Greater Glasgow and Clyde NHS Board

Board Meeting
December 2015 **Board Paper No – 15/60**

Scottish Patient Safety Programme Maternity Update

1. Background

The Scottish Patient Safety Programme (SPSP) is one of the family of national improvement programmes, developed over recent years in relation to the national Healthcare Quality Strategy. These programmes draw on improvement methods advocated by the Institute for Healthcare Improvement. SPSP now contains a number of distinctly identified programmes as follows:

- Acute Adult Care
- Primary Care
- Mental Health
- MCQIC (incorporating Paediatrics, Maternal Care & Neonates)

The paper provides members of the NHS GG&C Board an update on local progress implementing the Maternity and Children Quality Improvement Collaborative. The paper is divided into two sections reflecting the distinct work-streams of the Paediatric and Neonatal element and the Maternal Care elements.

The overall aim of the national programme is to improve outcomes and reduce inequalities in outcomes by providing a safe, high quality care experience for all children and babies in Scotland. MCQIC was launched formally as a collaborative in March 2013 although the paediatric work stream had started previous to this in 2010.

The Board is asked to

- Note the progress reported from Women & Children's Directorate in implementation of the SPSP work-stream for Paediatric, Maternal & Neonatal Care.

A.1. Purpose of the section

The purpose of this section is to update the members of the Acute Services Division Clinical Governance Forum with progress in implementing the Paediatric and Neonatal element of the Maternity and Children Quality Improvement Collaborative.

A. 2. Aim & Measures

2.1 Aim

The specific aim for this work stream is to achieve a 30% reduction in adverse events that contribute to avoidable harm in Neonatal and Paediatric Services by December 2015.

2.2 Measures

All of the elements currently measured in the programme are listed in appendix 1.

A.3 Summary of current position

There are currently 18 teams supported across Paediatric and Neonatal services.Initially following the move to the new hospital it was considered prudent to continue with monthly data submissions, even for those teams who had made good progress and were showing a reliable process is embedded. A number of these teams have now shown sustained reliability through the move and can be stepped down to reduced levels of process measurement.

3.1 Summary

Wards / Departments:

There are 13 clinical areas involved in implementing the general ward bundle which contains 7 elements. Not all of the elements are appropriate for every area but if it is appropriate it has been implemented. Before the move to the new hospital reliability levels were excellent with most teams running a reduced data review occurring once every 3 months.

Since moving to the new hospital some teams have merged and there are also 2 new wards which have been introduced to the bundle and are now submitting data. Wards which have demonstrated sustained reliability are

- RAH 15 – all current measures
- 1C – stepped down in all current measures
- 2B – Schiehallian – NEWs

The next focus for the ward areas is to extend the Peripheral Vascular Catheter (PVC) Insertion measure to those wards currently not working on this. There will also be a move to expand the Central Venous Catheter (CVC) Maintenance measure and work will be undertaken to determine which areas should be involved. There is also to be work new work across all wards related to the Deteriorating Patient bundle, which will be complimentary to recent launch of the National Paediatric Early Warning Score.

Peri-op workstream:
The data for all the theatres is pooled in one submission. The results are excellent for Surgical Brief, Pause and timing of antibiotics as reliability is demonstrated. As reported previously, there are issues with the insertion of PVC due in part to clinician choice in using elastoplast to secure the device instead of a the recommended sterile PVC dressing.

The post operative de-brief has shown reliability in some theatres but spread to other specialties is continuing to prove difficult. There are low levels of belief in the benefits of this process which seem to limit fullest engagement required for successful implementation.

The next steps for this work stream will see a focus on the introduction of a young person's perioperative bundle. This will incorporate the development of a theatre ticket which will give patients the opportunity to discuss what matters to them and will aim to improve communication between the patient and the clinical team.

Critical Care – PICU:
The PICU team have achieved reliability for the following measures:

- Hand hygiene
- CVC insertion bundle
- Multidisciplinary rounds
- PVC maintenance bundle
- Safety brief
- CVC maintenance bundle
- Daily goals

In previous reports, The VAP (ventilator associated pneumonia) bundle had been implemented with the exception of the 30° tilt for patients in cots as this was difficult to achieve with the cots the unit had. The move to the new facilities has meant that new cots are now available. As such, this element is now being implemented with an improvement on overall reliability noted.

Neonates:

In this work stream not all the units are working on the same elements. For some elements the plan is for systems to be developed on one site and then spread to the other sites when tested as successful. Two units have merged as a result of the move to the new hospital which will help share practice and spread the elements; however, the information below shows there has been a number of indicators with no data submitted. The Clinical Governance team supporting this program are currently working with the data-deficient areas to look at how the submission can be improved. The elements all units are reliable for are hand hygiene and safety brief.

Although reliability has not been achieved across the units, there is progress with the measures of:

- CVC insertion bundle
- CVC maintenance bundle
- Gentamicin

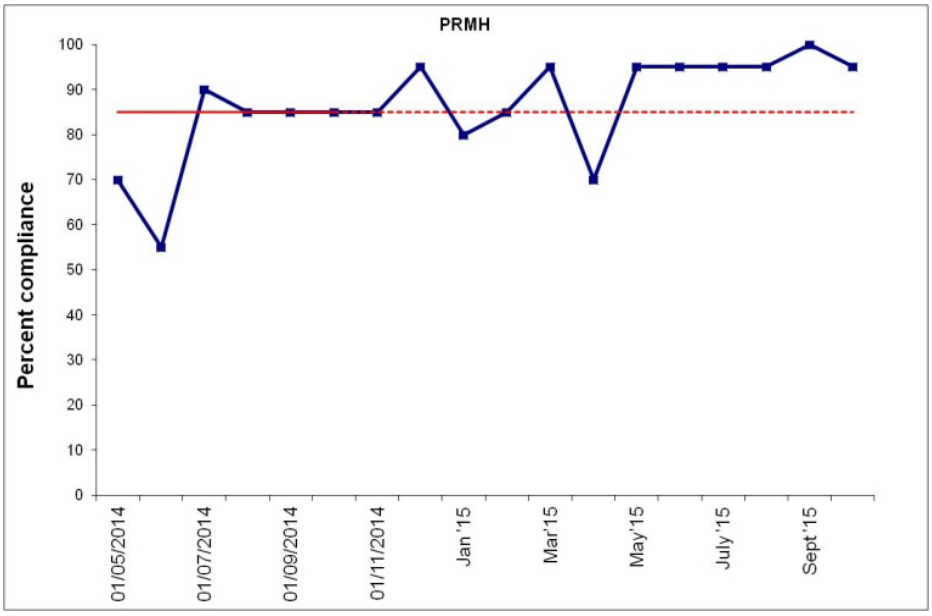
Testing continues in the following measures which were introduced later in the programme:

- Infiltration injury
- Newborns with documented consultation
- Newborn screening
- Warm bundle
- Extubation pause

4. Results

Outcome measure results

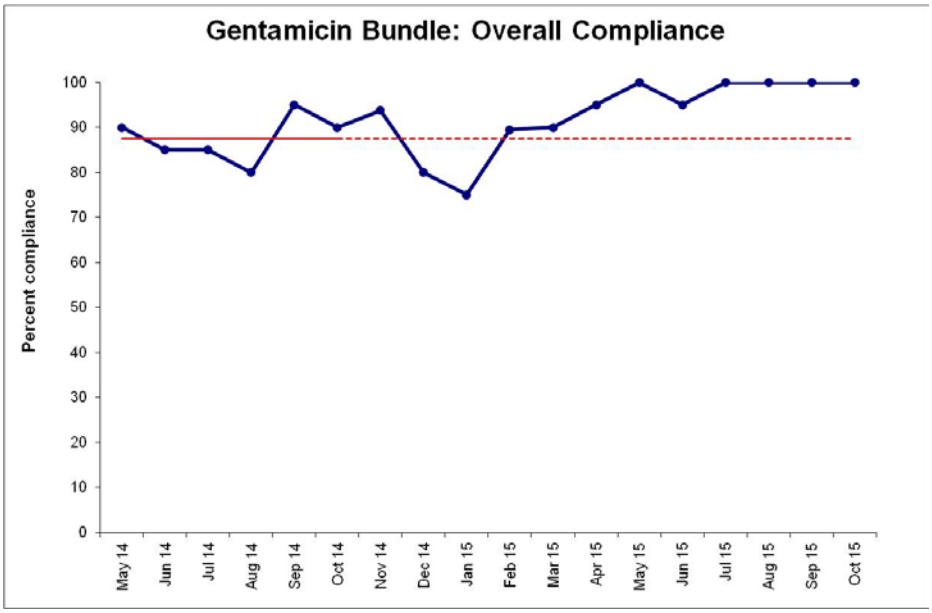
CVC Maintenance Bundle Compliance



This chart shows the levels of compliance with the CVC Maintenance Bundle at within Neonates at PRMH. Compliance has improved here with the chart showing increased reliabilty in the last six months. The median currently sits at 85% compliance. With the last six months reporting between 95 and 100% compliance.

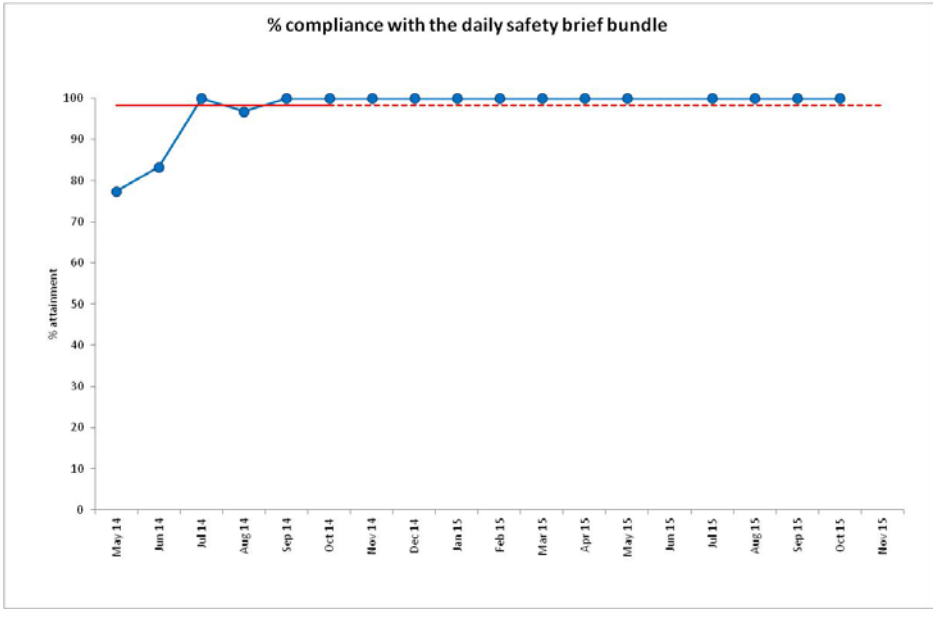
It is a similar situation at the RHC, where two units have recently come together although further data is required over the coming months to give assurance of sustained reliability. RAH have consistently reached 100% compliance in the data submitted.

Gentamicin Bundle Compliance



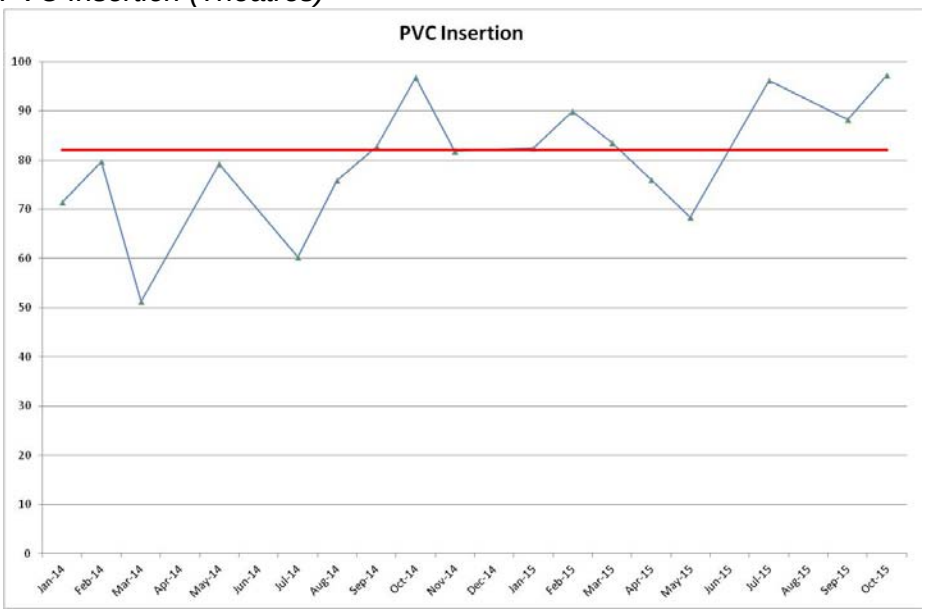
The next chart shows compliance with the Gentamicin Bundle at the RAH neonates unit, where the unit is making good progress in reliably maintaining compliance, with the last 6 months of data at 95-100% compliance over a median currently at 97.5%. PRMH is also showing a similar level of improvement in reliability for this measure. There has been no recent data submitted by RHC to it is not possible to comment on their current compliance rates. The Clinical Governance team is working with the unit to resolve the issues with collecting and reporting this data.

Safety Brief



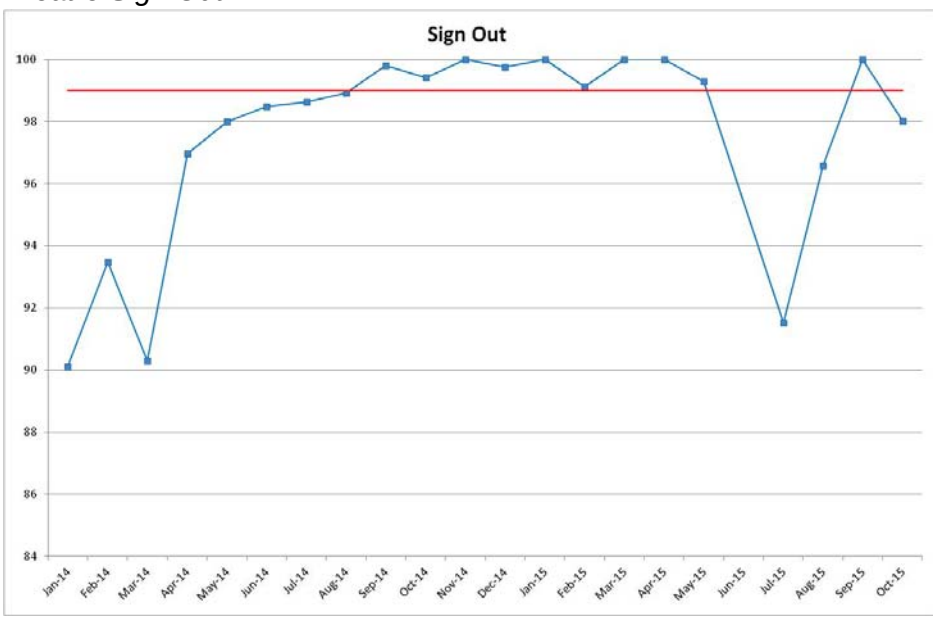
The chart to the left shows the level of compliance with the daily safety brief bundle at the RHC Neonatal Unit. Apart from June 2015 (when no data was provided) the unit has consistently shown 100% compliance with the bundle for over 12 months. This has continued following the moves within the service in the summer. The RAH has also shown a similar picture against this measure, achieving 100% compliance month on month for over a year. PRMH too is reliable, with 100% compliance demonstrated since April 2015.

PVC Insertion (Theatres)



There are an average of sixty patients per month where this measure is relevant. Median compliance currently sits at 82%.Theatres are struggling to demonstrate reliability with PVC insertion. This is largely down to a small number of clinicians insisting on the use of elastoplast, rather than sterile compliant dressing. All other elements of this measure are showing much greater reliability.

Theatre Sign Out



This chart shows the rate of compliance for the pilot theatre for this measure. There had been reliability with a median of 99% over the course of the last year but the rate of compliance has however reduced slightly since the move to the new site over the summer, dropping to just under 92% before rising again. It is not clear exactly what lay behind this, but it may be related to the “settling in” period following the move.

B.1 Purpose of this section

This section is the high level overview report to update the Board on the clinical improvement activity of the Scottish Patient Safety Programme's maternity strand, whose overall aim is to:

- To reduce the number of avoidable adverse events in women and babies by 30%, and
- To increase the percentage of women satisfied with their experience of maternity care to >95%

B.2. MCQIC Key Events

The next National MCQIC Learning Session is planned for 3rd February 2016 – MCQIC Learning Session 6.

4. Update on Maternity Workstream

4.1 HIS Update

Scottish Government has confirmed the extension of funding for MCQIC until the end of March 2016 which includes funding for the midwifery champions. This extension allows the continuation of the excellent work carried out to date, and provides an opportunity to work further with HIS in progressing and implementing improvements locally. Discussions are also currently being held with Scottish Government, regarding proposals for the next phase of MCQIC.

Revised Reporting Templates – the Maternity Care team and Data and Improvement team at Healthcare Improvement Scotland are continuing to work together on a revised reporting template. This will be issued shortly to all units, pending feedback from two test units and is expected to have fewer measures and a review of the current measure status definitions.

Measure MP19 - % compliance with stillbirth bundle will no longer be developed in the current phase of MCQIC.

4.2 Self Assessment of Progress

Self-assessment of progress is requested of boards every four months by the national team. Feedback for review period 5 (June 2015) was received in November 2015 and the tables and charts below detail the assessment and feedback from the national team. The definitions on progress are:

- **Reporting data** - Data reported on Maternity Care Toolkit and submitted by the 15th of each month (eg. January's data submitted by February 15th)
- **Improvement** - Six consecutive monthly points above or below the median on a run chart shift)
  or
  Five consecutive monthly points increasing or decreasing on a run chart (trend)
  or
  over 100 days without a case for rare events
- **Sustained Improvement** - Six consecutive monthly points above or below the median on a run chart (shift) followed by a further three points above/below the median (sustained) – nine data points in all – in the desired area of travel
  or
  Five consecutive monthly points increasing or decreasing on a run chart (trend) followed by a further four points above/below the median (sustained) – nine data

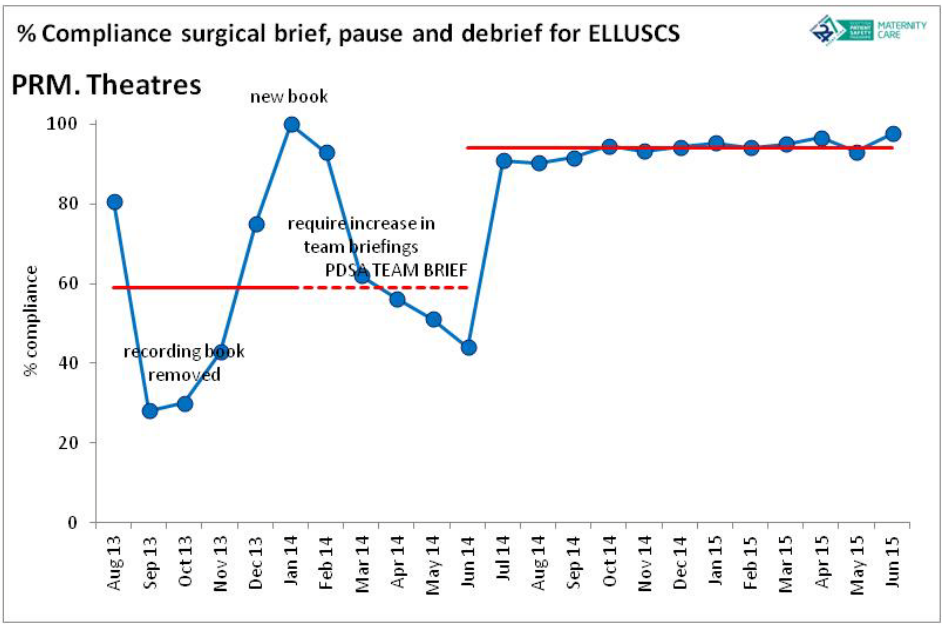
points in all – in the desired direction of travel
or
If weekly data are used, sustainability is defined as 13 data points in total (ie 6+7 for shift, 5+8 for trend).
or
300 days without a case for rare events
or
No change (e.g. if all at 100% or 0%) = not classed as improvement but not noted as failure to improve – 'ticks the box' for achievement of point on the scale. Step down measurement strategy as per measurement plan.

- **Universal Implementation -** All process and outcome measures demonstrating sustained improvement in all applicable areas. Step down measurement strategy as per measurement plan.

Princess Royal Maternity

Measure number		Measure Name	Progress Against Measures Period 5 (May - Aug 15)
Key Measures			
No.	MO01	Rate of stillbirths	Reporting Data
1	MO02	Rate of neonatal deaths	Reporting Data
	MO03	Rate of severe post-partum haemorrhages	Reporting Data
2	MO04	% of non-medically indicated deliveries prior to 39 weeks gestation	Reporting Data
	Key Measures (cont)		
3	MO05	% of women satisfied with the care they received	Reporting Data
	MP01	% of pregnant women offered CO monitoring at booking	Universal Implementation
4	MP02	% of pregnant women with a CO level ≥ 4 ppm (or who say they are current or recent smokers) that are referred to smoking cessation services	Universal Implementation
	MP03	% of pregnant women who continue to smoke who are provided with a tailored package of antenatal care	Reporting Data
5	**Person Centred Care**		
	MP04	% of birth plans signed and dated by the woman and midwife	No Data Reported
6	**Leadership and Culture**		
	MP05	Number of safety walkrounds	Reporting Data
	MP06	% of actionable items being	Reporting Data

		completed each month	
	MP07	Safety Culture Survey	No Data Reported
	Teamwork, Communication and Collaboration		
	MP08	% compliance with the daily safety brief bundle	Improvement
	MP09	% compliance with surgical briefing	Sustained Improvement
	MP10	% of exchanges that use a high quality SBAR	Sustained Improvement
	MP11	% compliance with the significant event debrief bundle	No Data Reported
	MP12	% compliance with team huddles	Improvement
	Safe, Effective and Reliable Care		
	MP13	% compliance with the MEWS bundle	Sustained Improvement
	MP14	% of observations identified as at risk that have appropriate interventions undertaken in terms of their management as categorised by MEWS	Sustained Improvement
	MP15	% compliance with the sepsis 6 bundle	Sustained Improvement
	MP16	% compliance with the PPH prevention bundle	Reporting Data
	MP17	% compliance with the PPH management bundle	Reporting Data
	MB01	% of normothermic newborn babies at the point of discharge from labour suite	Sustained Improvement
	MP18	% of women with a documented discussion regarding fetal movements	Sustained Improvement
	MP20	% compliance with VTE bundle	Reporting data


% Compliance surgical brief, pause and debrief for ELLUSCS
PRM. Theatres
new book
require increase in team briefings PDSA TEAM BRIEF
recording book removed
% compliance
100
80
60
40
20
0
Aug 13
Sep 13
Oct 13
Nov 13
Dec 13
Jan 14
Feb 14
Mar 14
Apr 14
May 14
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Aug 14
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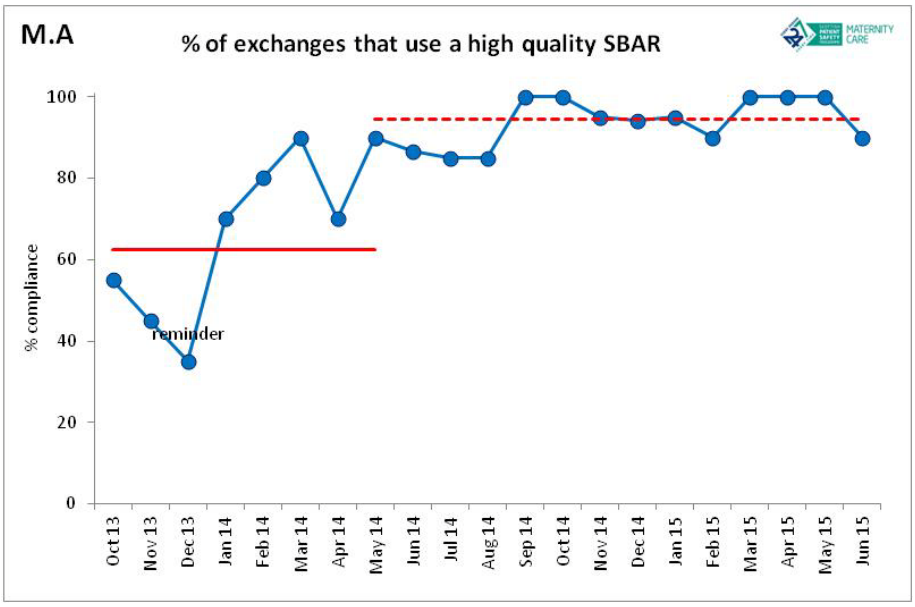
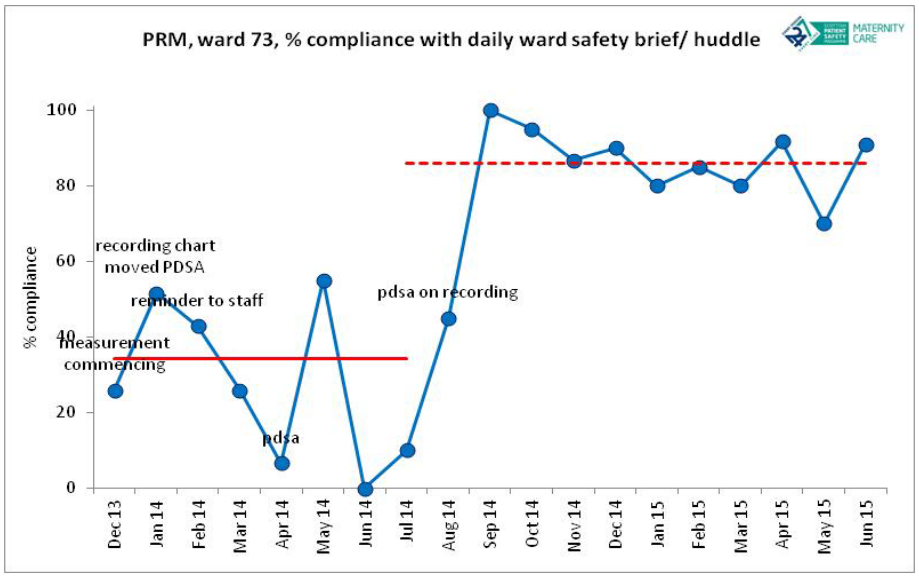
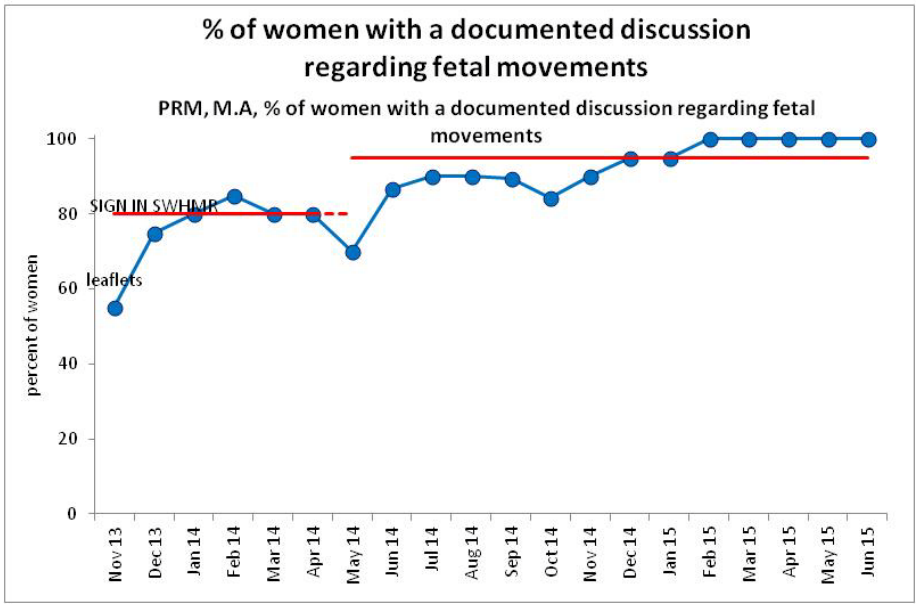
May 15
Jun 15


M.A
% of exchanges that use a high quality SBAR
reminder
% compliance
100
80
60
40
20
0
Oct 13
Nov 13
Dec 13
Jan 14
Feb 14
Mar 14
Apr 14
May 14
Jun 14
Jul 14
Aug 14
Sep 14
Oct 14
Nov 14
Dec 14
Jan 15
Feb 15
Mar 15
Apr 15
May 15
Jun 15


PRM, ward 73, % compliance with daily ward safety brief/ huddle
recording chart moved PDSA
reminder to staff
measurement commencing
pdsa
pdsa on recording
% compliance
100
80
60
40
20
0
Dec 13
Jan 14
Feb 14
Mar 14
Apr 14
May 14
Jun 14
Jul 14
Aug 14
Sep 14
Oct 14
Nov 14
Dec 14
Jan 15
Feb 15
Mar 15
Apr 15
May 15
Jun 15



Key Challenges

Key challenges remain full implementation of providing women who continue to smoke a tailored package of antenatal care (additional ultrasounds) and around the culture survey due to the resources required to gather and analyse the data. NHSGGC are no different here than any other boards, no boards are reporting data against the culture survey measurement.

Queen Elizabeth University Hospital (previously Southern General Hospital)

Measure number		Measure Name	Progress Against Measures
			Period 5 (May - Aug 15)
Key Measures			
No.	MO01	Rate of stillbirths	Reporting Data
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	Key Measures (cont)		
3	MO05	% of women satisfied with the care they received	Reporting Data
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4	MP02	% of pregnant women with a CO level ≥ 4 ppm (or who say they are current or recent smokers) that are referred to smoking cessation services	Universal Implementation
	MP03	% of pregnant women who continue to smoke who are	No Data Reported

		provided with a tailored package of antenatal care	
5	**Person Centred Care**		
	MP04	% of birth plans signed and dated by the woman and midwife	Reporting Data
6	**Leadership and Culture**		
	MP05	Number of safety walkrounds	Reporting Data
	MP06	% of actionable items being completed each month	Reporting Data
	MP07	Safety Culture Survey	No Data Reported
	Teamwork, Communication and Collaboration		
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	MP10	% of exchanges that use a high quality SBAR	Reporting Data
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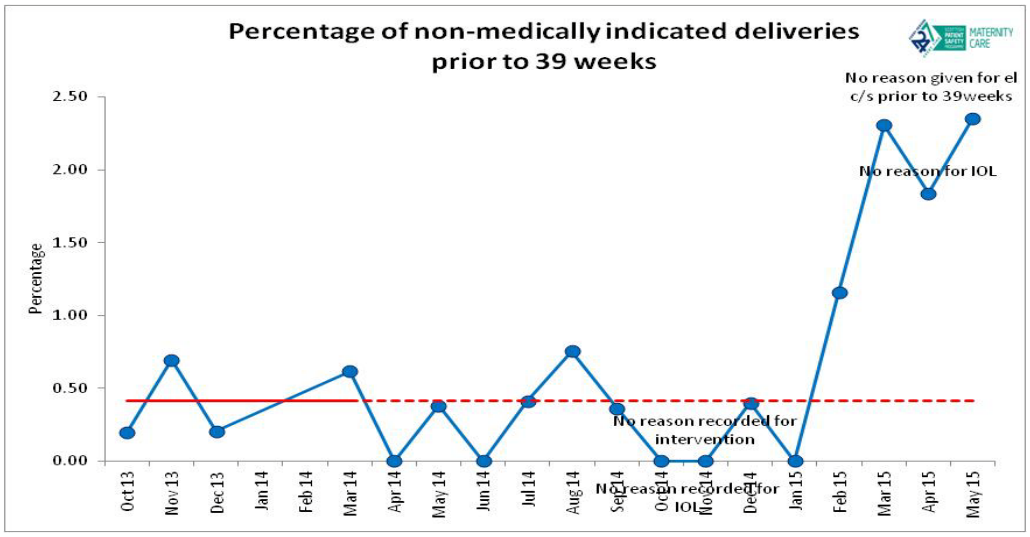

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Clyde

Measure number		Measure Name	Progress Against Measures
			Period 5 (May - Aug 15)
Key Measures			
No.	MO01	Rate of stillbirths	Reporting Data
1	MO02	Rate of neonatal deaths	Improvement(over 100 days without a case
	MO03	Rate of severe post-partum haemorrhages	Reporting Data
2	MO04	% of non-medically indicated deliveries prior to 39 weeks gestation	Reporting Data
	Key Measures (cont)		
3	MO05	% of women satisfied with the care they received	No data Reported
	MP01	% of pregnant women offered CO monitoring at booking	Sustained Improvement
4	MP02	% of pregnant women with a CO level ≥ 4 ppm (or who say they are current or recent smokers) that are referred to smoking cessation services	Universal Implementation
	MP03	% of pregnant women who	Reporting Data

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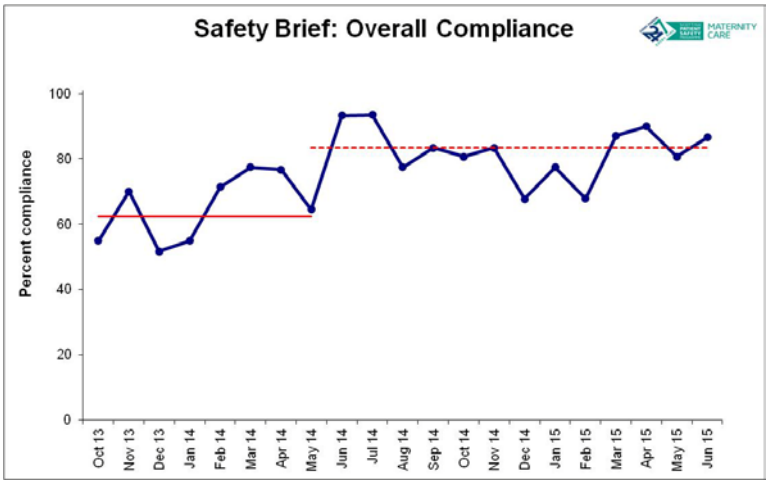

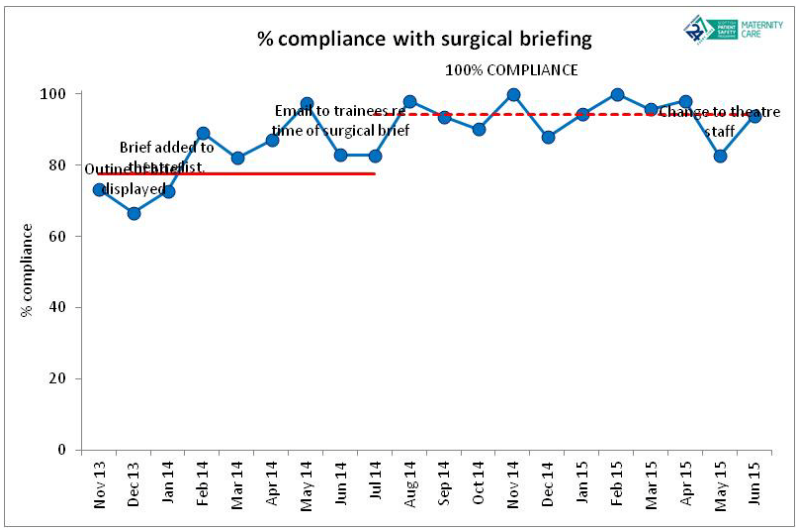

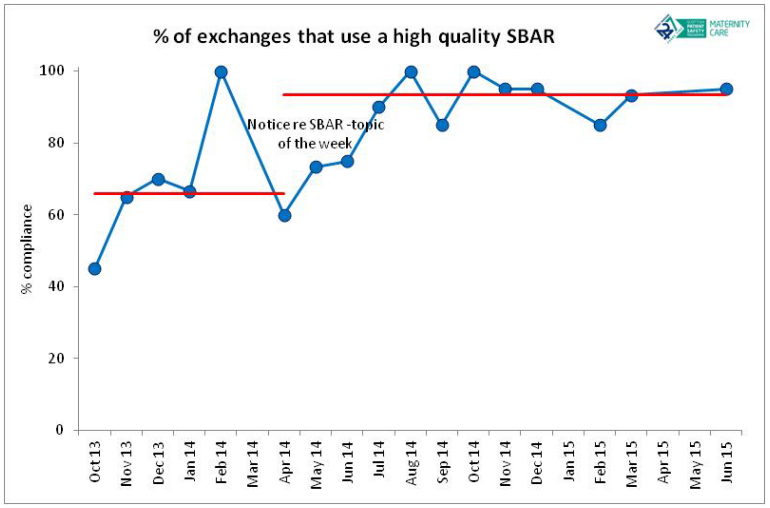

Key Challenges

Key challenges remain full implementation of providing women who continue to smoke a tailored package of antenatal care and around the culture survey due to the resources required to gather and analyse the data. NHSGGC are no different here than any other boards, no boards are reporting data against the culture survey measurement.

Next Steps

The Directorate have undertaken a review of current measures and mapped these against the clinical priorities and it has been agreed that the MCQIC work will concentrate on 5 areas listed below:

- Womens satisfaction with their care
- Smoking in pregnancy
- Fetal Heart Rate Monitoring
- Post Partum Haemorrhage
- Significant events debrief

Appendix 1 – Current elements measured in Paediatric Work-stream

General Ward Bundle

- % of compliance Hand hygiene
- % compliance with PEWS bundle
- % compliance with the daily safety brief bundle
- % of exchanges that use a high quality SBAR
- % compliance with the paediatric Peripheral Vascular Catheter (PVC) insertion bundle
- % compliance with the paediatric Peripheral Vascular Catheter (PVC) maintenance bundle
- % compliance with paediatric central venous catheter (CVC) maintenance bundle

Peri-operative bundle

- Pre-list team brief
- Pre case surgical pause
- On-time prophylactic antibiotics administration
- % compliance with the paediatric Peripheral Vascular Catheter (PVC) insertion bundle
- Post list de-brief

Critical Care PICU

- % of compliance Hand hygiene
- % compliance with the paediatric VAP prevention care bundle
- % compliance with paediatric central venous catheter (CVC) insertion bundle
- % compliance with paediatric central venous catheter (CVC) maintenance bundle
- % compliance with the paediatric Peripheral Vascular Catheter (PVC) maintenance bundle
- % achievement of patients being reviewed by the correct "people" and daily goals (DG) including child, young person and family / carer
- % compliance with the daily safety brief bundle

Neonatal

- % of compliance Hand hygiene
- % compliance with paediatric central venous catheter (CVC) insertion bundle
- % compliance with paediatric central venous catheter (CVC) maintenance bundle
- % compliance with the daily safety brief bundle
- % compliance with gentamicin bundle
- % of newborn infants with screening bundle
- % of newborn infants with a documented consultation with parents by an experienced clinician of the neonatal team within 24 hours of admission
- % compliance with warm bundle
- % of planned extubation using extubation pause

Outcome measures

- Serious Safety Events
- Ventilator associated pneumonia
- Central venous catheter related blood stream infections
- Unplanned admission to Paediatric Intensive Care Unit (PICU)

- Medicines Harm

Leadership and Culture

- Number of safety walk rounds including hospital & senior leaders
- % of actionable items being completed each month