



AGENDA ITEM
7.4.2

QUALITY & SAFETY COMMITTEE

UPDATE BRIEFING: NEONATAL SERVICES IMPROVEMENT

Date of meeting	18/01/2022
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FOI Status	Open/Public
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If closed please indicate reason	Not Applicable - Public Report
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Prepared by	Jane O’Kane Neonatal Improvement Programme Director
Presented by	Sallie Davies Senior reporting Officer Neonatal Services & Deputy Medical Director
Approving Executive Sponsor	Executive Medical Director

Report purpose	FOR DISCUSSION / REVIEW
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Engagement (internal/external) undertaken to date (including receipt/consideration at Committee/group)		
Committee/Group/Individuals	Date	Outcome
	(DD/MM/YYYY)	Choose an item.

ACRONYMS	
NIP	Neonatal Improvement Programme
IMSOP	Independent maternity oversight panel
PCH	Prince Charles Hospital



POW	Princess of Wales Hospital
QI	Quality Improvements
SOP	Standing operating procedure
MOU	Memorandum of Understanding
UHW	University Hospital of Wales
ET	Endotracheal

1. SITUATION/BACKGROUND

- 1.1 Neonatal services were incorporated within the programme of special measures alongside Maternity services in September 2020 with a formal Ministerial announcement confirming the same in February 2021
- 1.2 In March 2021 IMSOP recruited a neonatologist and Neonatal Nurses who commenced a review (deep dive) into Neonatal services in May 2021 with a focus upon the PCH Unit
- 1.3 In August 2021 the Neonatal IMSOP team members escalated a series of concerns to Welsh Government which equated with 15 areas for improvement
- 1.4 The Deep dive report is anticipated to be published at the end of January 2022

2.0 SPECIFIC MATTERS FOR CONSIDERATION BY THIS MEETING (ASSESSMENT)

2.1 The Immediate make safes

Within the IMSOP escalation report there were 15 areas identified to be a cause for concern with 5 requiring immediate improvements. The following illustrates activity to date relating to these 5, further to the evidence submission and subsequent IMSOP feedback:

Improvement Needed	Minimal interventions and UHB actions	Additional information & activity to progress
Immediate make safes to support safe prescribing in practice	-Good prescribing guide displayed -Revised Pharmacy SOP -Appointment of a Neonatal pharmacist with governance remit Nov 21	Weekly pharmacy risk meetings estab to review SOP content to be revisited /amended



	-Neonatal Formulary on each Unit	
Immediate improvements to support expert clinical decision making	-Review of CHANTS SOP -Tertiary support agreed -Rotation to tertiary Unit agreed with framework and MOU developed for UHW and CTMU for Jan 22	Rotations delayed due to Covid and operational pressures – revised date to be confirmed with both UHBS
Immediate review of unplanned extubations	-Purchase of ET Tape -NN trigger list amended to include unplanned extubations	
Immediate documentation review	-MDT working group established -Audit of 50 records completed and analysed -NMC & GMC standards reissued -Documentation Standard in draft	Training pending Jan 2022 to launch new standards Audit outcomes to be shared with teams Jan 2022 Monthly audit to commence post launch of new standards
Immediate review of Risk Registers	Both CYP CSG teams reviewed and updated Risk Registers	Neonatal dashboard to capture key risks and themes

2.2The programme of improvements

The NIP Improvement plan (Appendix 1) incorporates each area with a dedicated lead as embedded and upon receipt of the Deep dive report will be amended to reflect the same.

Key areas of development to note that underpin the improvement activity are as follows:

2.2.1 Strategy and Vision

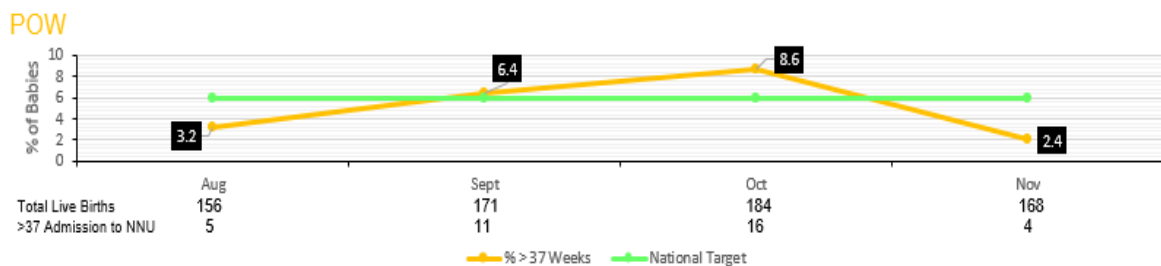
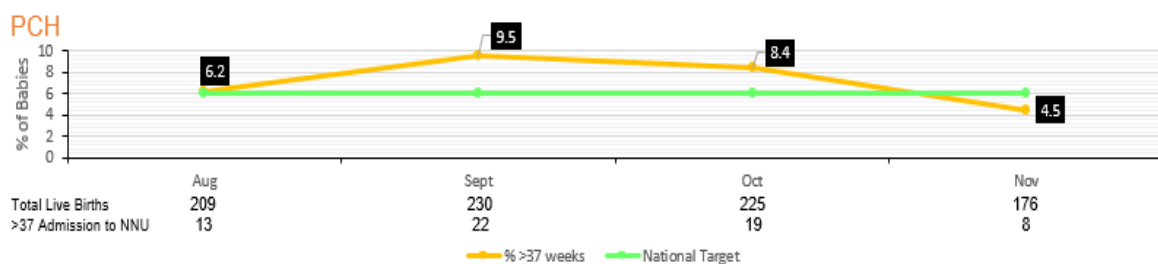
The Health Boards pre conception to 1000 days strategic priorities are being progressed to incorporate the Maternity and Neonatal vision ensuring that there is clear focus upon driving health improvements. Recent prioritisation has been afforded to maternal mental health and infant attachment with the development of operational programmes of work pending.

2.2.2 Progress in data systems and metrics to support analysis of activity and outcomes

The neonatal dashboard was developed with the appointment of a Data Manager and is being expanded to ensure it is responsive to service needs, able to demonstrate performance and support future service developments and clinical improvements.

The dashboard incorporates a range of data and metrics including that relating to our infant admissions which is a critical component of the QI *Avoiding Term Admissions improvement* work programmes (ATAIN). This element is shared as follows:

CTM Neonatal Admission Data for Term (>37 weeks) Babies

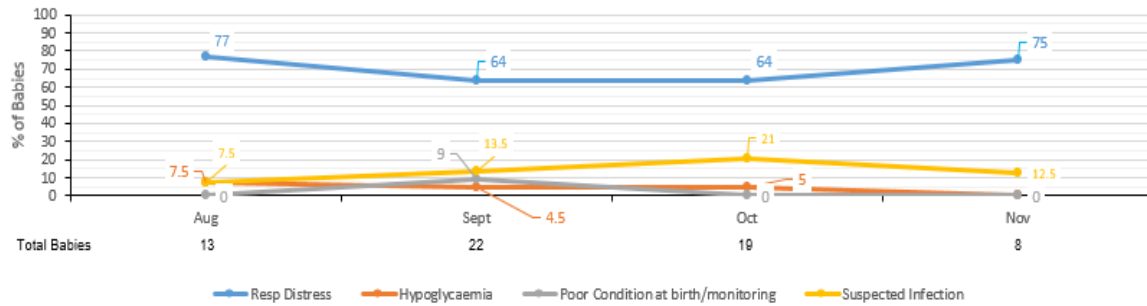


The above tables show the percentage of admissions to the NNU based on the total live births (all gestations). The green line represents the national target for term admissions to NNU, which is 6%. Included are the total live births (all gestations) and total admissions to PCH NNU and POW SCBU to give an understanding of the percentages shown in the charts.



PCH

Reasons for Admission



The above table shows the reasons for admission to NNU of > 37 weeks from Labour ward and Post Natal ward. The figures are the percentage of the total babies admitted per reason.

The 4 main reasons for admission of >37 weeks over this period were:-

Respiratory distress 68%

Suspected Infection 15%

Poor Condition at Birth/Monitoring 3%

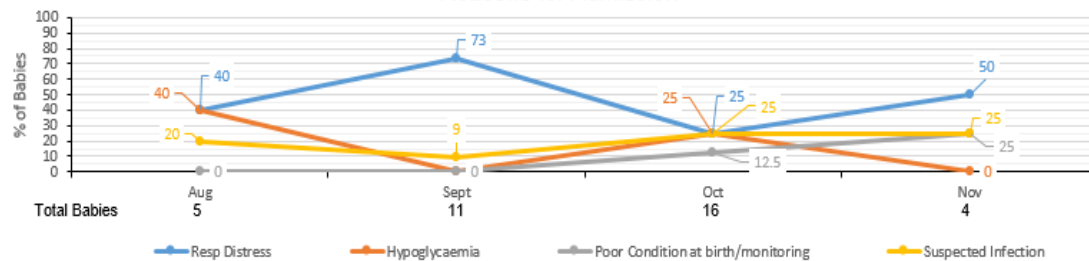
Hypoglycaemia 2%

(Figures are the average % over the 4 month period)

The other reasons for admission during this period included HIE, jaundice, congenital abnormalities, place of safety and NAS.

POW

Reasons for Admission



The above table shows the reasons for admission to NNU of > 37 weeks from Labour ward and Post Natal ward. The figures are the percentage of the total babies admitted per reason.

The 4 main reasons for admission of >37 weeks over this period were:-

Respiratory distress 44%

Suspected Infection 19%

Hypoglycaemia 17%

Poor Condition at Birth/Monitoring 8%

(Figures are the average % over the 4 months period)

The other reasons for admission during this period included Metabolic Disease, Suspected Convulsions, IUGR and Continuing Care.

2.2.2.a Neonatal Dashboard Governance and reporting

An internal governance process was agreed to facilitate a review, an analysis of the clinical data and a process of sharing and relevant learning (appendix 3)

The dashboard data is submitted to Welsh Government and IMSOP who receive this and the Maternity dashboard monthly with the clinical analysis (appendix 4)

2.2.3 Workforce

Both Neonatal Units are outliers in Wales with core deficits in therapy roles and supernumerary shift co-ordinators and business proposals are being developed to quantify the same. The aim is to ensure that workforce models reflect a robust modern MDT workforce for CTM2030 well placed to respond to inequalities, drive innovation and sustain Neonatal standards

It should be noted that there have been a number of changes made to the NIP team to facilitate aspects of cultural change, actively lead improvements through QI frameworks as well as support the NIP team capacity. This includes the appointment of a Snr Neonatal Nurse at PCH Unit who has a dual role with the NIP team, a psychologist and an academic lead (See Appendix 2)

2.2.4 Family Engagement

Due to previously reported challenges for the NIP team and staff being redeployed to front line duties this area of work has been delayed. With the recent support given for a lead Neonatal Engagement Nurse and recruitment planned for early 2022, the active development of a Parent Forum and PROMS and PREMS are anticipated at pace over the next quarter

3. MATTERS FOR ESCALATION TO BOARD/COMMITTEE

3.1 Governance and Assurance processes

In collaboration with IMSOP an agreed process is being developed to manage the requirements of the deep dive report recommendations and anticipated programmes of work. The same will aim to ensure effective engagement and facilitate learning from the expertise of IMSOPs Neonatal team.

3.2 Workforce pressures and acuity

Over the past two months significantly reduced staffing levels notably at PCH site where sickness and absence has equated with a 30 % shortfall have necessitated cot reductions to ensure safe services.

Although levels are now improved the impact upon staff to manage changes and improvements at pace within this context will need to be carefully

managed. Support and active staff engagement is planned for the report publication with colleagues across the ILG, corporately and from the NIP team.

4. IMPACT ASSESSMENT

Quality/Safety/Patient Experience implications	Yes (Please see detail below)
Related Health and Care standard(s)	Safe Care If more than one Healthcare Standard applies please list below:
Equality Impact Assessment (EIA) completed - Please note EIAs are required for <u>all</u> new, changed or withdrawn policies and services.	No (Include further detail below) If yes, please provide a hyperlink to the location of the completed EIA or who it would be available from in the box below. If no, please provide reasons why an EIA was not considered to be required in the box below. Equality Issues are addressed within the attached report
Legal implications / impact	There are no specific legal implications related to the activity outlined in this report.
Resource (Capital/Revenue £/Workforce) implications / Impact	Yes (Include further detail below) Potential increase in the demands on the Neonatal Improvement Team may lead to a need for increased resource
Link to Strategic Goals	Improving Health

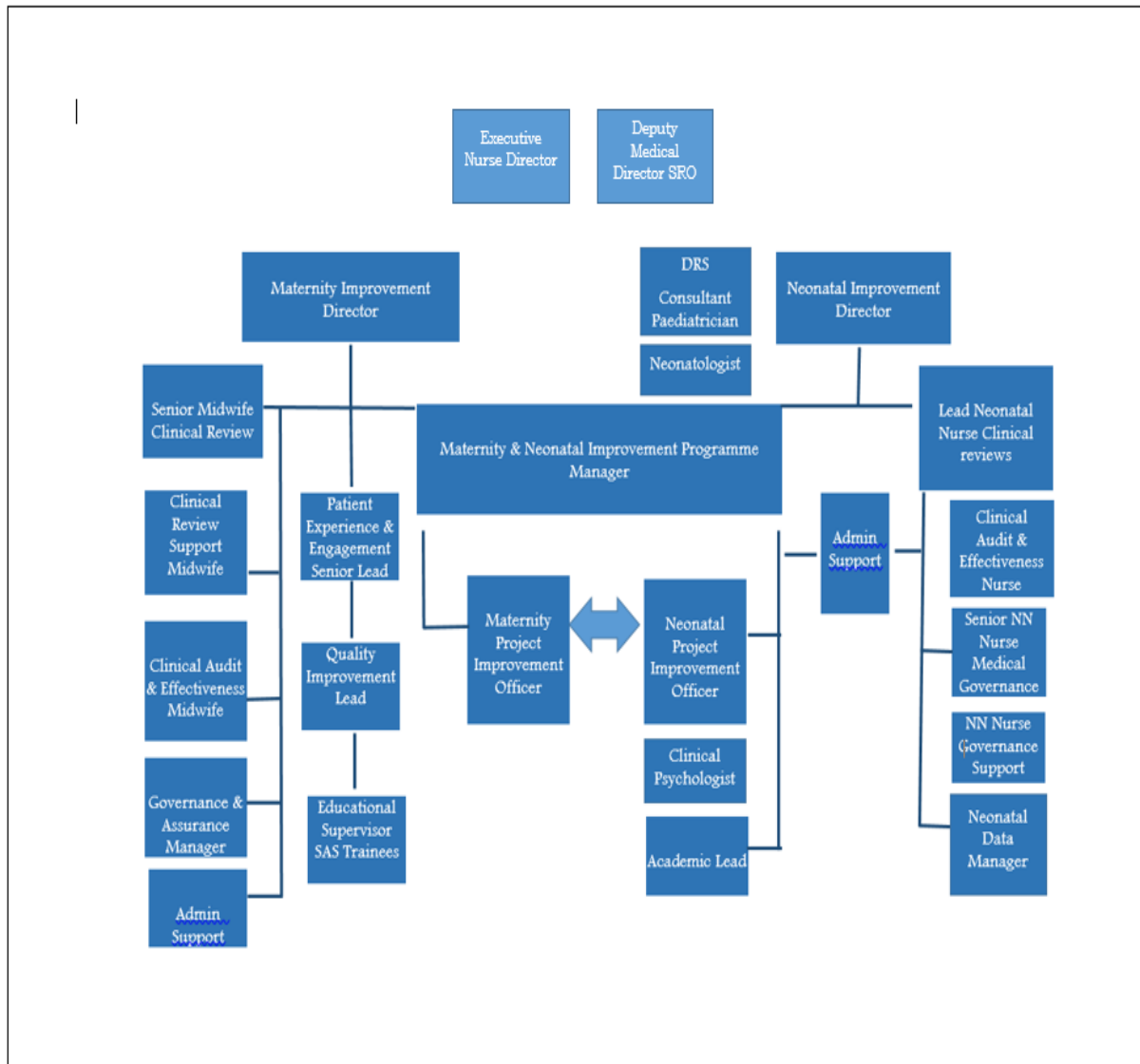
5 RECOMMENDATION

The Committee are asked to **NOTE** the reports contents



Appendix 2

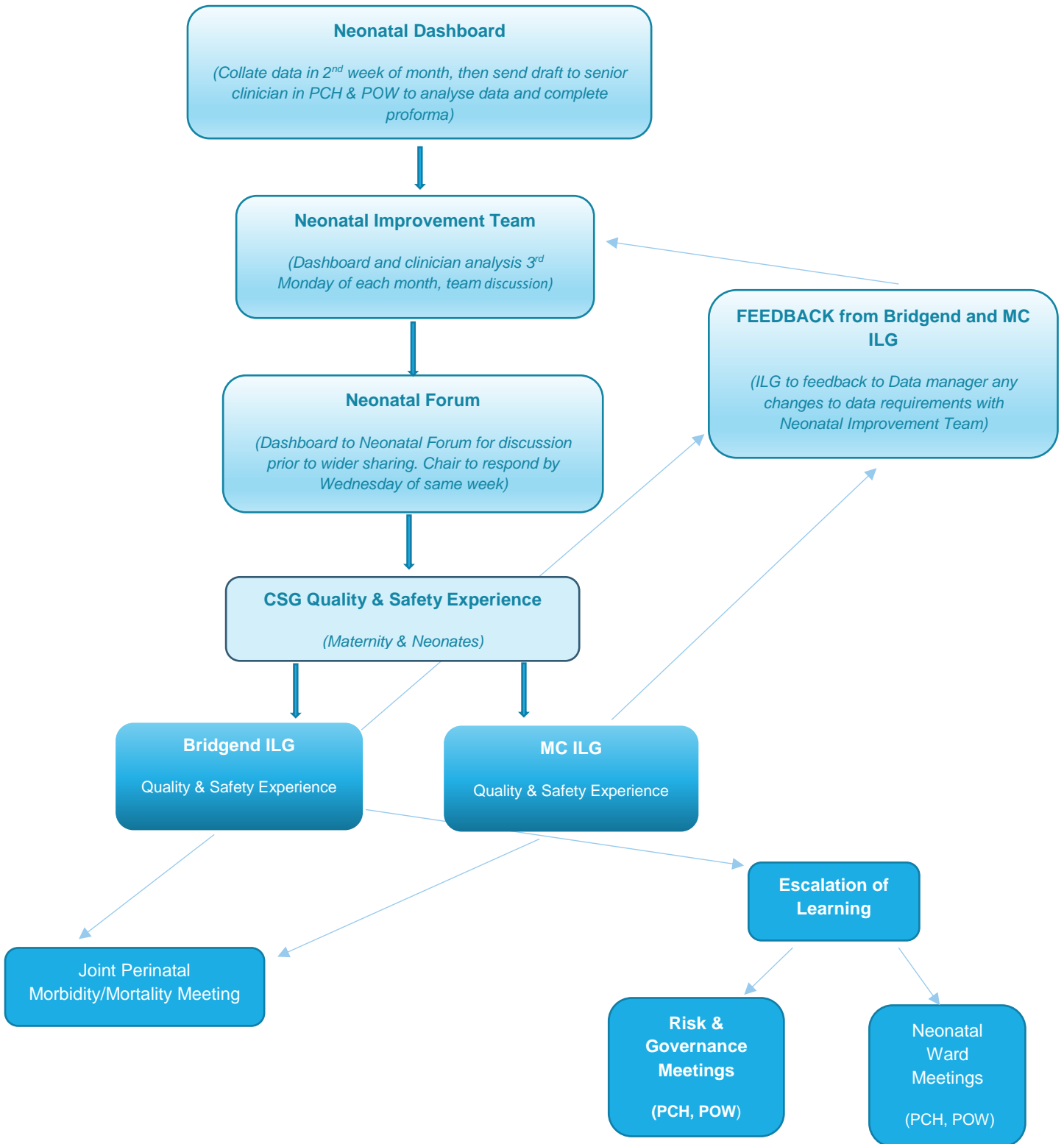
**Neonatal Improvement Programme
Organisational Flowchart**





Appendix 3

Neonatal Dashboard Governance Flowchart





Appendix 4

Clinical Data Analysis from the Dashboard submitted to Welsh Government for November 2021

Dashboard Data Analysis

Month/Year	November 2021																		
Names of Lead Clinicians	Dr David Deekollu Clinical Director Childrens Services (PCH) Dr Kate Creese Clinical Lead Neonatal services (POW)																		
KEY ISSUES																			
Nurse (Staffing) PCH	Nurse Staffing levels comply with BAPM standards.																		
Nurse (Staffing) POW	Nurse Staffing levels comply with BAPM standards.																		
Additional Nurse staffing information	PCH – 16% staff absence. Overtime/bank shifts to cover absence to ensure compliance. POW – 18% staff absence. To ensure staffing is compliant overtime/bank shifts and staff from paediatric ward are used to maintain the service.																		
Term Admissions <i>(Increase/decrease, Why?)</i>	<table border="1"> <thead> <tr> <th>SITE</th> <th>Term admission rate</th> <th>Total Live Births</th> </tr> </thead> <tbody> <tr> <td>PCH</td> <td>4.5%</td> <td>176</td> </tr> <tr> <td>POW</td> <td>2.2%</td> <td>168</td> </tr> <tr> <td colspan="3" style="text-align: center;">National Target for Term admissions 6% in Wales <i>(% sourced from IMSOP / Welsh Government Monthly CTM Performance Huddle)</i></td> </tr> </tbody> </table>	SITE	Term admission rate	Total Live Births	PCH	4.5%	176	POW	2.2%	168	National Target for Term admissions 6% in Wales <i>(% sourced from IMSOP / Welsh Government Monthly CTM Performance Huddle)</i>								
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National Target for Term admissions 6% in Wales <i>(% sourced from IMSOP / Welsh Government Monthly CTM Performance Huddle)</i>																			
Additional Information	Reduction in proportion of term admissions in November 21. Within national target.																		
Reasons for Term Admission <i>(Have there been any changes? Increase/decrease, Why?)</i>	<table border="1"> <thead> <tr> <th></th> <th>Respiratory Distress</th> <th>Jaundice</th> <th>Suspected Infection</th> <th>Monitoring/ Poor condition at birth</th> </tr> </thead> <tbody> <tr> <td>PCH</td> <td>75%</td> <td>12.5%</td> <td>12.5%</td> <td>-</td> </tr> <tr> <td>POW</td> <td>50%</td> <td>-</td> <td>25%</td> <td>25%</td> </tr> </tbody> </table>		Respiratory Distress	Jaundice	Suspected Infection	Monitoring/ Poor condition at birth	PCH	75%	12.5%	12.5%	-	POW	50%	-	25%	25%			
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<p>Additional Information <i>(Term Admissions that remain over 24 hours)</i></p>	<p>5 out of 8 term admissions remained in the unit >24 hours which suggests these were unavoidable term admissions. None were due to hypoglycaemia (PCH).</p> <p>ATAIN work is on-going and the new hypoglycaemia pathway is being introduced in both units. In POW the term admissions stayed on the unit over 24 hours implying that their admission was unavoidable.</p>											
<p>Antenatal Steroids</p>	<table border="1"> <thead> <tr> <th>SITE</th> <th>GIVEN</th> </tr> </thead> <tbody> <tr> <td>PCH</td> <td>50%</td> </tr> <tr> <td>POW</td> <td>80%</td> </tr> </tbody> </table>			SITE	GIVEN	PCH	50%	POW	80%			
SITE	GIVEN											
PCH	50%											
POW	80%											
<p>Magnesium Sulphate</p>	<table border="1"> <thead> <tr> <th>SITE</th> <th>GIVEN</th> </tr> </thead> <tbody> <tr> <td>PCH</td> <td>100%</td> </tr> <tr> <td>POW</td> <td>100%</td> </tr> </tbody> </table>			SITE	GIVEN	PCH	100%	POW	100%			
SITE	GIVEN											
PCH	100%											
POW	100%											
<p>Additional Information</p>	<p>Mag sulph 100% compliance in both PCH & POW. Antenatal Steroids 4 out of 5 received in POW and 1 out of 2 received in PCH. Plan to liaise with obstetrics to discuss reason for steroids not given.</p>											
<p>Admission Temperature <32week</p>	<table border="1"> <thead> <tr> <th>SITE</th> <th>DONE</th> </tr> </thead> <tbody> <tr> <td>PCH</td> <td>100%</td> </tr> <tr> <td>POW</td> <td>100%</td> </tr> </tbody> </table>			SITE	DONE	PCH	100%	POW	100%			
SITE	DONE											
PCH	100%											
POW	100%											
<p>Consultation with Parents</p>	<p>PCH and POW 100% compliant with parents being seen within the first 24 hours of admission.</p>											
<p>Additional Information</p>	<p>All eligible babies seen within the required timeframe.</p>											
<p>Mothers Milk at Discharge <34weeks</p>	<table border="1"> <thead> <tr> <th></th> <th>BREAST/MIX</th> <th>FORMULA</th> </tr> </thead> <tbody> <tr> <td>PCH</td> <td>100%</td> <td>-</td> </tr> <tr> <td>POW</td> <td>-</td> <td>100%</td> </tr> </tbody> </table>				BREAST/MIX	FORMULA	PCH	100%	-	POW	-	100%
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<p>Additional Information re feeding</p>	<p>4 out of 4 discharged on pre-term formula in POW, with 1 out of 1 discharged as receiving breast milk in PCH – always difficult to rely on these figures, as many babies <33 weeks have been repatriated from tertiary units where their feeding preferences have already been established.</p>											
<p>Summary</p>	<p>1) Continue to monitor trends via ATAIN analysis and team debriefs after each acute event/preterm delivery.</p>											