NHS Ayrshire & Arran



Meeting: Ayrshire and Arran NHS Board

Meeting date: Monday 7 October 2024

Title: Quality and Safety Paediatric Workstream

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1. Purpose

This is presented to the Committee for:

Awareness

This paper relates to:

Annual Operational Plan

This aligns to the following NHS Scotland quality ambition(s):

- Safe
- Effective

2. Report summary

2.1 Situation

This paper provides an overview of progress in relation to core Scottish Patient Safety Programme (SPSP) measures and also the Excellence in Care measures which apply to Paediatric services, to provide assurance to Healthcare Governance Committee and subsequently the NHS Board.

2.2 Background

NHS Boards report regularly on SPSP performance measures to Healthcare Improvement Scotland (HIS) in order to enable Boards and the national programme team to understand overall progress in relation to the aims of SPSP.

MCQIC was launched in March 2013 and is a programme of quality improvement (QI). The MCQIC collaborative has now evolved into the SPSP collaborative and covers two work streams of SPSP Perinatal (Maternity and Neonatal services) and SPSP Paediatrics. This paper presents the Paediatric work carried out under the auspice of SPSP Paediatric improvement work.

The overall aim of the programme is to improve outcomes and reduce inequalities in outcomes by providing a safe, high quality care experience for all women, babies, children and families across all care settings in Scotland.

A partnership agreement between SPSP and NHS Ayrshire & Arran in relation to the way forward with new measurements were signed off and sent to all relevant parties in November 2023.

The Paediatric work stream reports nationally on agreed measures within the Paediatric Care Measurement matrix. Under the terms of the joint Partnership Agreement with the SPSP Team, NHS Ayrshire & Arran have agreed to measure the following within paediatric services:

- Introduce and measure compliance with the national PEWS Bundle
 - Use of correct age-related PEWS chart
 - Reliable use of PEWS observations
 - Reliable scoring of PEWS
 - A reliable response to children and young people who trigger PEWS

In addition to the above, the Paediatric Quality Improvement Group have also agreed to continue to measure:

- Implement and attain measures contained within the Watchers Bundle
- Improve Compliance with the Sepsis Six bundle

The additional measures do not require to be reported nationally.

Excellence in Care (EiC) forms part of the government's response to the Vale of Leven Hospital Inquiry Report, and focuses on four key deliverables:

- A nationally agreed (small) set of clearly defined key measures/indicators of high quality nursing and midwifery
- A design of local and national infrastructure, including an agreed national framework and "dashboard"
- A framework document that outlines key principles/guidance to NHS Boards and Integrated Joint Boards on development and implementation of local care assurance systems/processes
- A set of NHS Scotland record-keeping standards

The Paediatric Early Warning Score measures come under the auspice of both SPSP and Excellence in Care.

2.3 Assessment

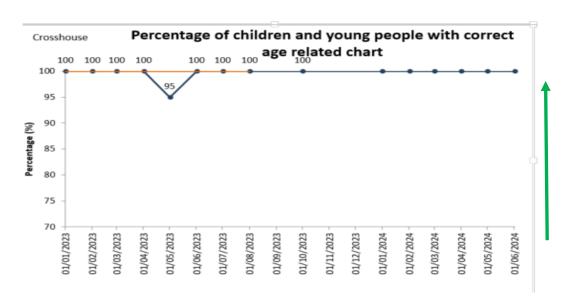
The national Paediatric Early Warning Score (PEWS) has been rolled out across Scotland. This allows consistency of reporting and understanding of information across Paediatric services in Scotland and is of particular assistance locally when in discussion with colleagues regarding an individual's progress or deterioration. The national toolkits were launched in Jan 24, however, the SPSP Team asked us to backdate data from January 23 from the historical data we had stored. The charts below demonstrates NHS Ayrshire and Arran's compliance with the national PEWS Bundle.

Use of correct age-related PEWS chart

NHS Ayrshire & Arran demonstrate excellent compliance with this measure, with 100% being observed since January 2023, with the exception of May 23 where 95% compliance was achieved. This still meets the required target. We also observed three months where data was not recorded and we were unable to obtain the data retrospectively.

The median was calculated on the baseline data from January to August 2023.

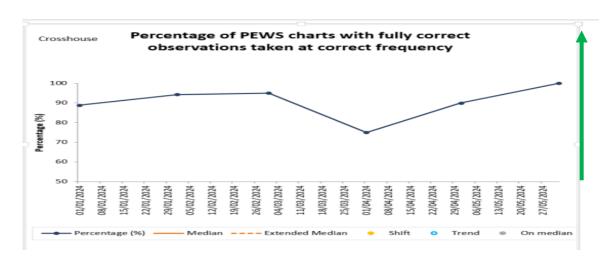
Figure 1 - Percentage of children and young people with correct age related chart



Reliable use of PEWS observations

This is a new measure with no historical data. We began the measurement of this practice in January and there is not enough data to calculate the median as yet, however on average we are 90.5% compliant.

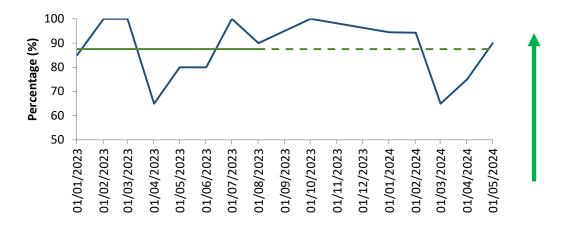
Figure 2 - Percentage of PEWS charts with fully correct observations taken at correct



Reliable scoring of PEWS

The reliable scoring of PEWS is a historic measure, therefore, we were able to backfill our data to January 2023. We are currently sitting on a median of 87.5.

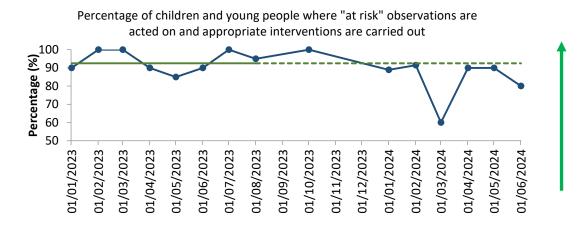
Figure 3 - Percentage of PEWS charts with fully correct scores



A reliable response to children and young people who trigger PEWS

The reliable response to those children whose care requires to be escalated has been under discussion for some time. We have developed a new escalation sticker which is used in conjunction with the PEWS chart to make the process clearer and demonstrate escalation of care has taken place. This sticker is currently being trialled in the Children's Inpatient Ward. We are currently sitting on a median of 92.5%

Figure 4 - Percentage of children and young people where "at risk" observations are acted on and appropriate interventions are carried out



Providing safe, effective and patient centred care is at the centre of what we do in NHS Ayrshire and Arran. We are continually reviewing our systems and processes and are always striving to improve the patient's outcome and experience.

We have:

- Developed and tested new documentation to ensure we are capturing the right information.
- Providing ongoing teaching session to nursing and medical staff.
- Teaching at the junior doctors at their induction to ensure they are completely familiar with the process within the paediatric department in Ayrshire and Arran, and why improvement is at the heart of all we do.
- We have also been very well received by the national SPSP team at HIS, at our recent face to face visit. They have also asked that we present the work carried out here at the national conference in the autumn.

Governance surrounding PEWS

A training package has been devised and delivered to all members of the nursing team from Band 3-7. The training package goes into great detail about the importance of the national PEWS bundle, linking the teaching to an actual case study.

An electronic record of the training is being created on Learn Pro, which evidences that the staff member has attended training and there is also a competency document being designed which will demonstrate that staff have been deemed competent in undertaking observations, calculating PEWS scores and escalating care appropriately.

A PEWS guideline has also been developed and has been ratified through the Women and Children's Clinical governance group. The aim of the guideline is to assist staff with the process of recording observations, calculating PEWS and escalating concerns appropriately.

Critical Care

An audit was undertaken of 10 critical care patients who were transferred to a tertiary intensive care unit in 2023. The clinical notes were examined and observations were reviewed to assess whether observations, PEWS scores were accurate and escalation of care occurred at an appropriate time. The audit highlighted that out of the 10 patients only 1 patient was compliant with the national PEWS bundle.

The audit has provided us with benchmark data and raised discussion whether we should be routinely including high dependency care patients within the PEWS audit to ensure a true reflection of our PEWS compliance.

Whilst reviewing the Critical care it was acknowledged that no formal training was provided to staff and there was no competency document in place. As a result a High Dependency Care team has been set up with a lead anaesthetist, consultant and nurse. A national critical care competency document is also being adapted so it can be rolled out to staff to evidence that staff are competent in delivering critical care.

The service will also be sending 2 registered nurses for formal education in critical care which is a university accredited post graduate course.

Watchers

A 'Watcher' is a patient where there is an increased concern, including the following reasons:

- Children and young people we are worried about
- Children and young people with potential/anticipated deterioration

- Children and young people whose health are causing concern to staff and parents
- Children and young people whose family are worried about them

The watchers bundle was gaining momentum and through training and discussion at the safety brief, staff became familiar with this. We re-introduced this QI work within the Unit, following Covid. Information is demonstrated in figure 5 below. Our target is to ensure 95% compliance with this bundle, which has happened only once in the last 12 months. We carried out a deep dive of the documentarian and all elements of the bundle were complete, apart for the documentation of the management plan. This has been discussed at handover and also to the junior doctors' induction training.

Figure 5 - Percent compliant with the Watchers Bundle

Sepsis

Compliance with the sepsis bundle has been challenging as there are certain elements of the bundle which are often not undertaken, in particular the 'consideration of Inotropes'. Usually by the time inotropes are being considered, the child is being transferred to PICU. We have previously been in discussion with the national team to question the feasibility of this element of the bundle and also to ascertain what current practice is in other Boards. This was also discussed at the SPSP Expert Reference Group meeting. In light of the Academy of Medical Royal Colleges (AMRC) report and the draft SIGN Guidance, Sepsis is being reviewed as a whole and our concerns are being taken into consideration.

Locally, we had begun to make some progress, by completing the measure on the QI Portal which gives us a degree of flexibility to address the cases which are not applicable. The paediatric team are currently testing a new sticker for use in the department. We have removed the 'did you consider' aspects of any part of the bundle to 'did you administer – and if not, why not'. We believe this better asks the question.



Figure 6 - Compliance with the Paediatric Sepsis Bundle

Where there are no observations (no cases) data is shown as 0%

2.3.1 Quality/patient care

The overall aim of the programme is to improve outcomes and reduce inequalities in outcomes by providing a safe, high quality care experience for all women, babies, children and families across all care settings in Scotland.

- We have observed a steady increase in the compliance with the PEWS bundle over the past twelve months
- Watchers remains an ongoing challenge due to the management plan not being completed in the recognised documentation. This has been escalated to senior medics.
- Data is still sporadic with the Sepsis bundle, however much work has been carried out recently and we hope to observe demonstrable improvement in the near future.

2.3.2 Workforce

Like other Paediatric Services across Scotland, NHS Ayrshire & Arran have found it very difficult to recruit paediatric nurses into vacancies this year. As a result, it has proven difficult to release the QI Champion due to clinical demand. There are newly qualified nurses starting in September and we hope to be able to release the QI champion once they are in place.

There can be issues with demand on staffing due to sickness and covering other areas. This results in staff, (including the QI Champion) requiring to support other clinical duties, which may have an impact on ongoing improvement work/data submission.

2.3.3 Financial

There may be financial implications identified as new National Standards of care are identified. This will be discussed as the programme progresses.

2.3.4 Risk assessment/management

Delivery of the programme is aimed at reducing harm within Women & Children's services. Non delivery of the programme could impact on the provision of a safe service and reputation of the organisation if timely effective implementation does not happen.

2.3.5 Equality and diversity, including health inequalities

By working towards compliance with each of the measures as agreed with the SPSP Partnership, we aim to protect and improve the health and wellbeing of the population and reduce inequalities, including through advocacy, prevention and anticipatory care.

No impact assessment has been completed as the operational definitions as outlined by the SPSP programme set out the inclusion of the population to be included in any measurement and this is a national programme of work.

2.3.6 Other impacts

The delivery of the elements contained within the SPSP programme and Excellence in Care will support the Boards commitment to safe, effective and person centred care.

The service aims to provide compassionate partnerships between patients, their families and those delivering health and care services which respect individual needs and values, and result in the people using our services having a positive experience of care to get the outcome they expect.

We will protect and improve the health and wellbeing of the population and reduce inequalities, including through advocacy, prevention and anticipatory care.

2.3.7 Communication, involvement, engagement and consultation

The Board has carried out its duties to involve and engage external stakeholders where appropriate:

- A partnership agreement between SPSP and NHS Ayrshire & Arran in relation to the way forward with new measurements was signed off and sent to all relevant parties in November 2024.
- Updates and the data to support these updates are sent to the SPSP Paediatric Team at HIS on a Quarterly basis.
- The work contained within this measurement is discussed at the bi-monthly meetings held by the Paediatric Quality Improvement Group. A programme of meetings have been set up for 2024/5.
 Full updates on this and other work are presented to the Paediatric Operational Management Group

2.3.8 Route to the meeting

This subject is a rolling update for this paper, however as above the work detailed in this paper is discussed at the Quality Improvement meeting and the Paediatric Clinical Governance meetings as a standing item on the agenda. Aversion of this paper was presented at the Healthcare Governance Committee on 9th September 2024.

2.4 Recommendation

For awareness. The Board is asked to note the quality improvement and safety activity in Paediatric Services as part of the SPSP Maternity and Children Quality Improvement Collaborative (MCQIC) programme and Excellence in Care.