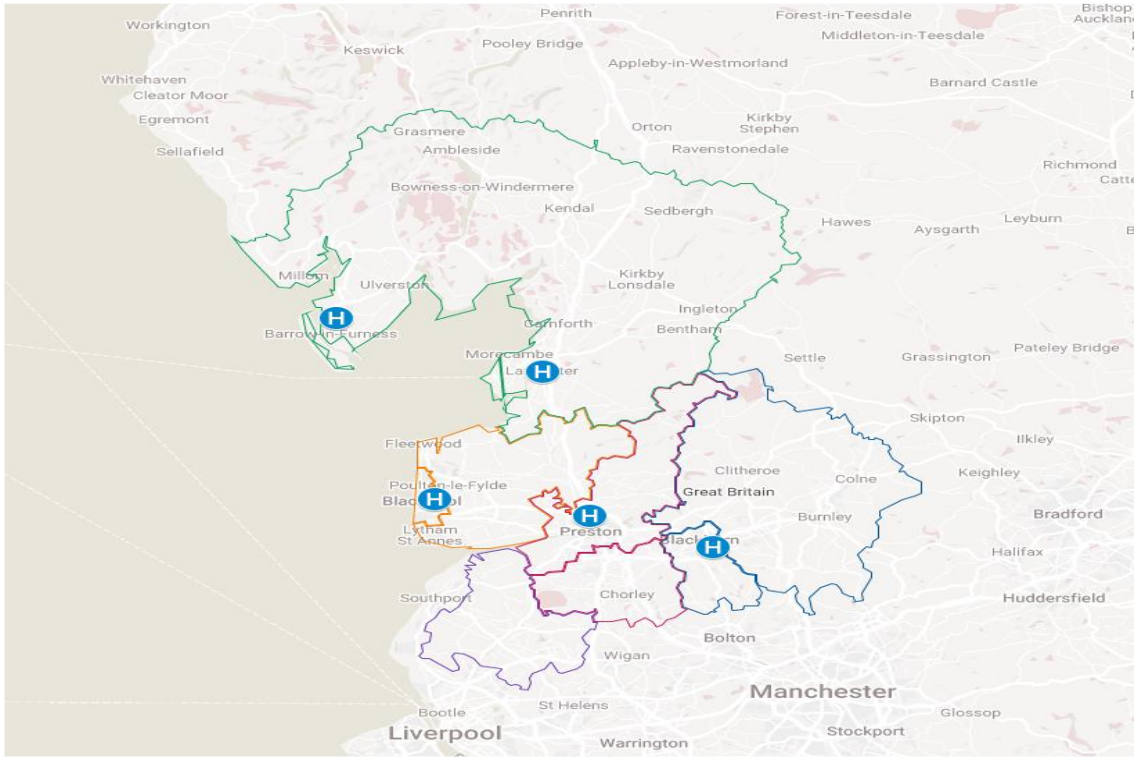
LANCASHIRE & SOUTH CUMBRIA

Critical Care and Major Trauma
Specialised Services Clinical Network

A Multidisciplinary Approach to Lancashire and South Cumbria Critical Care Specialised Services Clinical Network Improvement Programme

Lancashire & South Cumbria

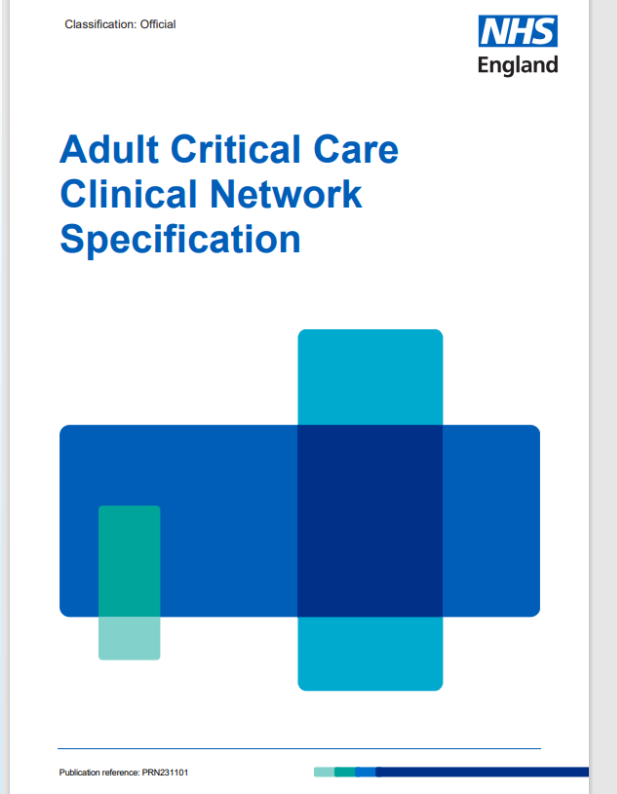


4 acute trusts
6 critical care units
100 commissioned L2/3 beds + 14 additional funded beds
Escalated beds – L1, L2 & L3
Enhanced Care beds – L1
Critical Care Outreach teams

Specialities:
Neuro, Hepatobiliary, Renal, Burns, Cancer, Cardiac Surgery, Cardiothoracic Surgery, Major Trauma, Head & Neck, Vascular
No commissioned Paediatric L2 capacity within L&SC

Our Aim

- The *Adult Critical Care Clinical Network Specification* (NHSE, 2023) outlines several areas which each Adult Critical Care (ACC) Specialised Services Clinical Network (SSCN) holds responsibility to support. The overarching aim of ACC SSCNs is to improve access, patient experience and clinical outcomes for Critical Care patients, ensuring services meet evolving demands and national standards (FICM & ICS, 2022).
- Lancashire & South Cumbria (L&SC) CC SSCN identified the need to broaden the representation within their network team to ensure it more accurately reflected the full multidisciplinary workforce within ACC.



Our Team

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AHP/Rehabilitation Developments

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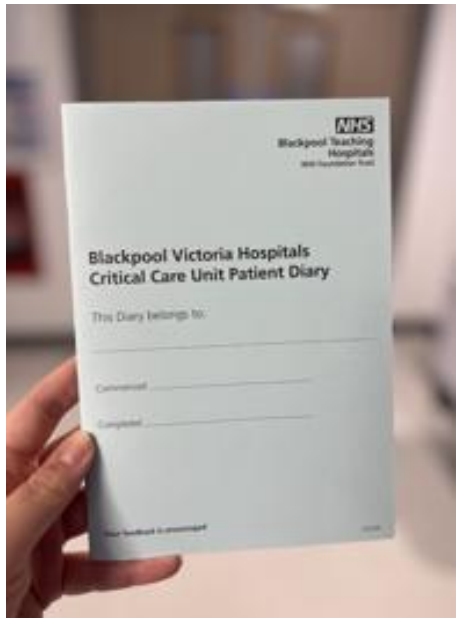
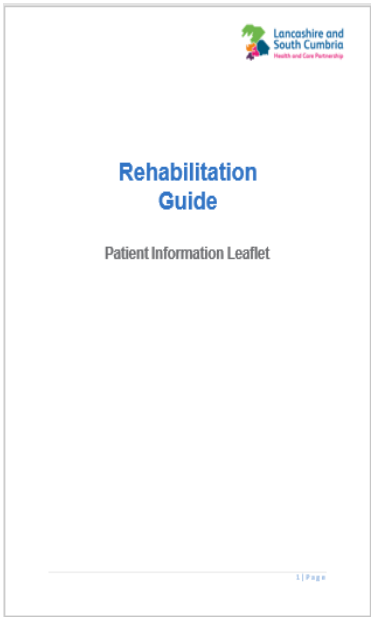
- Network groups
- Guidelines/SOPs
- Assessment templates
- Patient information
- Patient feedback
- Education
- Data/KPIs/Audit
- Development Frameworks
- Peer Reviews





Intensive Care Society

AHP Critical Care Capability Framework

Critical Care Monograph Project Driver Diagram

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Standardisation of medication and procurement of same

Harmonise IV drug administration and compliance with ICS guidance

- Develop intra-hospital forum within L&SC/Regional pharmacist/leads
- Understand current practice against ICS guidance
- Establish baseline of current local practices throughout L&SC

- Standardised Adult monographs
- Create paediatric monographs for possible RSV surge
- Aduit compliance against ICS guidance
- Collaboration with P.Ed on learning opportunities
- Scope national expansion nationally

Reduce IV volume of fluid input into critically ill patients

- Establish high volume infusions/current practice
- Collaborate with ICS & Medusa regarding development of critical care guidance
- Define staff development needs regarding change in practice

- Audit fluid balance accuracy
- Audit volume given of particular medications (IV bolus/infusion volume)
- Ped input and education regarding rationale behind lower volumes and fluid status
- Collaboration with clinical leads/prescribers regarding possible changes in practice and awareness of medication fluid volumes
- Collaboration with ICS and medusa, reduce volume ranges.

Improve Cost effectiveness of drug use

- Collaborate with procurement regarding high cost medications and consumables
- Education regarding bolus vs infusion vs NG
- Protocols for medication administration and prescribing

- Collaboration with Ped regarding developing Medication education for staff and prescribers
- Audit IV/infusion rates
- Audit spend
- Survey staff satisfaction

NHS
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Specialist Clinical Network

LANCASHIRE AND SOUTH CUMBRIA CRITICAL CARE INTRAVENOUS DRUG MONOGRAPHS

Drug preparation and administration guide

Lancashire and South Cumbria Critical Care Pharmacists| July 2024 |Version 7 Page 1

BNF
The first choice for concise medicines information
89
March – September 2025
BNF.org

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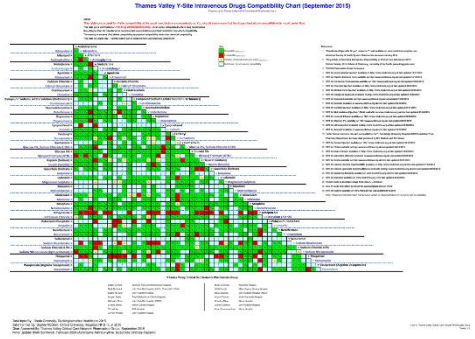
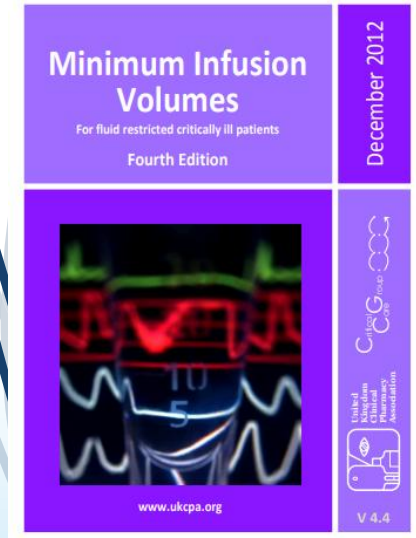




UKCPA Critical Care Group intensive care society 50

Standard Medication Concentrations for Continuous Infusions in Adult Critical Care

The Intensive Care Society supports the adoption of standard concentrations and endorses the recommendations of a multi-professional group who have published a list of concentrations with wide acceptance by critical care for this purpose [1,2,3].

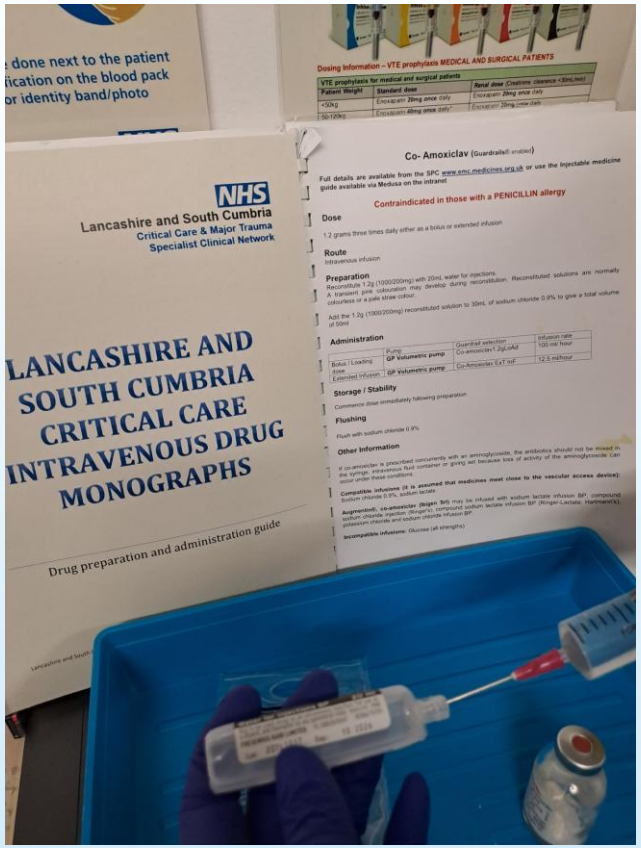
Standardising concentrations represents a significant step towards improving both patient safety and efficient use of resources within critical care. It also facilitates the production of a national injectables guide to provide the end user with the information necessary to safely administer such medications [4].

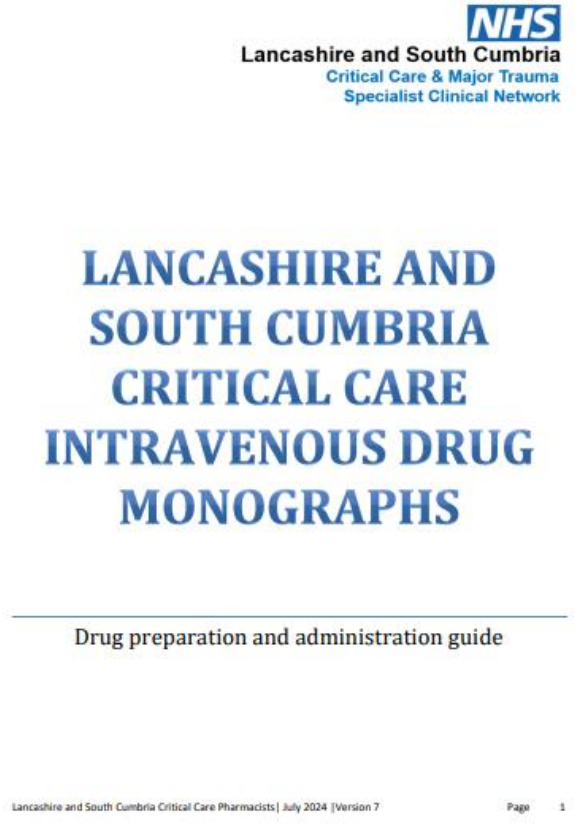
The adoption of these is recommended, not mandated. It is anticipated that pharmaceutical manufacturers will begin to prepare ready to use and ready to administer products based on this list.

Medication	Concentration	Example Infusion Composition	Central or Peripheral
Morphine	1mg/mL	50mg in 50mL	C / P
	2mg/mL	100mg in 50mL	C / P
Fentanyl	50micrograms/mL	2.5mg in 50mL	C / P
Alfentanil	500micrograms/mL	25mg in 50mL	C / P
Remifentanil	50micrograms/mL	2mg in 40mL	C / P
	100micrograms/mL	5mg in 50mL	C / P
Midazolam	1mg/mL	50mg in 50mL	C / P
	2mg/mL	100mg in 50mL	C / P
Clonidine	15micrograms/mL	750micrograms in 50mL	C / P
Dexmedetomidine	4micrograms/mL	200micrograms in 50mL	C / P
	8micrograms/mL	400micrograms in 50mL	C / P
Adrenaline	80micrograms/mL	4mg in 50mL 8mg in 100mL	C / P C / P
	160micrograms/mL	8mg in 50mL 16mg in 100mL	C C
	320micrograms/mL	16mg in 50mL 32mg in 100mL	C C
Noradrenaline	16micrograms/mL	4mg in 250mL	C / P
	80micrograms/mL	4mg in 50mL 8mg in 100mL	C C
	160micrograms/mL	8mg in 50mL 16mg in 100mL	C C
	320micrograms/mL	16mg in 50mL 32mg in 100mL	C C
Vasopressin (Argipressin)	0.4units/mL	20units in 50mL	C / P
Dobutamine	5mg/mL	250mg in 50mL 500mg in 100mL	C C

25 Published monographs available online

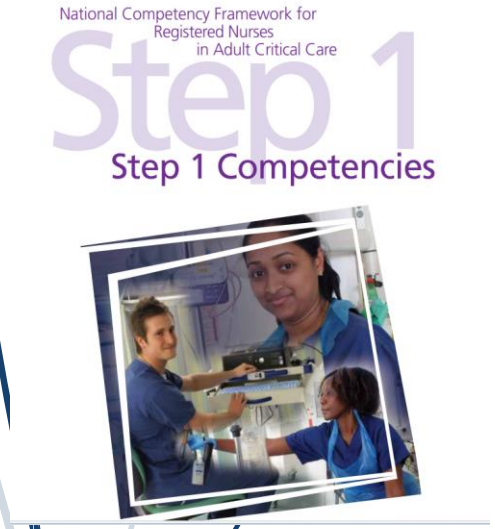
- **Other Outputs**
  - LSC Vancomycin Guideline
  - BLING III Project
  - HSJ Shortlisted 2025

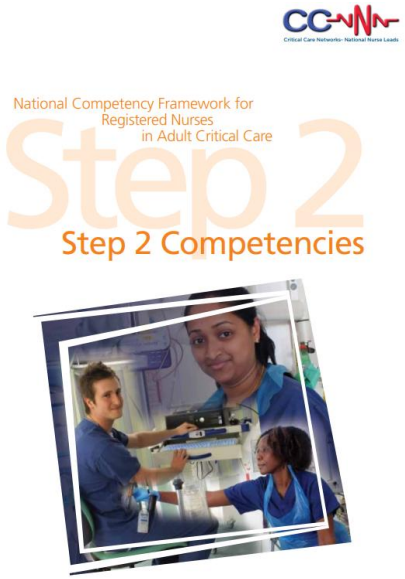


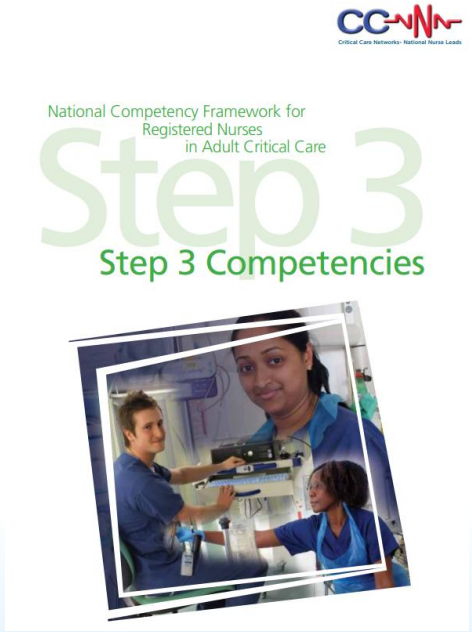


HSJ PATIENT SAFETY AWARDS

Lead Educator's role to service improvement.







Peer reviews highlighted gaps in step competency completion

Secondment role was created to facilitate Network level education to support step competency framework.

Initially education was for Registered Nurses with a focus on step competencies.

Study days were planned based on gaps in education around step and bolt on CC3N competencies.

Study days

- Rehabilitation Study day
- Neuro Study day
- Gastrointestinal disease study day
- HCSW competency study day – based on our Network HCSW competencies
- CCOT study day
- Step 4 senior leadership study day
- Online webinars
- Critical Care education Team's channel

Progress so far.....

Over 12 months.....

- 18 face to face study days at different sites across LSC.
- 12 online webinars – fully accessible to all teams.
- Total amount of attendees – 583 people
- Increase in RN steps proficiency completion.
- After 7 HSCW study days - 81% HCSWs attendance
- 79% completion of Network HCSW CC proficiencies.
- All education is available to all MDT members to support individual educational frameworks.
- All Critical Care unit's in LSC are now successfully onboarded to the digitised step competency platform

What have I gained from this experience

- Don't be frightened to step out of your comfort zone
- Take a risk when opportunities arise
- Developed my leadership skills
- Improved my confidence
- Built professional relationships in wider areas across the Network within MDT.
- Taken different approaches with educational strategies.
- CCNERF representation
- BACCN committee member

MDT impact on Service delivery improvements….

- Improved relationships within our teams – forums/study days.
- Raised awareness of the Critical Care Network and its responsibilities for all staffing levels.
- More focus on step proficiencies and other educational pathways, and completion within our wider MDT teams.
- Creation of a digital quarterly Newsletter to share progress updates and highlight key achievements.
- Quality Improvement projects completed and shared as a Network team.
- Shared learning.

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