

NHS Ayrshire & Arran



Meeting: Ayrshire and Arran NHS Board

Meeting date: Tuesday 28 March 2023

Title: Quality & Safety Maternity Workstream

Responsible Director: Jennifer Wilson, Nurse Director

Report Author: Attica Wheeler, Associate Nurse Director & Head of Midwifery – Women and Children’s Services

Jackie Welsh, Improvement Advisor – Women and Children’s Services

1. Purpose

This is presented to the Board 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 the core Scottish Patient Safety Programme (SPSP) measures and also the Excellence in Care (EiC) measures which apply to Maternity 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 and EiC.

MCQIC was launched in March 2013 and is a programme of quality improvement (QI). The MCQIC collaborative covers three work streams of Maternity, Neonatal and Paediatrics. This paper presents the Maternity 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 MCQIC and NHS Ayrshire & Arran in relation to the way forward with new measurements was signed off and sent to all relevant parties on 21 December 2018. These are due to be updated and we are currently in discussion with the national team to produce a draft Partnership Agreement for 2022 – 2025. This has been subject to delay, due to mobilisation of the national team.

The Maternity workstream continues to report nationally on agreed measures within the Maternity Care Measurement matrix. Under the terms of the joint Partnership Agreement with the MCQIC Team, NHS Ayrshire & Arran have agreed to measure the following within maternity services:

Core: Reduce stillbirth rates and to reduce the rate of severe PPH

Other priorities are to:

- Achieve a reduction in rates of perinatal morbidity and mortality.
- Collaborate with Neonatal colleagues in relation to the Management of Preterm Babies

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

Improvement activity is monitored. Current activity and performance is included in the assessment section below.

2.3 Assessment

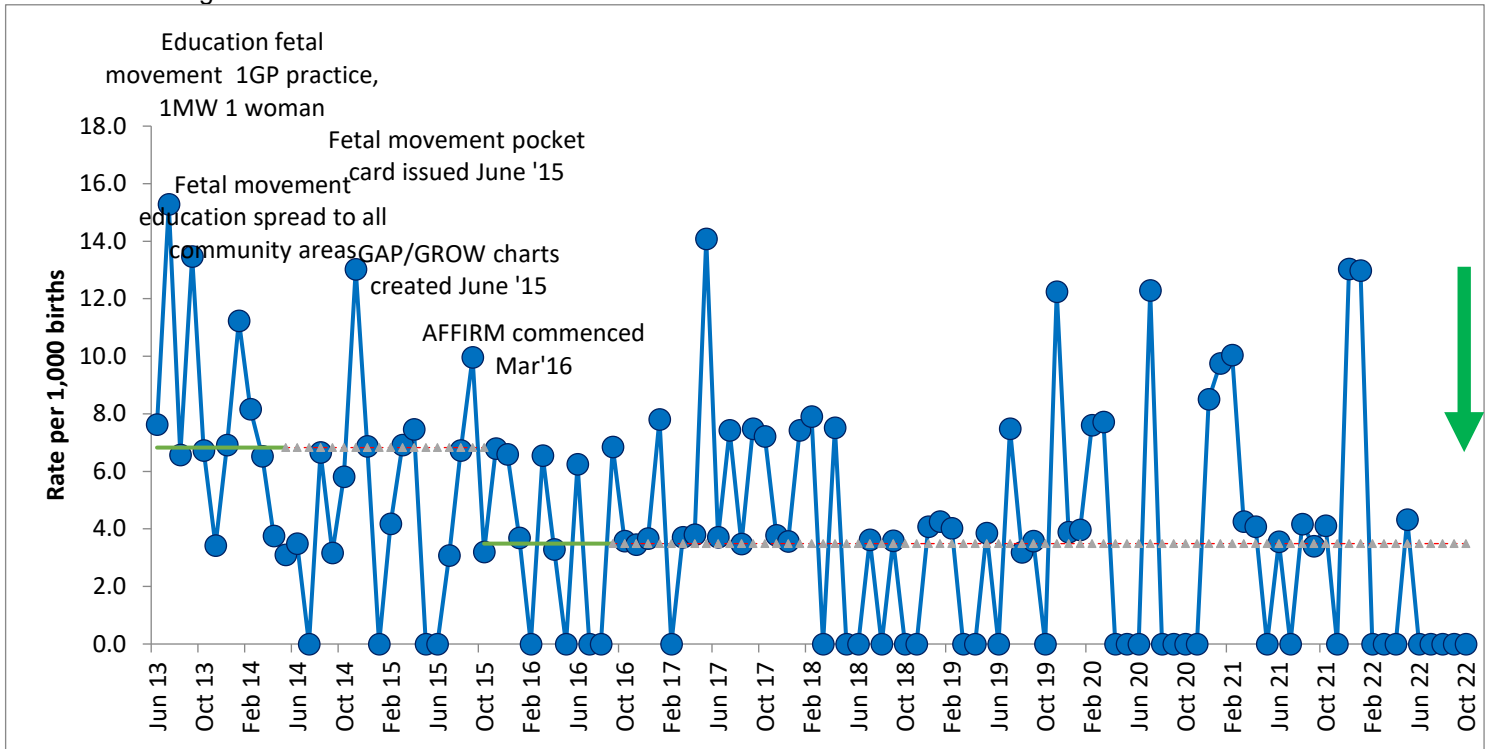
The overall aims of the Maternity Care strand continue to be ensuring the best possible care is given to our mums and babies within Ayrshire Maternity Unit. We are looking at ways of capturing information on service user satisfaction from Care Opinion, Social media sites (Facebook), and also via complaints to ensure any issues are addressed and improvements made where necessary.

Rate of Stillbirths

NHS Ayrshire & Arran continue to demonstrate sustained improvement. Since January to October 2022, we have reported four stillbirths within our Unit. Each case has been reviewed utilising the Perinatal Mortality Review Tool (PMRT) and subject to the Being Open process.

Figure 1 below demonstrates the rate of stillbirths per 1,000 births from June 2013 through to October 2022

Figure 1. Stillbirth Rates



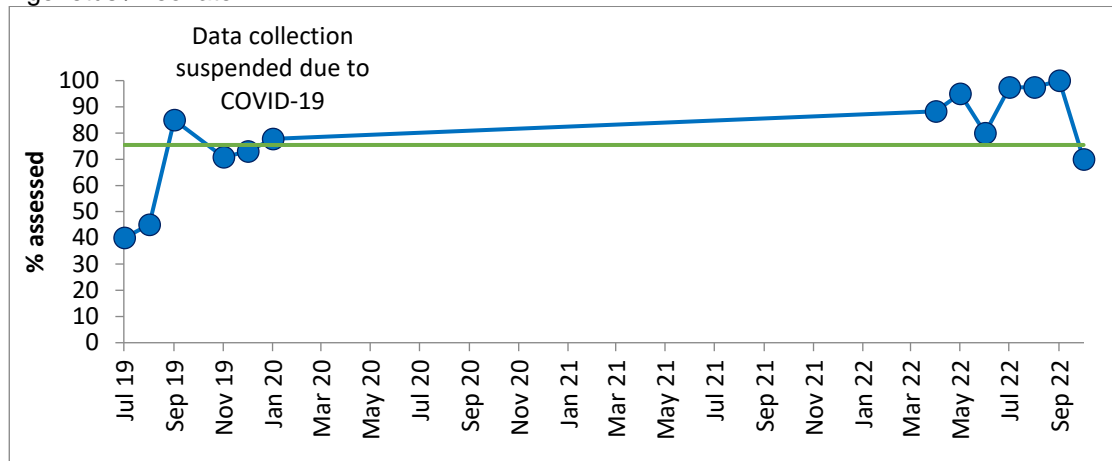
The MCQIC work stream includes measures to identify the small for gestational age fetus and recommends the use of a customised chart being used to plot growth measurements.

In 2015, Ayrshire Maternity services implemented the Growth Assessment Protocol (GAP) developed by the Perinatal Institute in Birmingham. This is a more objective technique of monitoring fetal growth through clinical palpation and ultrasound.

Use of customised growth charts has been shown to better identify stillborn babies as small for gestational age (SGA), reducing the number of losses with no explainable cause.

Maternity services began to measure against the compliance with this measure which was suspended due to the impact of Covid-19. Measurement re-commenced in April 2022 however work continued throughout the pandemic.

Figure 2 Percentage of women assessed at booking interview for risk factors for a Small for Gestational Age fetus / neonate



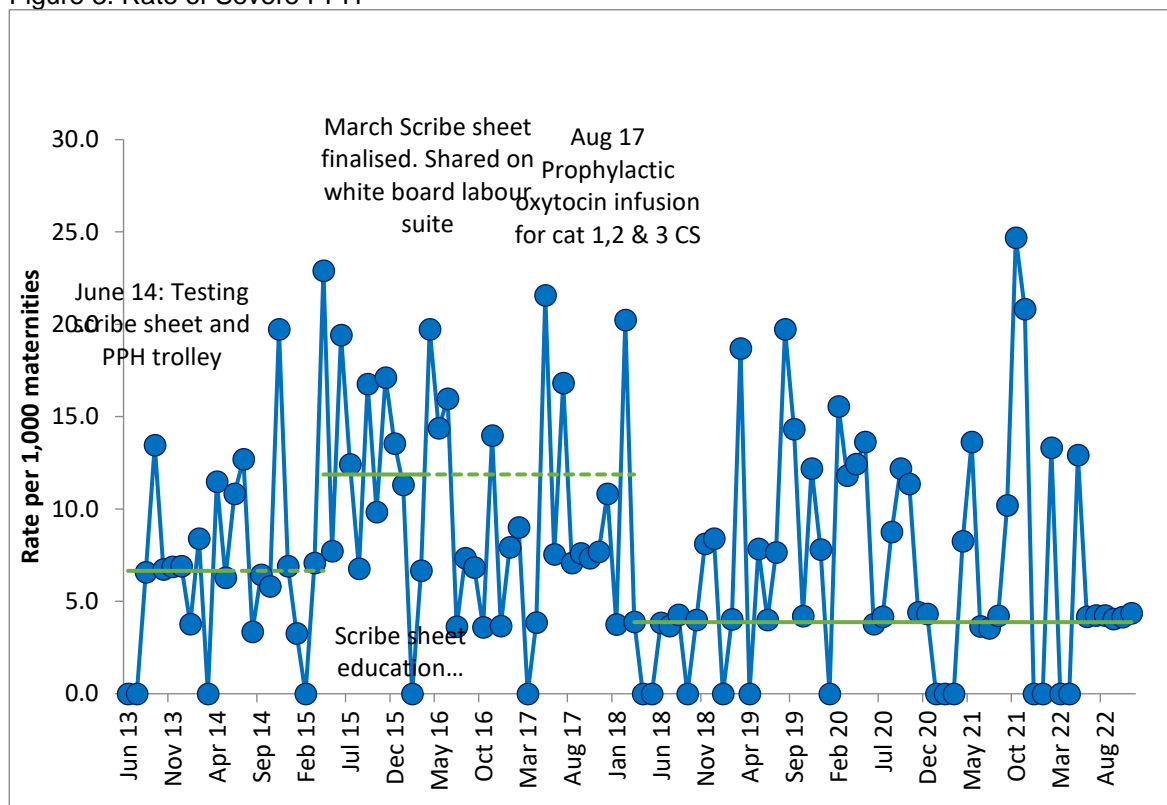
Please note, at a glance the data appears to be presented only to September 2022, however the data points extend to October 2022.

Rate of Severe Post-Partum Haemorrhage (PPH)

Although still statistically demonstrating sustained improvement, the data has been variable since May 2019. All severe PPHs are reviewed and appropriate management of these cases has been delivered in all cases.

Figure 3 below demonstrates the rate of severe PPH per 1,000 maternities from June 2013 through to November 2022.

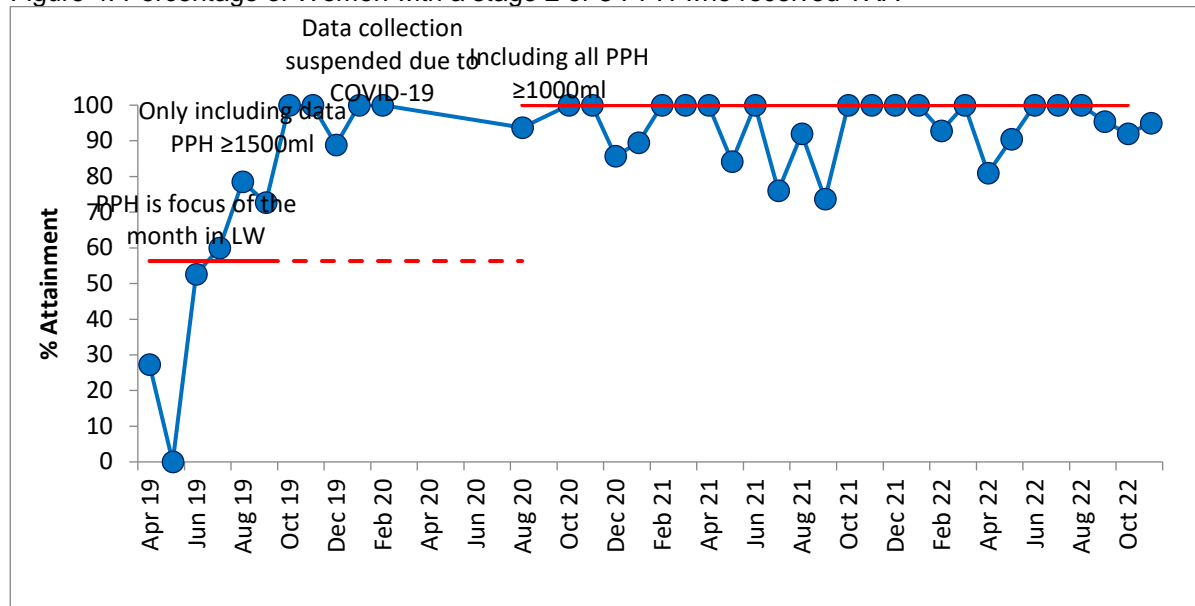
Figure 3. Rate of Severe PPH



Please note, at a glance the data appears to be presented only to August 2022, however the data points extend to November 2022,

Stage 2 PPH is defined as $\geq 1000-1499\text{ml}$ blood loss. A Stage 3 PPH is defined as $>1500-2499\text{ml}$ blood loss. Tranexamic Acid (TXA), a medicine that controls blood loss is therefore recommended. The administration of TXA has been fully implemented since Apr 2019.

Figure 4. Percentage of Women with a stage 2 or 3 PPH who received TXA

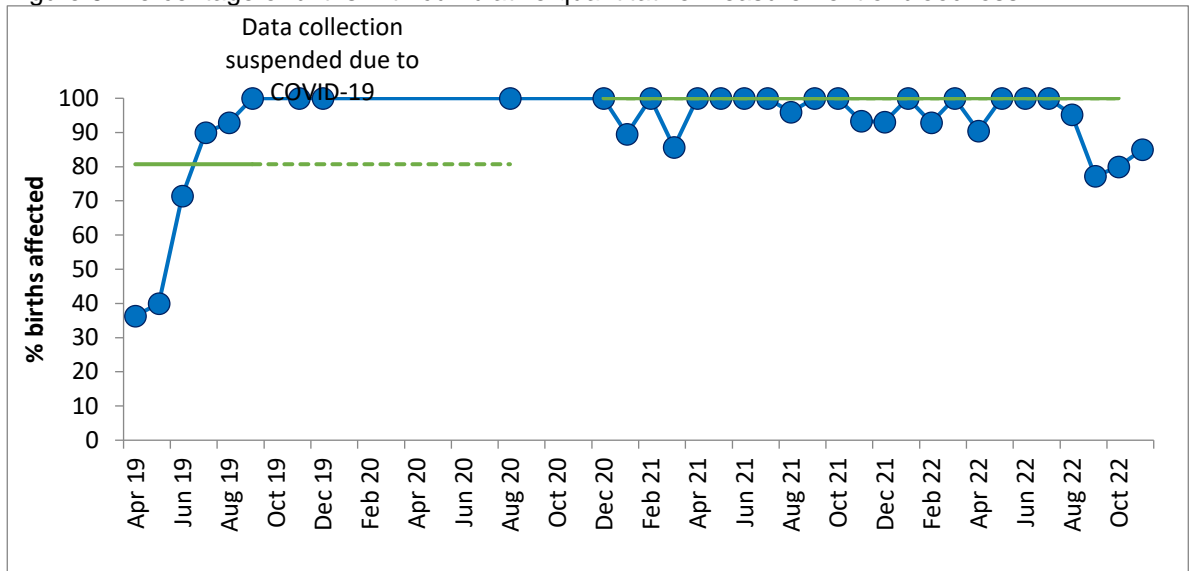


Please note, at a glance the data appears to be presented only to October 2022, however the data points extend to November 2022.

Historically delay in recognition of large blood losses is a common finding in cases of maternal morbidity and mortality from haemorrhage. A policy of waiting to quantify blood loss only after the excessive loss does not address this problem.

All women, regardless of mode of delivery, should have a measured blood loss. A quantitative approach (i.e. volume in ml) to communicate blood loss is more reliable than the use of descriptors such as 'small amount', 'trickle', 'moderate blood loss'. In addition, every time blood loss is measured this should be added to previous measurement to give a cumulative total. We noticed a slight dip in performance in September 2022, which was communicated to staff and focus placed on improvement. We have since observed improvement again.

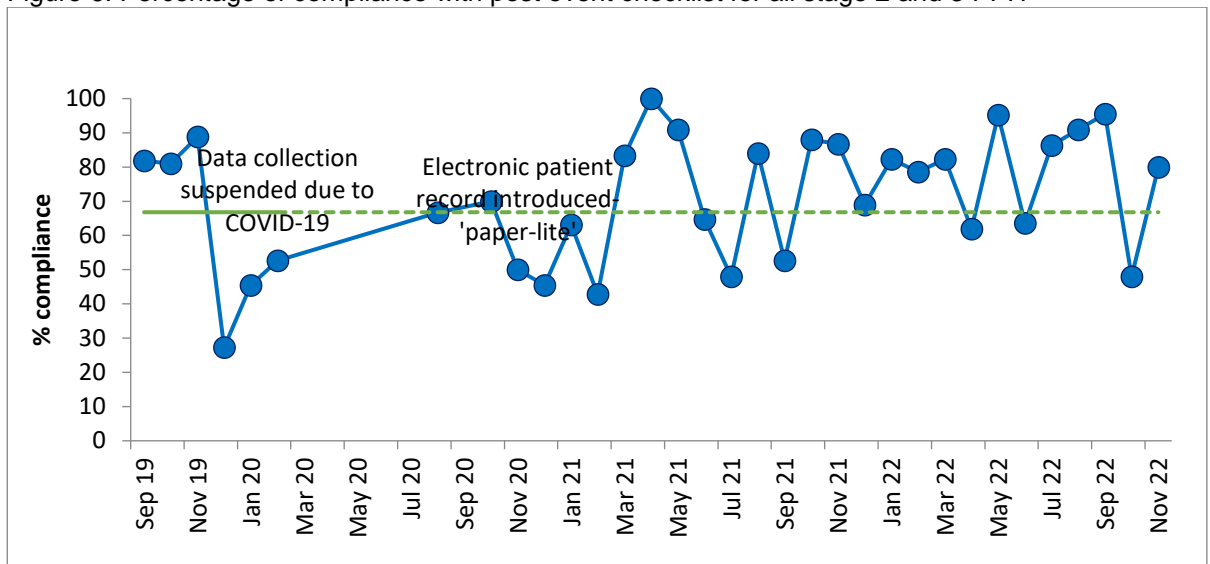
Figure 5. Percentage of births with cumulative quantitative measurement of blood loss



Please note, at a glance the data appears to be presented only to October 2022, however the data points extend to November 2022.

A Post Event Checklist should be completed after the event by a member of the obstetric or anaesthetic team. This checklist reduces reliance on memory, and thus reduces errors of omission while contributing to team communication and increasing situational awareness amongst clinicians. Compliance with completing the checklist is variable as shown in figure 6 below. This has been discussed further at the QI meeting and with the labour ward management team with the importance of compliance reinforced.

Figure 6. Percentage of compliance with post event checklist for all stage 2 and 3 PPH

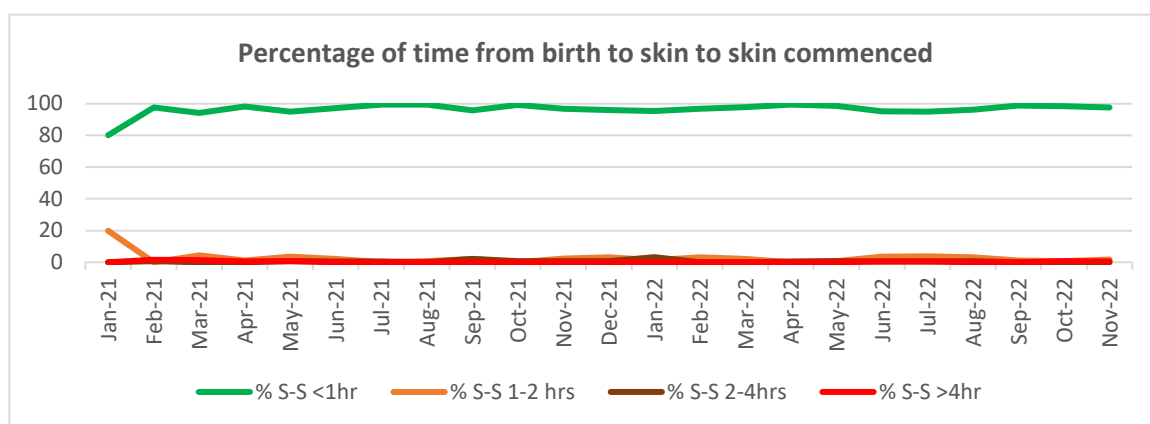


Skin to Skin Contact

One of the Excellence in care measures is Skin to Skin Contact. Skin-to-skin contact is the practice where a baby is dried and laid directly on their mother's bare chest after birth, both of them covered in a warm blanket and left for at least an hour or until after the first feed. Skin-to-skin contact can also take place any time a baby needs comforting or calming and to help boost a mother's milk supply. Evidence would suggest that skin-to-skin contact after the birth helps babies and their mothers in many ways.

In NHS Ayrshire & Arran, Skin to Skin documentation has been recorded since the introduction of the Clever med BadgerNet system in December 2020. The data below demonstrates the time documented from birth to first skin to skin contact. The duration of skin to skin is not routinely documented at this time.

Figure 7 Percentage of women who established skin to skin contact within one hour of birth



On average, 97% of women commence skin to skin contact with their baby within the recommended one hour timeframe since the birth of their baby (median 97 (IQR 95-98) since January 2021. 2.7% commenced between 1-2 hours, 0.6% between 2-4 hours and 0.3% >4 hours.

Maternity Early Warning System

The Maternity Early Warning Score tool was launched within Maternity Services at AMU on 24 December 2018

Compliance with the Maternity Early Warning System (MEWS) is measured as part of the SPSP MCQIC Programme and EIC. This data is contained in BadgerNet, however there is no function within BadgerNet to breakdown this measure by department. This data is therefore entered into the QI Portal in order that we can measure each department's individual compliance.

The data below demonstrates compliance with the tool for 12 months from December 2021 for the Early Pregnancy Assessment Service (EPAS), In Patient Ward, Labour Suite, Maternity Assessment Unit (MAU) and the Midwifery Suite. A report is generated each month to the Senior Charge Nurse (SCN)/Senior Charge Midwives (SCMs) via the Clinical Midwifery Managers (CMMs) highlighting where the recommended target of 95% compliance has not been achieved and support offered.

Figure 8 EPAS compliance with MEWS

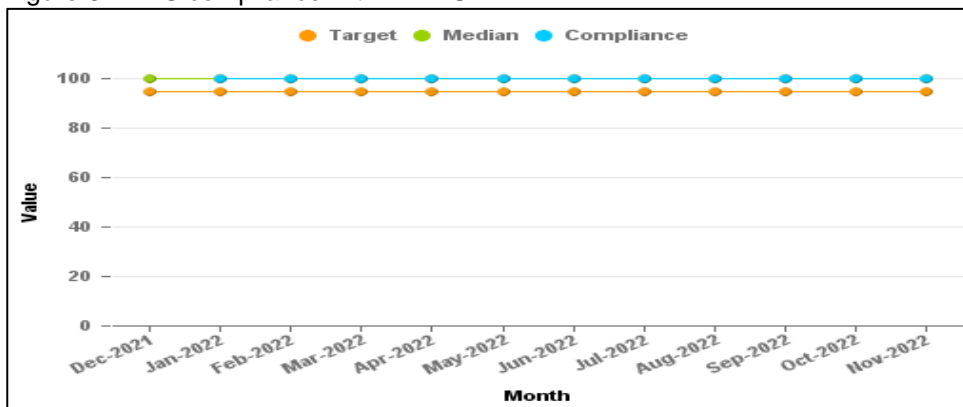


Figure 9 Maternity In-Patient Ward Compliance with MEWS

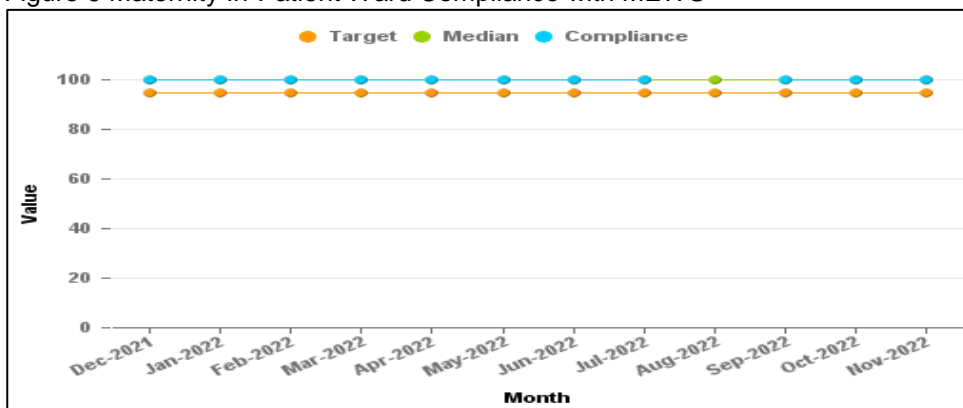


Figure 10. Labour Suite Compliance with MEWS

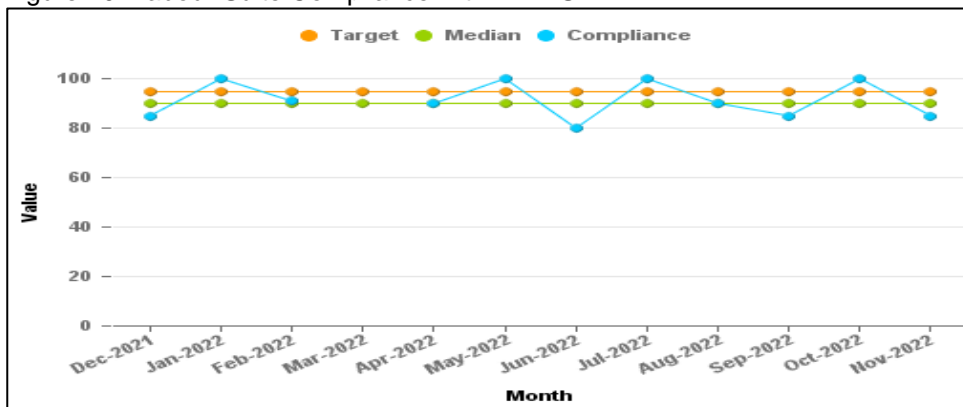


Figure 11. Maternity Assessment Unit Compliance with MEWS

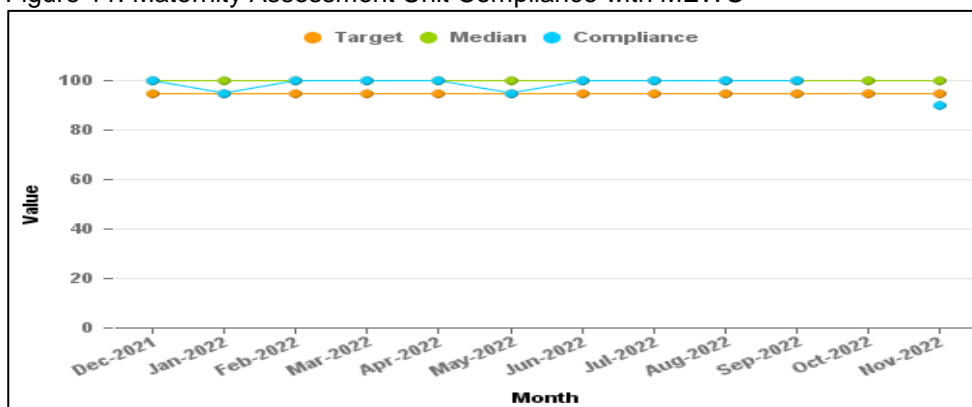
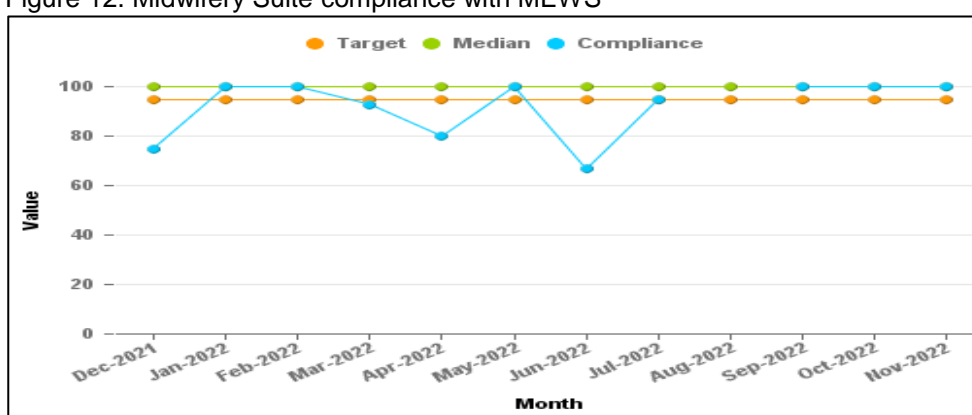


Figure 12. Midwifery Suite compliance with MEWS



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.

- NHS Ayrshire & Arran continue to demonstrate sustained improvement with stillbirth rates
- Although the data is variable, the service is still statistically demonstrating sustained improvement with PPH. All PPHs are reviewed and findings would indicate appropriate management of all cases has been delivered.
- There is good compliance with the rate with the administration of Tranexamic Acid (TXA), and the cumulative measurement of blood loss for post-partum haemorrhages. The use of the post event checklist is variable, which has recently been subject to discussion at the Quality Improvement Group meeting.
- On average, 97% of women commence skin to skin contact with their baby within the recommended one hour timeframe since the birth of their baby.
- Compliance with the MEWS bundle is high in most areas. Any areas reporting below the required 95% compliance is escalated to the Clinical Midwifery Managers for action.

2.3.2 Workforce

Two QI Champions were appointed in April 2022 to support the QI Advisor drive improvement in the Maternity service. One has since secured a new post, and we are therefore in the process of recruiting a new Champion. The QI Champions are scheduled for protected time to support QI, however, this has been sporadic due to clinical pressures.

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 MCQIC 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 MCQIC 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 Excellence in Care, MCQIC programme and the SPSP programme will support the Boards commitment to safe, effective and person centred care.

We aim 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 MCQIC and NHS Ayrshire & Arran in relation to the way forward with new measurements was signed off and sent to all relevant parties on 21 December 2018. We have recently engaged the appropriate staff in producing a draft partnership agreement for 2022-25. This has been sent to the national team as a draft and will be subject to change when formally agreeing.
- The work contained within this measure plan are discussed at the bi monthly meetings held by the Maternity Quality Improvement Group (MQIG).
- Any issues arising are taken forward at the Maternity Clinical Governance Group.

2.3.8 Route to the meeting

This is the first point of contact for this paper, however as above the work detailed in this paper is discussed at the MQIG meeting and the Maternity CG meeting.

A version of this paper was presented to the Healthcare Governance Committee on 27 February 2023

2.4 Recommendation

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

3. List of appendices (where required)

None