Desirable Pharmacy and Hospital Services		Evidence	Self-Assessment Compliance Y/N	Comments	Reviewing Team Compliance Y/N	Reviewing Team Comments
43	<p>The Trust information system is computerised and can comply with requirements of no. 41 in addition to:</p> <ul style="list-style-type: none"> a) alert healthcare professionals to disease state-drug interaction b) provide intravenous admixture information c) provide online drug and poison information d) document clinical pharmacy patient care interventions 	<p>Discussion with staff</p> <p>Written evidence</p>				
44	Computerised drug administration records are generated, manual records are only used in emergency (off line) situations	<p>Discussion with staff</p> <p>Written evidence</p>				
45	Pharmacotherapeutic / pharmacokinetic and nutrition consultation available 24 hrs/day 7 days/week	<p>Staff rota</p> <p>Discussion with staff</p> <p>Written evidence</p>				
Optimal Pharmacy and Hospital Services		Evidence	Self-Assessment Compliance Y/N	Comments	Reviewing Team Compliance Y/N	Reviewing Team Comments
46	Parenteral products are pre-prepared in pharmacy and delivered at regular scheduled interval 7 days/week	<p>Discussion with staff</p> <p>Written evidence</p>				

	<ul style="list-style-type: none"> a) Parenteral Nutrition b) Cytotoxics c) CIVAS 					
47	<p>The Computerised Trust information system serving Critical Care has the following additional capabilities:</p> <ul style="list-style-type: none"> a) direct clinician drug prescribing at the patient's bedside b) interfaces with bedside clinical information systems 	<p>Discussion with staff Written evidence Demonstration</p>				

Post Visit comments

Immediate Risks

General Concerns

Further consideration / General comments

Good practice / Significant Improvements

References

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