



Lancashire and South Cumbria

Critical Care & Major Trauma
Operational Delivery Network

Quality Improvement Plan

for Adult Critical Care Services

2019 -2022

July 2019

| | |
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FOREWORD

This Quality Improvement Plan for Adult Critical Care Services sets out the network's commitment to ensure continuous quality improvement is at the heart of critical care services across Lancashire and South Cumbria. This plan should be read in conjunction with the network Delivery Plan for the Critically Ill Adult (2019) and forms part of the overall Network strategy for engaging with, monitoring and improving critical care services for our service users and associated stakeholders.

Although this Quality Improvement Plan aims to reflect the core quality improvement (QI) business of the network for the next 3 years, it will need to be reflective and responsive to national, regional and local intelligence to ensure it continues to focus improvement activities on relevant issues.



Claire Horsfield
Quality Improvement Lead Nurse

INTRODUCTION

Lancashire and South Cumbria Critical Care & Major Trauma Operational Delivery Network (LSC CCMT ODN) has produced this document in order to articulate the framework for quality improvement specifically across adult critical care services within our region. It is based on NHS principles for delivery of safe, effective and compassionate care and forms part of the wider Network Delivery Plan

Assuring our services are carried out according to best practice recommendations is a key component of network activity, and in addition to this, areas for improvement are continually being sought and robust mechanisms for improvement activity and measurement are actively encouraged and supported where possible.

TARGET AUDIENCE

The purpose of the ODN's Quality Improvement Plan for adult critical care services is to ensure that continuous quality improvement becomes part of the day-to-day service provision to critical care users, through the development and integration of clinical policy and evidence-based standards of practice, where this exists.

All staff across the Network who are involved in critical care service provision should be aware of this strategy, and understand the meaning of quality improvement, how this can improve critical care services and enhance outcomes for patients and staff.

KEY COMPONENTS OF A QUALITY CRITICAL CARE SERVICE

The L&SC ODN has centred quality improvement plans based on the themes identified in the Delivery Plan (2019) as identified below, however it is acknowledged that the majority of QI activity will centre on Theme 2: Improving Care.

L&SC ODN Delivery Plan: Themes

| | |
|---------|---|
| Theme 1 | • Operational Effectiveness and Consistency |
| Theme 2 | • Improving Care |
| Theme 3 | • Managing Patient Flows |

In order to achieve high-quality care a quality improvement process must be in place. Quality improvement must be driven by measurement and / or regular well conducted audit in order to identify defects in care and areas for improvement, and these are principles on which all quality improvement activity is based across the ODN.

IDENTIFICATION OF QI WORK STREAMS

Key quality improvement work streams are identified by the Network through various mechanisms including national policy, local need, research findings, clinical audit, benchmarking, peer review, ICNARC CMP network reports, national Quality Surveillance Programme (QSP) dashboards, clinical practice, user and carer feedback, and incident reporting. They will align and support the relevant work streams within the 'Healthier Lancashire and South Cumbria' (2019) plans. Available at:

<https://www.healthierlsc.co.uk/priorities>

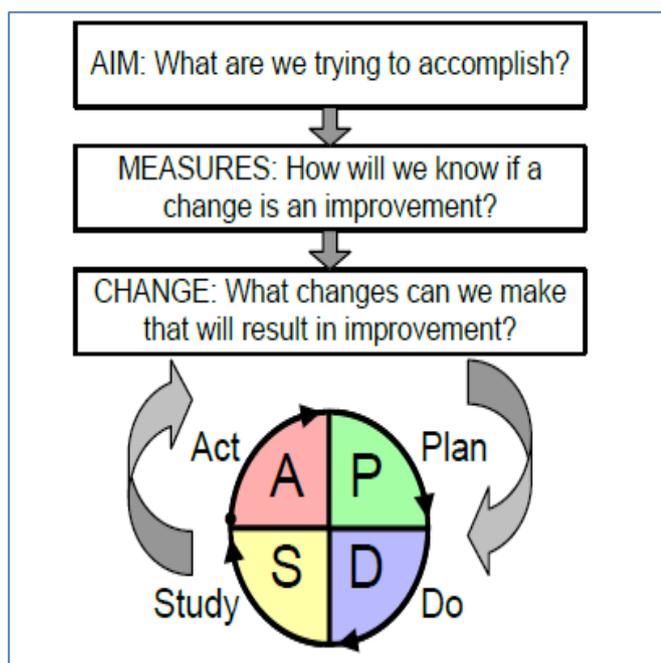
In collaboration with the ODN Director the Critical Care Clinical Effectiveness Group (CC CEG) will agree Network quality improvement and audit priorities, an annual work plan for implementation will be produced based on these priorities. The Network may also include plans for clinical audit in response to findings of local and or national reports and Care Quality Commissioning (CQC) reviews. At a Network level the CEG will support recommendations from emerging national guidelines and polices, by receiving and considering all relevant NICE guidelines and reports e.g. NCEPOD and supporting their implementation in critical care services as part of Network policy. The CC CEG will also be responsible for agreeing the quality improvement plan submitted for consideration by the ODN Quality Improvement Nurse Lead and Clinical Lead annually.

With regard evidence based practice, the service specification for adult critical care services (NHS England, 2019) states that critical care teams must be able to *'demonstrate effective implementation of evidenced based practice within Intensive Care Medicine'*. To support this, critical care professionals are supported by the 'Guidelines for the Provision of Intensive Care Services', (GPICS) (Intensive Care Society (ICS) and The Faculty of Intensive Care Medicine (FICM), 2019). The Network QI plan incorporates these guidelines as a central focus for activities to support clinical teams in measuring, improving and ultimately demonstrating compliance. The network QI plan can be found on page 9.

MODEL FOR IMPROVEMENT

Figure 2: Model for improvement

Critical care teams should be familiar with improvement methods which they use regularly, the Network advocates the use of the PDSA cycle (figure 2) as a model for improvement, as this allows changes to be tested on a small scale with a cyclical approach to evaluation and roll out. The Network also supports the personal development of critical care staff on a regular basis in the use of improvement tools and associated methodologies through provision of free training courses, which are accessible to all grades and professions of staff associated with critical care service delivery.



Staff should be encouraged and supported locally by clinical leaders to attend and access training in improvement methodologies. Further information about this and other quality improvement methodologies can be found on The Health Foundation website at: www.health.org.uk

LOCAL DELIVERY

Units should have nominated medical and nursing leads for quality improvement and audit. Appropriate time should be made available in job plans and off duty for these activities. The time required will depend on the size of the unit. Time to participate in audit and quality improvement programmes should also form part of the job plans of all Critical Care staff (medical, nursing, allied health professionals and ancillary). The Network supports this through the provision of funds to release clinical staff to undertake QI activities relating to the Network QI plan. This equates to one day per week of a band 6 Registered General Nurse. Local trusts are afforded the flexibility to utilise these funds as required to meet the requirements set out by the Network. QI projects should be multi-professional, recognising the need for a collaborative approach involving all staff groups. Projects need SMART objectives with clear statements of their aim and this should be measurable and have a time frame, e.g. “unit acquired pressure ulcer incidence will reduce by 50% as measured by clinical incident reports”

The Network QI Work Plan (appendix 1) is linked to this QI plan. Units should have robust data-collection systems in place to support the collection of activity and quality data for local and national audit programmes. Audits and QI activities should be targeted at problems where improvements in care can be made.

The ODN leads for Quality Improvement are the Clinical Lead and the Quality Improvement Nurse Lead. The ODN Director, members of the CC CEG and the unit Quality Improvement Leads (QuILs) will support the ODN Clinical Lead and Quality Improvement Nurse Lead in the implementation of the QI Plan and annual Quality Improvement activity. The ODN Clinical Lead and Quality Improvement Nurse Lead will co-ordinate the implementation of the Quality Improvement Plan working with other critical care staff and members of the Quality Improvement Leads Forum within Governance Structures identified within the ODN Plan. Effective communication and cross membership with other ODN groups is also essential, particularly the ODN Quality Improvement Leads Forum, Medication Group, Rehabilitation Group, Workforce Education and Training Group, Outreach Group, Transfer Group and local Critical Care Operational Groups (or equivalent). The ODN Communication Plan outlines the process for communication within and across the Network.

MONITORING PROGRESS

Quality improvement must be supported by regular measurement, e.g. monthly review of patients readmitted after discharge from ICU. Charts can be simple “run charts”, and the construction and display of such charts should form an integral part of a quality improvement process. Results should be made available to staff, patients and carers, and this is the responsibility of unit Quality Improvement Leads.

The Network will collect, monitor and report on data received in order to assess progress against quality improvement plans. Data can take multiple forms such as;

- Key Performance Indicators
- Monthly clinical incidents
- Patient flow data
- Quarterly reports from local QuILs
- ICNARC CMP reports
- Network/local audits

All units must also participate in the National database for adult critical care, and turnaround times for data submission and validation will also be monitored on a quarterly basis.

Reports on progress against quality improvement plans will be produced quarterly by the ODN Quality Improvement Nurse Lead. These reports will include information and data reports submitted by the local unit QULLs, and any data or information submitted to the Network should be agreed through local governance processes prior to submission. Network reports will be shared with key ODN group members and the local QULLs are responsible for wider dissemination and reporting within their teams as per recommended ODN Governance structures.

The ODN Quality Improvement Nurse Lead and Clinical Lead will report quarterly to the CC CEG progress against quality improvement plans, and also identify any areas of concern or lack of progress.

The CC CEG will support quality improvement activity by promoting effective partnerships and multi-collaborative working within and across organisational boundaries. CC CEG members will make recommendations to the ODN Board via the ODN Director for practice and resource utilisation based on audit results. The ODN governance process is outlined within the ODN Plan.

CONCLUSION

The Network has set out a plan for critical care quality improvement that forms part of the wider ODN Delivery Plan, with priorities identified according to information received and appraised. Multiple sources of information will inform this programme including but not limited to; clinical policy, clinical audit, guideline development, integrated care pathways, benchmarking, research, innovation and service evaluation. Key work streams will enable the CC CEG to focus plans of action through the ODN Quality Improvement Leads Forum in order to continue the development of high quality services.

The organisational benefits and risks have been considered and the implementation structure and processes for delivering the strategy outlined. The Network systems and processes for effectiveness will thus be strengthened.

A QI Work Plan linked to this QI plan has been developed (appendix 1) and submitted via the CC CEG to the ODN Board for approval, additionally, quarterly and annual QI reports will be made available and presented to the CEG and ODN Board. In order to ensure responsiveness, the Network may need to adapt plans in year to address issues that are identified through the CC CEG or in response to national or regional priorities requiring improvement; hence the QI activities identified on page 9 will be reviewed annually to support the 3 year ODN Delivery Plan.

LSC ODN CRITICAL CARE QI PLAN 2019-2022

OPERATIONAL EFFECTIVENESS & CONSISTENCY



Safe Critical Care Patient Transfers

- Quarterly audit of transfer forms
- Agree & roll out new SCITT programme
- Monitor transfer training local delivery through peer review processes



Safe Administration of Medications in Critical Care Areas

- Benchmark specialist pharmacist provision
- Monthly incident reviews to identify themes for improvement
- Review Network medication standards
- Repeat observational survey of IV administration practice



Improve Safety Culture

- Monthly critical incident reviews ; lessons learned to be shared via network quarterly QI report
- 3 yearly safety climate survey, local reports and feedback via CEG
- Production of quarterly QI report and dissemination via website, and network distribution lists



Patient Feedback & Engagement

- Patient feedback survey every 3 years
- Local patient and family engagement events annually
- Review and publish patient engagement strategy
- Deliver study event pilot for all critical care staff and patients /families to showcase the impact of follow up clinics



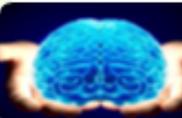
Workforce Development

- Develop senior staff nurse leadership skills and knowledge through twice yearly study day delivery with network faculty
- Follow up improvement project presentation days every 6 months
- Review and produce pocket book to support staff in the recognition and escalation of acutely unwell patients
- Provide solution focused therapy training opportunities for any critical care staff who are involved in supporting patients through critical care recovery
- Delivery annual QI event including award for winner of quality improvement project



Evidence Based Practice

- Benchmark GPICS V2 and develop network action plan according to results
- Support local delivery of action plan through network forums
- Demonstrate year on year improvement in compliance



Reduce Risks of Delirium

- Implementation of delirium prevention (DREAMS) bundle.
- Support Quills to improve DREAMS bundle compliance and report results quarterly
- Audit pain and sedation protocols and practice and develop actions to promote standardised approach and evidence based practice
- Review rehabilitation patient information 2021



Data Collection & Monitoring

- Receive local and network ICNARC reports and highlight issues for escalation
- Review unit SSQD dashboards and provide comparative reports for CEG & ODN Board
- Monthly incident report reviews to identify trends for escalation
- Support trusts to utilise data to highlight patient flow issues that may impact on provision of high quality timely care for critically ill patients.



Supporting Effective Patient Pathways

- Monitor incident reports relating to specific patient pathways e.g. single organ renal failure, delayed repatriation
- Liaise with specialist clinicians /referral destination site to develop plans to support development of systems in order to improve patient flow, which will promote effective resource utilisation and safe patient placement.

IMPROVING CARE

Managing Patient Flows

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APPENDIX 1: LSC ODN CRITICAL CARE QI WORK PLAN

Appendix 1: Lancashire and South Cumbria (LSC) Adult Critical Care Work Plan 2019 -2022

The following programme outlines the current and scheduled work programmes in progress within LSC and should be read in conjunction with the LSC Critical Care Delivery Plan and QI plan 2019-2022.

Table key for abbreviations:

| | | |
|---|--|--|
| AB: Andrea Baldwin CH: Claire Horsfield PD: Paul Dean DB: Dorothy Bailey | ODNB: ODN Board (Co-Chairs Karen Partington and Ian Stanley) CEG: Clinical Effectiveness Group (Chair: AB) QILs: Local Quality Improvement Leads Group (Chair: CH) WEaT: Workforce, Education & Training Group (Chair: AB) ORG: Outreach Group (Chair: AB) | RG: Rehabilitation Group (Chair: Nicky Williams- NW) MSG: Medication Safety Group (Chair: CH) TG: Transfer Group (Chair: Mike Entwistle –ME) IS: Independent Sector Group (Chair: AB) |
|---|--|--|

| Category | Project No. | Title | Aim | Actions | Lead(s) | Target date/ status |
|---|-------------|---|--|---|---|--|
| Operational Effectiveness and Consistency | 1. | Safe Critical Care Patient Transfer (SCITT) | To ensure high quality transfer of critically ill patients | <ul style="list-style-type: none"> Quarterly audit of transfer forms and feedback via transfer forum Develop newsletter style method of feedback across network Agree updated e learning system across NW and roll out Monitor quality of transfer training through peer review process Engage with Major trauma colleagues to ensure consistent approach to staff training and equitable high quality patient transfers | ME & TF CH/ME/DB AB/CH/ME Peer review teams AB/CH | On going July 2019 September 2019 Alternate years On going |
| | 2. | Safe Administration of Medications in | To ensure safe administration of medications | <ul style="list-style-type: none"> Benchmark specialist pharmacy provision Receive and review monthly incident reports to identify themes and areas for improvement | CH CH | Completed Sept 2018 On going |

| Category | Project No. | Title | Aim | Actions | Lead(s) | Target date/ status |
|----------------|-------------|---------------------------------|--|---|--|---|
| | | Critical Care Areas | according to evidence based practice in critical care areas | <ul style="list-style-type: none"> Review network medication standards and roll out across network Carry our survey to assess current practice for sedation and develop action plan according to results | MSG MSG | Completed Feb 2019 July 2019 |
| | 3. | Safety Culture in Critical Care | To ensure safe culture across all critical care teams | <ul style="list-style-type: none"> 3 yearly safety climate survey Provide network and local feedback to CEG and units Identify any areas for improvement and action accordingly Produce quarterly QI report and disseminate across all network contacts. | CH CH CEG CH | On-going – due 2021 On going |
| | | | | | | |
| Improving Care | 4. | Patient Feedback & Engagement | To ensure patient feedback and experience is central to network quality improvement activity | <ul style="list-style-type: none"> Undertake patient feedback survey every 2 years Facilitate patient feedback events for each unit every year Review and publish patient engagement strategy Organise and deliver symposium for AHP staff to focus on follow up clinics and AHP contribution to patient recovery | CEG AB/CH AB CH, NW & DR. Emma Jackson | Feb 2021 Annually June 2019 November 2019 |
| | 5. | Workforce Development | To support development of highly skilled | <ul style="list-style-type: none"> Deliver biannual senior staff nurse development days with faculty from across the network Facilitate follow up day 6 months after senior staff nurse development days to enable | CH & WEaT CH & Faculty | On going On going |

| Category | Project No. | Title | Aim | Actions | Lead(s) | Target date/ status |
|----------|-------------|-------------------------|---|--|---|--|
| | | | workforce | <p>attendees to present improvement projects</p> <ul style="list-style-type: none"> Review pocket book and redistribute to staff to support the timely recognition of acutely ill adults in hospital. Arrange delivery of Solution Focused Therapy training event for staff involved in patient recovery Deliver annual QI event including award for QI project | <p>CH & ORG</p> <p>CH & RF</p> <p>CH & DB</p> | <p>July 2019</p> <p>Feb 2020</p> <p>Annually</p> |
| | 6. | Evidence Based Practice | To Ensure Critical Care Practice is Evidence Based | <ul style="list-style-type: none"> Benchmark GPICS V2 and develop network action plan according to results Support delivery of above action plan through relevant network groups Demonstrate year on year improvements in compliance | <p>CH, PD & QuILs</p> <p>All</p> <p>All</p> | (ICS Tool dependant) |
| | 7. | ICU Delirium | To reduce the risks of critical care patients developing delirium | <ul style="list-style-type: none"> Implementation of delirium prevention (DREAMS) bundle Demonstrate improving compliance with DREAMS bundle elements Carry out survey of pain and sedation assessment and practice and develop action plan accordingly Review 'Road to Recovery' information for patients and redistribute | <p>CH & QuILs</p> <p>QuILs</p> <p>CH & MSG</p> <p>CH,NW &RF</p> | <p>April 2019</p> <p>On going</p> <p>July 2019</p> <p>Feb 2021</p> |
| | | | | | | |

| Category | Project No. | Title | Aim | Actions | Lead(s) | Target date/ status |
|------------------------|-------------|---------------------------------------|--|--|---------------------------------------|--|
| Managing Patient Flows | 8. | Data Collection & Monitoring | Ensure Data Collection Systems are Timely, Reliable, Relevant & Meaningful | <ul style="list-style-type: none"> • Receive local and network ICNARC reports and highlight issues for escalation • Review unit QSP dashboards and provide comparative reports for CEG & ODN Board • Monthly incident report reviews to identify trends for escalation • Support trusts to utilise data to highlight patient flow issues that may impact on provision of high quality timely care for critically ill patients. | AB & Network Team AB CH | On going Biannual Ongoing - Quarterly Ongoing - Quarterly Ongoing - Quarterly |
| | 9. | Supporting Effective Patient Pathways | Ensure patient pathways are effective, timely and equitable | <ul style="list-style-type: none"> • Monitor incident reports relating to specific patient pathways e.g. single organ renal failure, delayed repatriation • Liaise with specialist clinicians /referral destination site to develop plans to support development of systems in order to improve patient flow, which will promote effective resource utilisation and safe patient placement. | CH CH & Network team | Ongoing – monthly Ongoing – as required |