

IMPROVING UNWARRANTED CLINICAL VARIATION IN LANCASHIRE AND SOUTH CUMBRIA



INTEGRATED CARE SYSTEM REPORT

PRODUCED BY THE ADVANCING QUALITY PROGRAMME
FOR NORTH WEST MEMBER ORGANISATIONS

Why participate?

AQ is a data-driven improvement programme. Our analysis and reporting shows you where you are doing well and where you could do even better. Our specialist analysts and improvement team support you to translate improvement plans into action, and we can proudly demonstrate improvements to patient care.

700,000 patient pathways

AQ data is uniquely validated, giving a clearer picture. We've collected data on over 700,000 patient pathways since 2008.

Clinical leadership and engagement

AQ focus areas are supported by our specialist clinical leads. Our network connects clinical teams and helps them to work together.

21 trusts, 37 sites, 78 teams

AQ's improvement community comprises 200 + clinicians and improvers, sharing successes and tackling common challenges.

Improving patient care and experience

Evidence-based benefits of AQ include reduced bed days for acute kidney injury patients and reduced unwarranted variation in hip & knee replacement. AQ participation also correlates with lower risk-adjusted mortality for sepsis.

What we've done 2022/23

AQ was shortlisted for the 'Driving Change through Data and Analytics' Award at the 2023 HSJ Digital Awards for our data-based improvement methodology.

We have worked with Dr Dan Wootton (AQ **hospital acquired pneumonia** clinical lead) and the University of Liverpool, exploring the impact of HAP and generating statistics on incidence in England.

An example of AQ's other research projects includes a publication in the [British Medical Journal](#) authored by our **community acquired pneumonia** clinical lead, Dr Bis Chakrabarti.

2022/23 saw a welcome return to face-to-face events, with our **sepsis, acute kidney injury** and **hip & knee replacement** collaboratives bringing people together to share good practice, discuss common challenges and support one another. The events attracted well known guest speakers, including Dr Ron Daniels from the UK Sepsis Trust.

Our round table events provided a forum for clinical leaders to share experiences, bringing clinical insight to AQ data and enabling the development of improvement plans.

Coming up 2023/24

Our clinical measure sets define what good care looks like for our six focus areas. To keep them relevant and ensure we continue to drive improvements in patient care and experience, we convene **Clinical Expert Groups**. This year, we'll review our measures for **sepsis**, with other focus areas to follow.

We continue to build our digital capacity, allowing teams easy access to input data, and programme and learning e-resources to help build capability.

We have a busy year of events ahead, including round tables and collaboratives for all six of our clinical focus areas. Follow us on X (Twitter) at [@Aqua NHS](#) to see what we're doing when. We welcome ideas for key topics and sharing improvement stories.

We're launching monthly drop in sessions to provide on-the-spot improvement support and we'll continue to showcase teams' work in case studies via the [Aqua website](#).

We're continuing to use our data in research to provide unique insights into NHS care, such as the impact of high-quality care on length of stay for patients with **acute kidney injury**.

What AQ can tell you



Advancing Quality (AQ) is a quality improvement programme operating across north west England and is part of the Advancing Quality Alliance (Aqua). We collect data about acute kidney injury (AKI), decompensated liver disease (DLD), community and hospital acquired pneumonia, sepsis and elective hip and knee replacement. Our validated, enriched dataset is the bedrock of our improvement work and allows us to produce insights not available from standard NHS data.

AQ offers the north west regular, detailed, QI-focussed analysis and support and this report provides an overview for Lancashire and South Cumbria in 2022.

2022 headline opportunities

ICS participation & engagement

Historically Trusts from across Lancashire and South Cumbria (L&SC) have actively participated in the AQ programme, with good engagement from clinical leaders and their multidisciplinary teams. This has included using data to identify where unwarranted variation exists and working with us to implement, capture and share the results of improvements. While those Trusts still participating in the programme are active members of the network who regularly share good practice, the ICS would benefit from widening participation to East Lancashire Hospitals. The results from 2022 show some excellent results and the system's Trusts regularly support other AQ organisations, for example developing inpatient sepsis pathways. It has been particularly good to see Blackpool Teaching Hospitals engaging so strongly with the programme in 2022.

Reducing unwarranted variation

AQ's historic data show a strong track record in tackling and reducing unwarranted variation and developing highly reliable care with evidence of continuous improvement. However, pressures on hospital Trusts to recover from the impact of the pandemic are significant and the impact of the NHS response to the COVID-19 pandemic is evident in worsened performance rates and widening variation between Trusts.

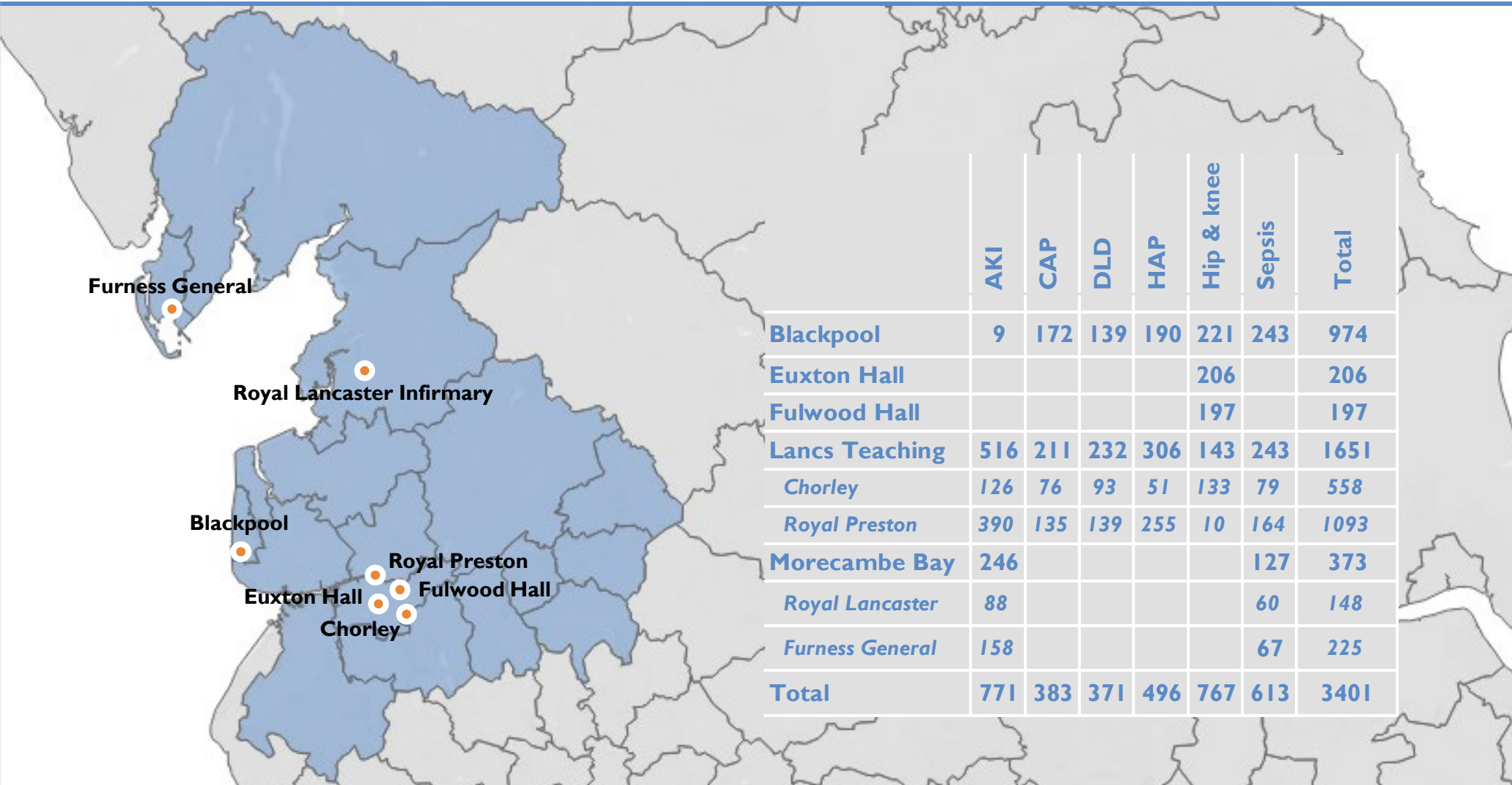
How Advancing Quality can help

As the UK's longest running unwarranted clinical variation programme, AQ provides Trusts across the North West and beyond with significant opportunities to improve patient care. This includes engaging and equipping clinicians to use data to measure care quality and reliability, along with a QI based approach to deliver improved outcomes. Being part of our large network also enables clinical teams to capture and share best practice, as well as learning from other organisations. There remain significant opportunities for L&SC Trusts to increase levels of participation, drive more focused improvement activities and to work with the team at Aqua to develop new clinical focus areas in 2023-24

Find out more >>

Condition-specific analysis, visualisations and insights

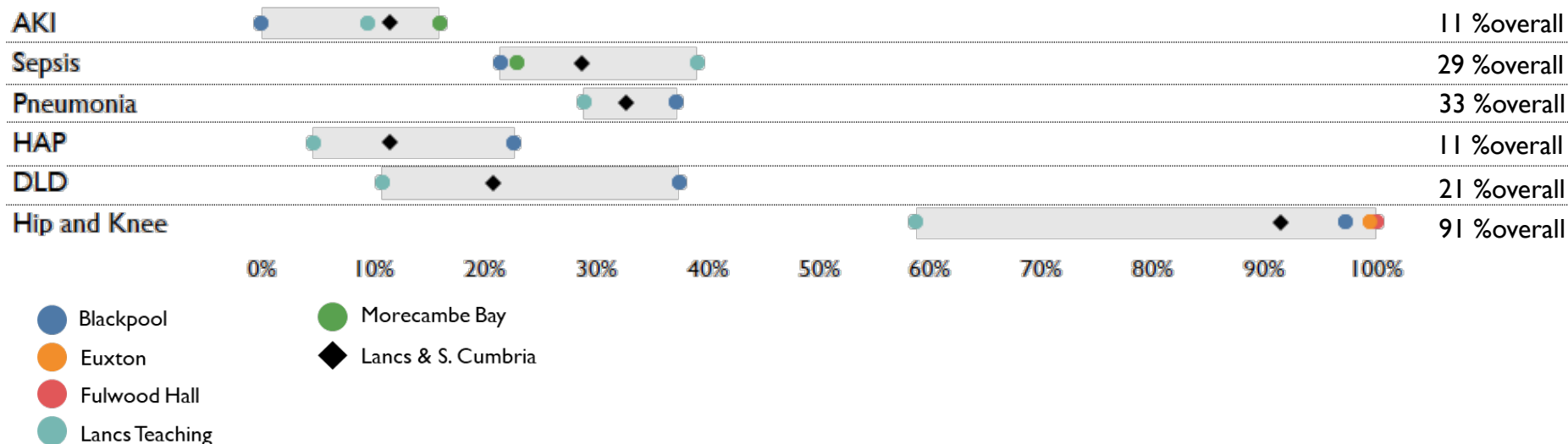
PARTICIPATING ORGANISATIONS ACROSS AQ CLINICAL FOCUS AREAS IN LANCASHIRE & SOUTH CUMBRIA 2022



Five of the six Lancashire and South Cumbria acute providers and two independent hospitals collected data in 2022 to address unwarranted clinical variation in care delivered to patients; one of the ICS's biggest providers, East Lancashire Hospitals NHS Trust do not currently participate. This rich dataset details the treatment delivered to 3,400 patients. The table shows the number of validated cases by AQ clinical focus area; where a Trust has no figures, they did not participate in that focus area in 2022.

UNWARRANTED CLINICAL VARIATION IN LANCS & SOUTH CUMBRIA

This chart shows variation in 'perfect care' (patients who received all the AQ measures they were eligible for) between Lancs & South Cumbria trusts. Coloured dots represent individual trusts and the black diamond shows Lancs & South Cumbria overall.



2022 INSIGHTS

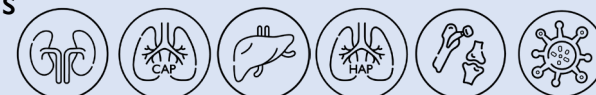
Headline

The care delivered for elective hip and knee replacements was best overall; most providers met all standards for 95% of patients. However, levels of variation were wide indicating opportunities to improve. We are working with our clinical experts to consider how to measure the impact of huge increases in waits for these patients.

Headline

The most significant opportunities for improvement are in the treatment of patients with hospital acquired pneumonia and acute kidney injury. Only 1 in 10 patients are currently meeting agreed care standards, far below levels elsewhere in the region.

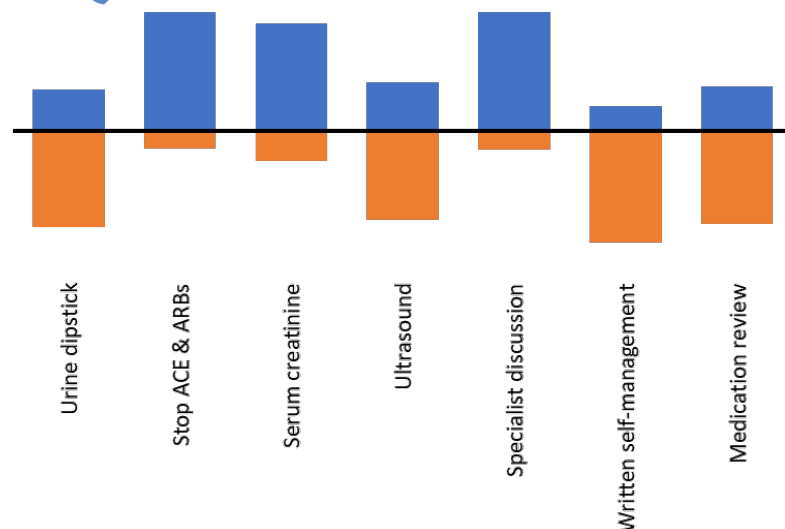
See the following pages for detailed information about performance in each of our clinical focus areas.



Acute Kidney Injury in Lancashire and South Cumbria



The AQ measures in 2022



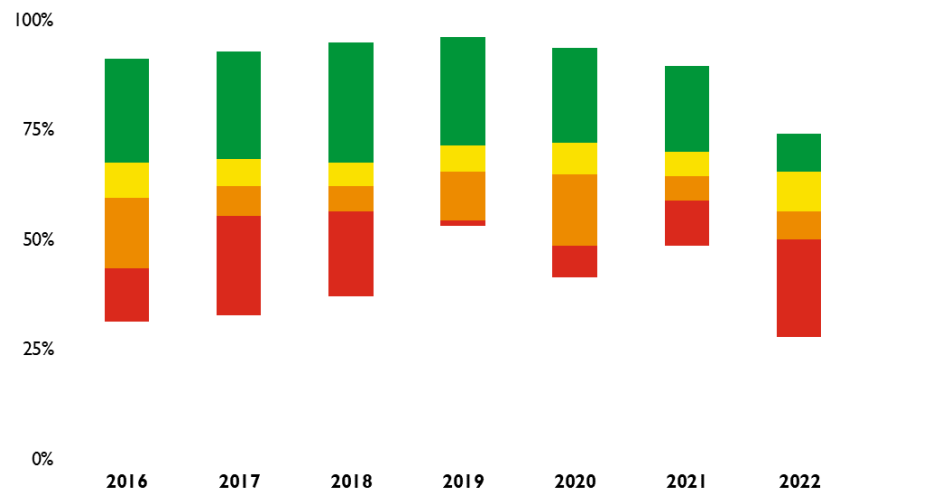
2022 Findings

In 2022, AQ validated acute kidney injury (AKI) patients in Lancashire & South Cumbria (L&SC; n=770) had more favourable outcomes reported than elsewhere in the North West. There remains significant opportunities to improve; patients spent an average of 13 days in hospital, 13% died in hospital and 16% were readmitted as an emergency within 30 days.

Participation in the AQ AKI clinical focus area has been inconsistent over time and the small number of Trusts involved mean that it is more meaningful to look at composite process score trends for the whole of the North West. Trends show improvements in scores and narrowing of variation 2016-2019. In 2020-2021 scores remained high, but levels of variation between Trusts widened and in 2022 overall performance declined.

Trusts have put in place some successful improvement initiatives; for example, Lancashire Teaching have developed a new peri-operative AKI bundle with pre-operative risk assessment tools and have plans to develop their AKI nurse service.

Trends in NW AKI Composite Process Score 2015-22



2022 Insights

Trusts in L&SC have the highest rates in the North West for timely repetition of serum creatinine testing and for specialist or critical care team review, both of which allow the severity of the disease to be better understood in order to optimise treatment decision making.

However, L&SC Trusts have lower rates for urine dipstick testing than elsewhere in the North West (just 30% compared with around 50%); this is a simple, effective and inexpensive diagnostic test that can identify conditions that can be treated to either prevent AKI or reduce its severity and avoid more serious consequences.

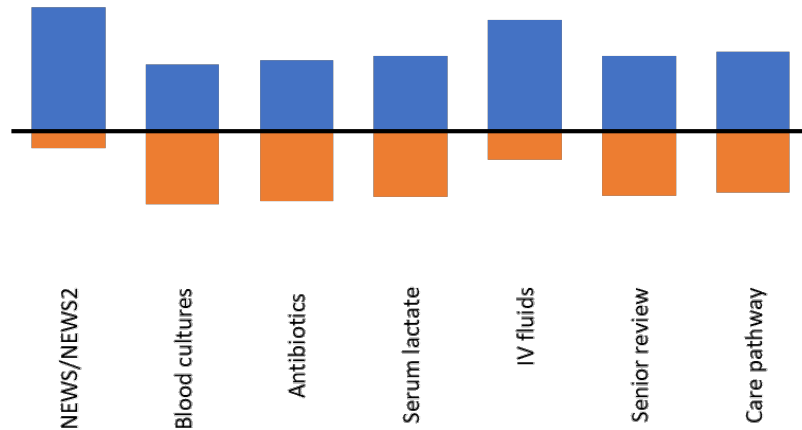
Rates are also low for provision of written self-management information to patients prior to discharge. Only 1 in 5 L&SC patients received this in 2022, compared with 1 in 2 elsewhere.

11% received perfect care

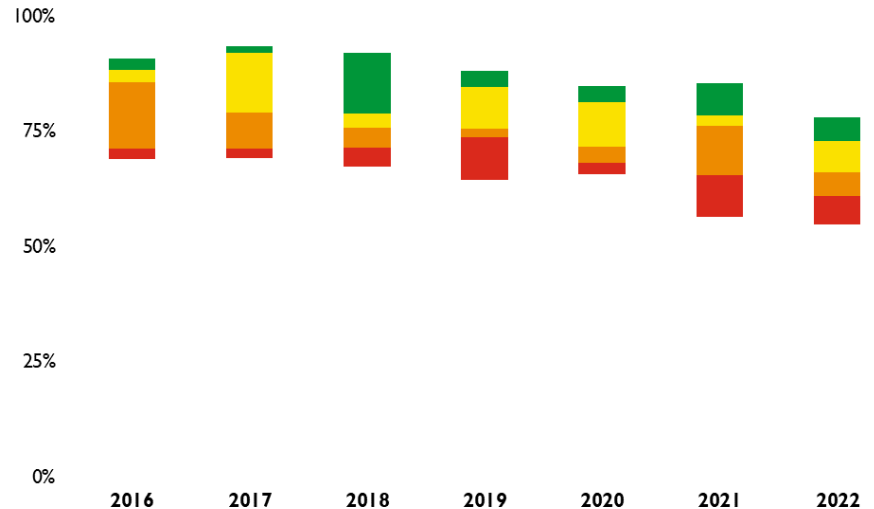
Sepsis in Lancashire and South Cumbria



The AQ measures in 2022



Trends in NW Sepsis Composite Process Score 2015-22



2022 Findings

In 2022, AQ validated sepsis patients in Lancashire & South Cumbria (L&SC; n=613) spent an average of 8 days in hospital, which is similar to elsewhere in the North West. 13% died in hospital and 17% were readmitted as an emergency within 30 days, which is lower than elsewhere in the North West.

Participation in the AQ sepsis clinical focus area has been inconsistent over time and the small number of Trusts involved mean that it is more meaningful to look at composite process score trends for the whole of the North West. The trends show that while there have been no increases in unwarranted clinical variation between Trusts in recent years, there has been a decline in the score overall, which indicates the numbers of measures being passed. This suggests the systems in the region should re-focus efforts into improving the care delivered to sepsis patients across all of the measures.

There have been some good improvement initiatives in the region, including the implementation of sepsis dashboards and revised frameworks, as well as pocket card reminders for staff at Lancashire Teaching hospital.

2022 Insights

Fewer than 1 in 3 patients received care that met all standards; 88% recorded an early warning score and 79% received IV fluids within an hour of arrival.

There remain significant opportunities to improve sepsis care; the L&SC system falls behind Trusts in the Greater Manchester and Cheshire and Merseyside systems for most of the sepsis measures in 2022.

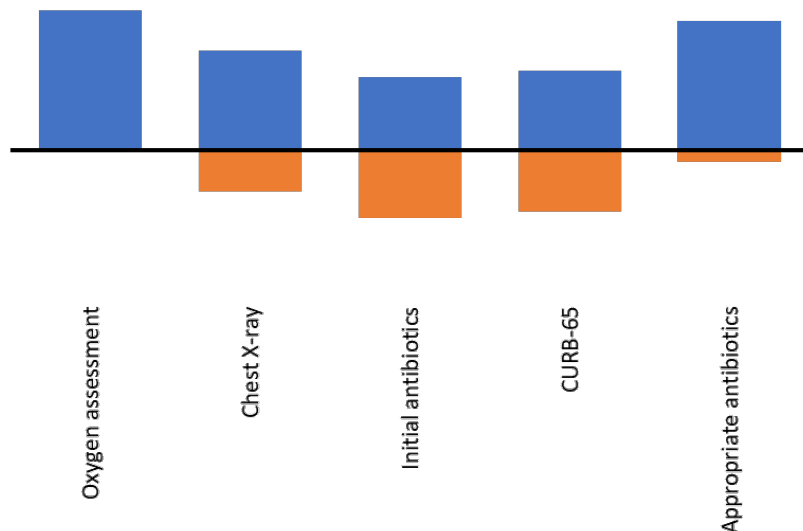
For three of the sepsis six measures (taking blood cultures, administration of antibiotics and measurement of serum lactate within an hour) only 1 in 2 L&SC patients are receiving what clinicians have agreed good care looks like. The system should focus on improving the proportion of patients receiving these measures in order to improve outcomes.

29% received perfect care

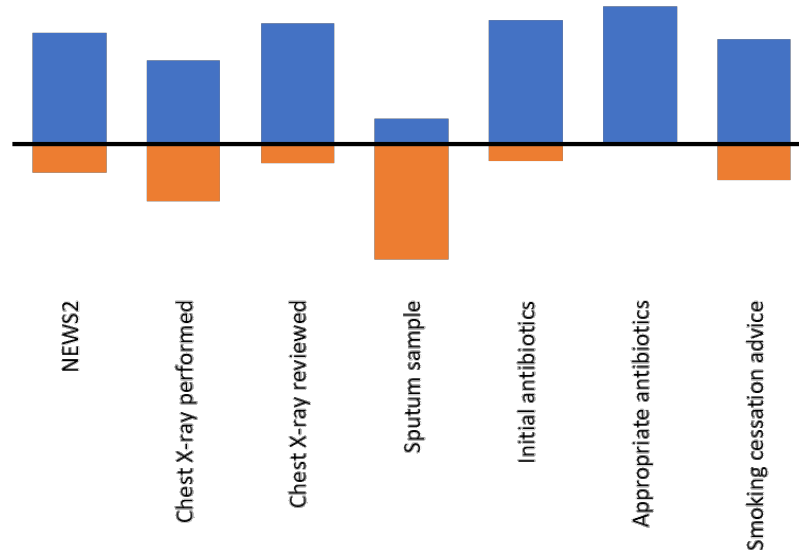
Community and Hospital Acquired Pneumonia in Lancashire and South Cumbria



The CAP AQ measures in 2022



The HAP AQ measures in 2022



2022 Findings

In 2022, AQ validated community acquired pneumonia (CAP) patients in Lancashire & South Cumbria (L&SC; n=383) spent an average of 6 days in hospital, which is higher than the other systems in the North West. 9% of CAP patients died in hospital and 15% were readmitted as an emergency within 30 days, which is lower than elsewhere.

In 2022, AQ validated hospital acquired pneumonia (HAP) patients in L&SC (n = 496) spent an average of 21 days in hospital. 16% died in hospital and 19% were readmitted as an emergency within 30 days. L&SC benchmark well for HAP outcomes compared with the other systems in the region. However, there remain significant opportunities for the Lancashire & South Cumbria system to improve outcomes for people with pneumonia.

Trusts in the region have implemented some excellent improvement initiatives, for example the Blackpool Teaching team have developed a CAP dashboard and care bundle, and also trialled a care bundle to prevent HAP.

2022 Insights

L&SC Trusts report excellent results for HAP patients receiving initial and appropriate antibiotics compared with Trusts elsewhere in the region.

As with sepsis, the Trusts in L&SC benchmark poorly on NEWS2 and the system may want to consider an improvement focus on deteriorating patients across sepsis, AKI and pneumonia.

Only 1 in 3 patients with CAP and 1 in 10 with HAP are receiving what clinicians agree is good care across the region and the system may want to consider a collaborative approach to improvement.

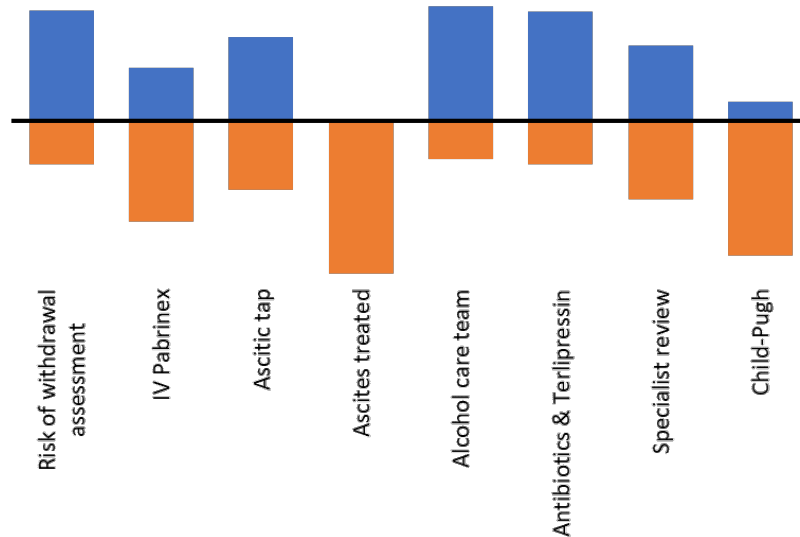
33% received perfect care

11% received perfect care

Decompensated Liver Disease in Lancashire and South Cumbria



The AQ measures in 2022



2022 Findings

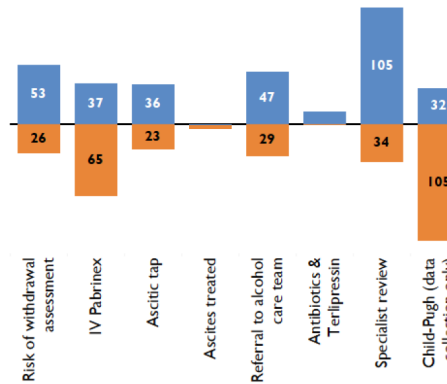
In 2022, AQ validated decompensated liver disease (DLD) patients Lancashire & South Cumbria (L&SC; n=371) spent an average of 7 days in hospital. 4% died in hospital and 25% were readmitted as an emergency within 30 days.

The majority of the data for this system comes from Lancashire and more recently Blackpool Teaching hospitals, so looking at trends and unwarranted variation for the system is of limited use. The numbers of patients are relatively small compared with other clinical focus areas; crude mortality rates are significantly below what might be expected when compared to elsewhere in the region.

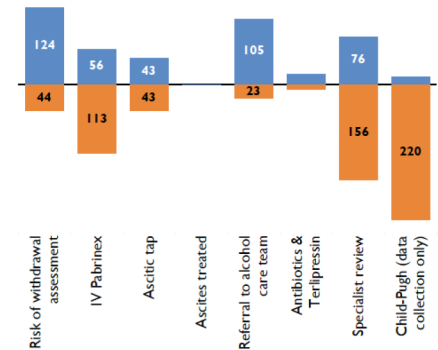
Investment in clinical leadership and establishing dedicated improvement groups focussing on DLD management would help drive improvement.

Improvement opportunities

Blackpool Teaching



Lancashire Teaching



2022 Insights

Despite having better reported outcomes to the other systems in the North West, the L&SC Trusts have worse performance across most of the measures. Only 1 in 5 DLD patients in the system receive the care clinicians would recommend.

Of particular concern is that only 1 in 3 patients are receiving IV Pabrinex within 8 hours of hospital arrival. Pabrinex contains water soluble vitamins which can be severely depleted in patients presenting with alcoholism. As these vitamins are not produced by the body, only obtained from diet, it is essential to ensure that they are replaced to help prevent serious complications such as encephalopathy.

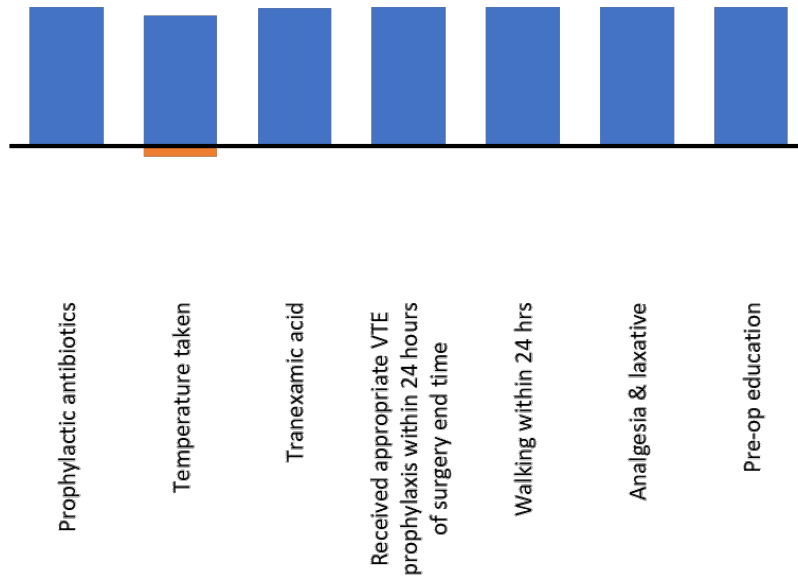
The system also has low levels of specialist review, received by only half of patients. Patients with alcohol related or decompensated disease usually present with complex medical problems, with a high severity of illness. Review and/or admission under the direct care of a gastroenterologist or hepatologist would aid in the treatment of this condition.

21% received perfect care

Hip & Knee Replacement in Lancashire and South Cumbria



The AQ measures in 2022



2022 Findings

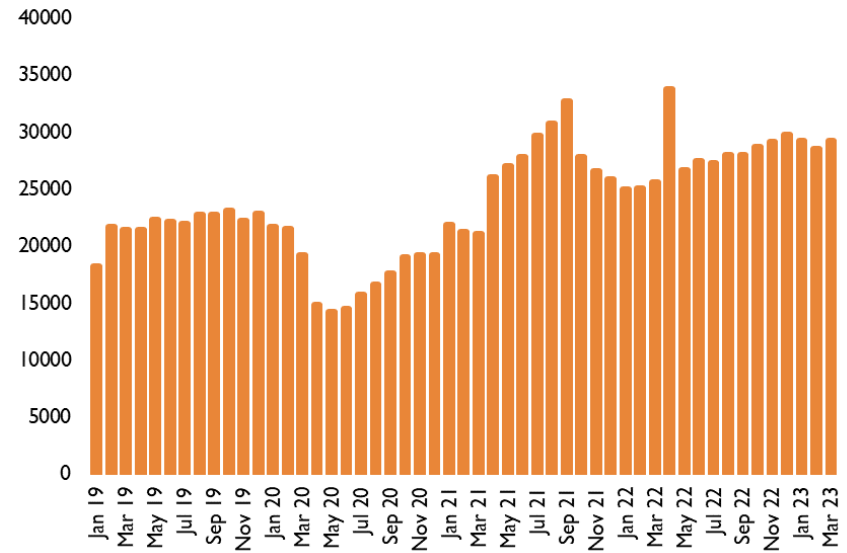
In 2022, AQ validated elective hip and knee replacement patients in Lancashire & South Cumbria (L&SC; n=767) spent an average of 2 days in hospital, similar to other systems. 5% were readmitted as an emergency within 30 days.

Performance across the AQ standards was consistently high for Trusts in L&SC and across the rest of the North West, but these data only reflect the experience of those being treated and miss the experience of those waiting.

The number of people on the trauma and orthopaedics waiting list in L&SC has increased significantly since 2019.

The AQ team have been working with clinical leaders and improvement teams across the North West to explore how shared decision making approaches might inform work to improve the experience of waiting for hip and knee replacements.

Trends in Trauma and Orthopaedic waiting list – Lancashire & S Cumbria 2019-2023

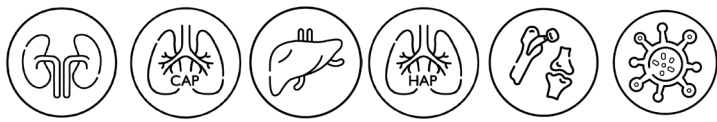


2022 Insights

Performance across both NHS and independent providers in L&SC is high for all hip and knee measures. The only area for potential improvement indicated by the data is recording of temperature being taken at Lancashire Teaching hospital.

In 2024, the elective hip & knee measure set will be reviewed to ensure that the programme is assessing relevant aspects of care, and to better capture the patient's experience. Teams are looking to work with AQ to explore the best approaches to pre-operative education, for managing patient expectations and reducing readmission.

91% received perfect care



How we're working with you to reduce unwarranted clinical variation

Tackling unwarranted variation

AQ is the UK's longest running clinical continuous improvement programme. Across more than a decade, we've built our network of improvers and established a proven approach to tackling unwarranted variation. Our data shows significant improvement opportunities for your Trusts, including:

Timely drug administration

Use of severity risk tools

Implementation of care pathways

Senior and specialist review

Trust reports

Alongside regular monthly reports on performance and patient outcomes, each of your participating Trusts has received their own 2022 Annual Report including a detailed breakdown of performance, highlighted improvement opportunities and bespoke recommendations:

[Blackpool](#)

[Lancashire Teaching](#)

[Morecambe Bay](#)

Driving continuous improvement across Lancs & S. Cumbria

AQ provides opportunities for providers to work together through shared learning events and monthly workshops. The programme has stayed relevant by evolving with evidence, aligning to policy developments and by developing and retiring clinical focus areas. We want to explore how we can use our approach to help you deliver on your system level priorities to reduce unwarranted clinical variation.

Contact us 

advancing.quality@aqua.nhs.uk

aqua.nhs.uk/solutions/aq-programme/@AQProgrammeNHS

**3rd Floor, Crossgate House,
Cross Street, Sale, M33 7FT**

Supporting Organisations and Systems to implement Getting it Right First Time (GIRFT)

Aqua can support your system, collaborative or organisation to use an improvement approach to implement your GIRFT opportunities.



Building clinical and lived experience consensus on what good care looks like, and how to measure.



Using data to explore unwarranted clinical variation to identify opportunities to improve.

Reducing **Unwarranted Clinical Variation** to Improve the Reliability, Quality and Experience of Care



Using QI approaches combined with building governance, clinical leadership & data literacy to drive improvement.



Collaborate and network to share good practice and drive system-wide improvement.

Aqua's flagship unwarranted variation programme is the longest running improvement programme within the NHS, with measurable impact on the quality and reliability of care.

We can support you with our expertise in clinical and lived experience engagement, data analysis, and insight and practical application of Quality Improvement in clinical settings, capturing and sharing learning.



@Aqua_NHS



Advancing Quality Alliance

3rd Floor, Crossgate House, Cross Street, Sale, M33 7FT
Call: 0161 206 8938
Email: enquiries@aqua.nhs.uk
www.aqua.nhs.uk



Contact us to find out how we can help:
enquiries@aqua.nhs.uk



Advancing Quality Programme Offer

Gain Consensus on Care Standards



AQ Offer

- Support & coaching to engage with relevant stakeholders
- Access to AQ's Clinical Expert Group
- Access to clinical expertise across the AQ regional network
- Access to the AQ web-based data collection tool Patient Intelligence & Quality System (PIQS)
- Support setting up Clinical Focus Areas (CFA) & internal AQ steering groups
- Peer support from other AQ participants

AQ Products

- AQ implementation framework
- 1 page summary of each CFA
- Onboarding video explaining how we use data, monthly reports & FAQ's
- Group PIQS presentation & demo
- Bespoke skills assessment tool
- Tool to map existing data against AQ measures

Actions for members

- Executive level sponsorship
- Capacity to input data in a timely way and quality assure with AQ team
- Capacity for AQ group to routinely meet, ideally monthly

Identify Unwarranted Variation



AQ Offer

- Data quality & analytics support
- Utilisation of PIQS to input clinical pathway data
- National benchmarking and sharing of good practice
- Cross-organisational, data driven identification of areas for improvement
- Independent data audit that can be used as part of governance processes
- Consistent methodological approach

AQ Products

- Monthly reports generated from regional AQ member data
- Standardised CFA presentations including analysis of data & recommendations
- On demand reports via PIQS
- AQ Annual Report
- 1 page monthly report

Actions for members

- Collate and share previous audit data to identify possible areas for improvement
- Access to and introductions to relevant staff along each pathway

Improve Quality of Care



AQ Offer

- Quality improvement insights from the AQ regional network
- Coaching support for teams to develop capability
- Access to collaborative QI training
- Support to mobilise and collaborate with internal teams
- Support to develop evidence to demonstrate quality
- Standardisation of clinical practice

AQ Products

- Access to QI resources and tools such as presentations, videos and latest research
- Templates to embed AQ improvement systems of reporting within existing governance structures

Actions for members

- Feedback on quality improvement work
- Drive development of internal governance which allow for quality improvement to occur & be reported
- Continue to embed pathway improvements

Learn and Share Best Practice



AQ Offer

- Support to capture & spread high quality, reliable clinical interventions
- Access to large scale regional events for each CFA
- Support to identify & develop case studies
- Support to share data in an accessible way
- Opportunities to share best practice at AQ collaborative events
- Opportunities to access support drop-in sessions

AQ Products

- Access to case study templates & examples
- Access to presenter guidance & support
- Access to AQ poster presentation templates & examples

Actions for members

- Capacity & interest in translating improvements to case studies
- Attendance at our events
- Interest in accessing our material for learning