Maternity and Neonatal Learning System
12th of March 2018
Welcome

Amanda Risino
Managing Director Health Innovation
Manchester
Patient Safety Collaborative Steering Group (Chair)
Health Innovation Manchester (HInM)

- GM is the first region in the country to take control of its combined health & social care budgets, with a budget of more than six billion pounds.

- GM health devolution has enabled the formation of an Academic Health Science System facilitating the acceleration of clinical research into clinical practice.
Health Innovation Manchester (HInM)

- HInM supports a ‘One Manchester Team’ to tackle GM health & care challenges and delivers the GM Patient Safety Collaborative with a mandate to create a culture of continuous learning and improvement in the NHS

- Promoting a system thinking approach to patient safety and population health across Greater Manchester
Patient Safety Collaborative National Context

The national PSC is the largest safety initiative in the history of the NHS, supporting and encouraging a culture of safety, continuous learning and improvement, across the health and care system.
For further information on Health Innovation Manchester Patient Safety Collaborative

Amanda Risino
Managing Director Health Innovation Manchester
@healthinnovmcr
Tel: 0161 206 7979

HInM, Suite C, Third Floor, Citylabs, Nelson St, Manchester, M13 9NQ
Patient Safety collaborative overview

Jay Hamilton
Associate Director Patient Safety Collaborative
Patient Safety Collaborative Steering Group (vice Chair)
Housekeeping
# AGENDA – 12 March 2018

Conference Room 1, Ground Floor, Citylabs, Nelson Street, Manchester, M13 9NQ

## Sharing Local Innovations

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00</td>
<td>Arrival Tea/Coffee</td>
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<tr>
<td>9:30</td>
<td>Welcome and Introductions</td>
<td><strong>Amanda Risino</strong> - Managing Director, Health Innovation Manchester</td>
</tr>
<tr>
<td>9:40</td>
<td>Patient Safety Collaborative Overview</td>
<td><strong>Jay Hamilton</strong> - Associate Director, Lead for GM Patient Safety Collaborative, Health Innovation Manchester</td>
</tr>
<tr>
<td>9:50</td>
<td>GM Local Maternity System</td>
<td><strong>Jen Sager</strong> - Senior Project Manager, Local Maternity System</td>
</tr>
<tr>
<td>10:00</td>
<td>Interactive Health Innovation Quiz</td>
<td><strong>Bob Diepeveen</strong> - Patient Safety Collaborative GM Improvement Advisor, Health Innovation Manchester</td>
</tr>
<tr>
<td>10:15</td>
<td>Getting Innovation to the Frontline: Episcissors</td>
<td><strong>Cara Afzal</strong> - Senior Programme Development Lead, Health and Implementation, Health Innovation Manchester, <strong>Alexander J. Fisher</strong> – Director, Advanced Global Health</td>
</tr>
<tr>
<td>10:30</td>
<td>Women’s Experience</td>
<td><strong>Victoria Ashcroft</strong></td>
</tr>
<tr>
<td>10:45</td>
<td>Break</td>
<td></td>
</tr>
<tr>
<td>11:00</td>
<td>Getting Innovation to the Frontline:</td>
<td><strong>Prof. Alex Heazell</strong> - Senior Clinical Lecturer in Obstetrics and Clinical Director of the Tommy’s Stillbirth Research Centre, University of Manchester, <strong>Louise Stephens</strong> – Specialist Midwife</td>
</tr>
</tbody>
</table>

- Rainbow Clinic
- Table discussion
# Maternity and Neonatal Learning System Launch Event

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Presenter</th>
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</thead>
<tbody>
<tr>
<td>11:40</td>
<td>Learning from Wave 1 / The Journey So Far</td>
<td>Jen McCartney - Divisional Support Manager, Women and Children’s Division, The Pennine Acute Hospitals NHS Trust, Lewis Stott - Assistant Directorate Manager Obstetrics, Pennine Acute</td>
</tr>
<tr>
<td>11:50</td>
<td>Big 5 Introduction</td>
<td>Julie McCabe – Network Director, North West Neonatal Operational Delivery Network</td>
</tr>
<tr>
<td>12:00</td>
<td>Big 5 Efforts in GM</td>
<td>All</td>
</tr>
<tr>
<td>12:30</td>
<td>Lunch (afternoon drinks)</td>
<td></td>
</tr>
<tr>
<td>14:30</td>
<td>Use of Quality Improvement in PSC</td>
<td>Bob Diepeveen - Patient Safety Collaborative GM Improvement Advisor, Health Innovation Manchester</td>
</tr>
<tr>
<td>15:30</td>
<td>Plan next period</td>
<td>All</td>
</tr>
<tr>
<td>15:50</td>
<td>Summary and Next Steps</td>
<td>Jay Hamilton - Associate Director, Lead for GM Patient Safety Collaborative, Health Innovation Manchester</td>
</tr>
</tbody>
</table>
National Patient Safety Collaboratives

Nationally Funded & Coordinated by NHSI

15 PSC’s Delivered by AHSNs

Support & Encourage

- Culture of Safety
- Continuous Learning
- Spread of Innovation for Safety
- Continuous Improvement

Mandated across Health & Social care
PSC workstream

Workstream 1: Deteriorating Patient
• To reduce avoidable harm & enhance the outcomes & experience of patients who are deteriorating

Workstream 2: Culture & Leadership
• To help create the conditions that will enable healthcare organisations to nurture & develop a culture of safety by 31st March 2019

Workstream 3: Maternity & Neonatal
• To improve maternity & neonatal care, specifically reducing the rate of stillbirth, neonatal death & brain injuries occurring during or soon after birth by 20% by 2020
For further information on Health Innovation Manchester Patient Safety Collaborative

Jay Hamilton
Managing Director Health Innovation Manchester
@healthinnovmcr
Tel: 0161 206 7979

HInM, Suite C, Third Floor, Citylabs, Nelson St, Manchester, M13 9NQ
What is a Local Maternity System?

**Role of the LMS is to:**
- Bring together providers involved in maternity and neonatal care including ambulance service and primary care services
- Co-produce services with women, their partners and communities
- Put in place the infrastructure needed to support services working together
- Develop new approaches to commissioning services that span organisational and service boundaries
- Commission maternity services to support personalisation, safety and choice

**LMS’s will:**
- Provide the opportunity to do something different
- Work closely with NHS England Clinical Networks
- Have in place robust governance, structure and leadership for transformation
- Oversee the implementation of a local Maternity Strategy
Who are the Local Maternity System?
7 themes of Better Births

- Personalised Care
- Safer Care
- Continuity of Carer
- Better Postnatal and Perinatal Mental Healthcare
- Working Across Boundaries
- Multi-professional Working
- Payment System

Greater Manchester Health and Social Care Partnership
9 National MTP work streams

Local drivers for change

System enablers

Service improvement

Greater Manchester Health and Social Care Partnership
Safer maternity care

The Secretary of State’s ambition is to reduce the rate of stillbirths, neonatal and maternal deaths and brain injuries by 50% by 2025.
End of March 2018 Maternity and Neonatal Transformation Strategy to be made available publicly
What we know about GM&EC

12.9% of women smoke at time of delivery
(Data collected from ONS Sept 16 to Aug 17)

29% of mothers giving birth in Greater Manchester and Eastern Cheshire are from Black and Minority Ethnic (BME) communities
(Data collected 2015/2016 PHE Fingertips)

19.75% of women who become pregnant are overweight (BMI >30)
(Data collected 2016/17 NHS maternity statistics)

Around 37 full term babies per 1000 are admitted to the neonatal unit
(Local Maternity Dashboard)

21 mothers per 1000 were readmitted to hospital within 30 days after giving birth
(Local Maternity Dashboard)
What we know about GM&EC

- Around 30 women per 1000 experience a 3rd or 4th degree tear
  (Nov 16 – Oct 2017 local Maternity Dashboard)

- 4.54% of women have an obstetric hemorrhage
  (Nov 16 – Oct 2017 local Maternity Dashboard)

- 10.9% of babies are born before 37 weeks
  (NHS Maternity Statistics 2017, Sept 16 – Aug 2017 Local Maternity Dashboard)

- Currently around 65% of women initiate breastfeeding, and 40% continue to breastfeed at weeks
What we know about GM&EC

4.6 of stillbirths per 1000
(Local Maternity Dashboard Local Data Jan - Dec 16)

2.74 of Neonatal Deaths per 1000
(ONS GM&EC Data 2013-2015)

1.26 Intrapartum Brain Injuries per 1000
(Local Maternity Dashboard 2016)

10.5 Maternal mortality per 100,000
(Local Maternity Dashboard 2016)
What we know about GM&EC

• Greater Manchester and Eastern Cheshire supported over 38,000 women to birth their babies in 2017.

• We cover a geographical area of over 993 Square Miles, which is a variety of urban and rural areas.

• Within this area there are areas of significant deprivation and health inequality

• We have 7 maternity providers, with 9 maternity sites (soon to be 10 with the opening of Ingleside (FMU in Salford, run by Bolton FT) and 11 CCG’s.

• We have 1 maternity Pioneer looking at Choice and Personalisation as part of the Maternity Transformation programme (Salford CCG, Bolton CCG and Wigan CCG)
Our Vision

Maternity services in Greater Manchester and Eastern Cheshire should work with women and their families to meet their wishes and needs, producing outcomes for them and their babies that are comparable to the best in the world.
Greater Manchester and Eastern Cheshire LMS

- National Maternity Transformation Board
- Children's Health and Wellbeing Board
- GM&EC Maternity Transformation Board
- Thematic Groups (Including Neonatal ODN, SCN Maternity Steering Group, NW Sector Pioneers, Patient Safety)
  - Safety Working Group
  - Choice Working Group
  - Continuity Working Group
  - Postnatal Working Group
  - Perinatal MH Working Group
  - Neonatal Working Group
  - Commissioning Working Group
Greater Manchester and Eastern Cheshire LMS

Developments to date

• Stakeholder Analysis
• Workstreams established with clinical representation from across Greater Manchester and Eastern Cheshire
• Service Users at the heart of the plan

➢ Maternity Voices Partnership Network set up
➢ Co-produced the Maternity Transformation LMS vision and plan, and co-leading on Choice and personalisation working groups

– Development of a communication strategy and implementation plan
– Data sources identified, baseline figures updated with proposed trajectories
– Working in partnership with GM Strategic Clinical Network (SCN) and Patient Safety Collaborative
– Setting up of working groups within Maternity transformation plan
For more information contact:

Alison McGovern – GM&EC LMS Programme Lead
Jennifer Sager – GM&EC LMS Senior Project Manager

✉️: gmeccmpc@nhs.uk
🔗: www.gmeccsn.nhs.uk
🐦@GMEC_SCN or tag us #MaternityGM
📖Our Maternity Transformation Strategy Summary (will be released end of March)
Interactive Health Innovation Quiz
What do you already know about today?
National Innovation Accelerators - getting innovations to the frontline!

Example of: Episcissors-60 roll out and new innovation - the Hampton App

Cara Afzal, Senior Programme Development Lead, Health and Implementation

Alexander J. Fisher
Director, Advanced Global Health

12 March 2018
The NHS Innovation Accelerators

- NHS England initiative delivered in partnership with the 15 Academic Health Science Network, hosted by UCL Partners

- Supporting delivery of FYFV by accelerating uptake of high impact, evidence-based innovations for patient, population and NHS staff benefit

- 469 additional NHS commissioners and providers now using NIA innovations; £28.6m in external funds secured; 14 awards won; 10 selling internationally

- Impact data demonstrates earlier intervention, reductions in complications and emergency admissions, cost savings

- ITT incentivising the adoption and spread of transformation innovation.
### The Innovation Technology Tariff (ITT) - costing models

<table>
<thead>
<tr>
<th>Theme</th>
<th>Example product</th>
<th>How will it operate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Guided mediolateral episiotomy to minimise the risk of obstetric anal sphincter injury</td>
<td>Episcissors-60</td>
<td>Incentive based on activity. The price 16.00 per use.</td>
</tr>
<tr>
<td>2) Reduction of bacterial contamination and accidental administration of medication</td>
<td>Non-injectable arterial connector (NIC)</td>
<td>Provided under the zero cost model. The value of this device per patient is £2.</td>
</tr>
<tr>
<td>3) Prevention of ventilated associated pneumonia in critically ill patients</td>
<td>Pnuex</td>
<td>Provided under the zero cost model. NHS England is covering the cost of the tubes valued at £150 each.</td>
</tr>
<tr>
<td>4) Applications for the self-management of Chronic Obstructive Pulmonary Disease</td>
<td>myCOPD</td>
<td>Provided under the zero cost model. NHS England is covering the cost of licences valued at £20.00 per patient.</td>
</tr>
<tr>
<td>5) Frozen Faecal microbiota transplantation (FMT) for recurrent Clostridium difficile infection rates</td>
<td>Frozen Faecal Microbiota</td>
<td>Provided under the zero cost model. NHS England is covering the cost of FMT aliquots valued at £95.00 per patient.</td>
</tr>
<tr>
<td>6) Management of Benign prostatic hyperplasia as a day case</td>
<td>Urolift</td>
<td>Re-imbursement automated via tariff recoded under a new OPCS code.</td>
</tr>
</tbody>
</table>

FMT Awaiting MHRA approval
The AHSN Network
Introducing NHS England’s Innovation Technology Tariff

- Accessing the zero cost NHS ITT

- ITT introduced to incentivise the adoption and spread of transformational innovations in the NHS

- Aims to remove need for multiple local price negotiations and guarantee automatics reimbursement when an approved innovation is used

- The ITT allows NHS E to optimise its purchasing power and negotiate “bulk buy” price discounts where applicable on behalf of the NHS

- 2017-19 first years pathfinder
Preventing Avoidable Harm From Severe Perineal Trauma

- Continuity of carer
- Physiological birth
- AN Perineal Massage
- No Routine Episiotomy

EPIISCISSORS

- Fetal Compromise?
- Instrumental birth?
- Episiotomy
Dr Dharmesh Kapoor, NIA Fellow - inventor of the Episcissors-60

**EPISCISSORS-60**

FIRST SCISSORS DESIGNED TO GIVE AN ACCURATE MEDIOLATERAL EPISIOTOMY; PATENT OWNED BY PLYMOUTH HOSPITALS NHS TRUST

Ref: Kapoor, 2017
“SPECIAL SCISSORS DESIGNED TO ENSURE AN INCISION ANGLE OF 60 DEGREES HAVE BEEN SHOWN TO BE EFFECTIVE IN ACHIEVING THE CORRECT ANGLE\textsuperscript{29,30}. EVIDENCE LEVEL 3”
“WHERE EPISIOTOMY IS INDICATED, THE MEDIOLATERAL TECHNIQUE IS RECOMMENDED, WITH CAREFUL ATTENTION TO ENSURE THE ANGLE IS 60 DEGREES AWAY FROM THE MIDLINE WHEN THE PREINEUM IS DISTENDED. (D)”
Obstetric Anal Sphincter Injuries (OASIS)

**Incidence**
- 30,000 new cases each year
- 6% in first vaginal births
- Leading cause of anal incontinence in women (9:1 F:M)

**Direct Costs**
- £1625 per case for repair + post operative care
- £48.75 million each year

**Indirect Costs**
- 25% of Women choose elective caesarean delivery (extra £1100 per birth, £4.9 million each year)
- £2500 per year/person for fecal incontinence
Litigation costs

- Perineal trauma is the 4th highest reason for claims made in obstetrics over 10 years
- £31 million in legal pay-outs alone
- OASIS being mooted as a patient safety indicator
- £1.6 million damages for OASIS due to an acutely angled Episiotomy
What does this mean for GM?

Episcissors - 60 - in Greater Manchester

Approximately 15% of births require an episiotomies nationally each year, resulting in over 30,000 Obstetric anal sphincter injuries (OASIS) with approximately 12,000 women suffering bowel incontinence.

Based on a GM 2.8 m population estimate:

- #women requiring a episiotomy per year (15% of all births) = 5,160
- Estimated # of OASIS cases per year 1,290 in GM
- Combined savings for prevented OASIS and secondary repair, is estimated at £1,380,796
- Annual avoided litigation costs if 50% of OASIS cases averted = £80,846
Results from UK Hospitals, where they have replaced old episiotomy scissors with Episcissors-60

- 20% reduction in childbirth anal sphincter injuries (OASIS) at Poole and Hinchingbrook hospitals (Van Roon et al;2015)

- 40-50% reduction at Croydon University Hospital (Lou, 2016)

- 40-50% reduction at Royal Free and Barnet Hospitals (Myers, 2016, Unpublished audit)
Progress made in GM adoption

All hospitals in the region other than Warrington, East Cheshire and Uni Hospital of South Manchester (now MFT) have adopted, we are just checking in with sites to make sure!
### Some of the barriers to adoption

<table>
<thead>
<tr>
<th>Reason for not adopting</th>
<th>Some solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difficulty making cogent Business case</td>
<td>ITT provides the fund for the scissors Make CCGs aware of the cost implications of continued high rates of OASIS (detailed in NHS E Guidance)</td>
</tr>
<tr>
<td>If injury rates go down Trust loses income</td>
<td>Make CCGs aware of the cost implications for continued high rates of OASIS</td>
</tr>
<tr>
<td>Single use instrumentation</td>
<td>One third of English Trusts use single use birth packs Have off site sterilisation facilities</td>
</tr>
<tr>
<td>Clinical apathy</td>
<td>Clinical engagement, provision of support, use any other validated means to perform the 60 degree angle episiotomies</td>
</tr>
</tbody>
</table>
What have we done so far - our approach to adoption

• Sourcing and sharing information;

• on the Tariff attached to the products and summarising how it works

• A gathering of Implementation Toolkits and meetings with NIA fellows and companies involved in product development

• Information gathering from other AHSNs on the strategies employed for deployment

• A baseline assessment of the number of products spread - by sourcing information from the NIA Clinical Fellows and the developers, on which sites they had successfully engaged with.
What have we done - approach to adoption continued...

- **Engagement with Procurement leads**, sharing the details of the products, the Tariff information

- Contact with **Innovation leads at Trusts**, where information has been available.

- Presentation and relevant NIA ITT Product information shared with all **GM Procurement Leads**

- Presentation at **Medical Directors**, including sharing of detailed information packs on all products. With a follow up meeting, with MD leads which took place on the 18th December 2017

- Production of a **NIA summary slides pack** for GM HSCP and sharing of products with LCO leads

- Working through the Medical Directors and the Innovation, **Prioritisation and Monitoring committee (IPMC)**.

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The Hampton App - This year’s National Innovation Accelerator Maternity Product

- Up to 10% of patients are hypertensive and therefore at risk of pre-eclampsia.
- Standard pathway for hypertensives is to visit hospital 2/3 times per week for BP and proteinuria assessments.
- 90% of these patients have safe readings.
- The Hampton App is home BP and proteinuria app.
- Mothers input daily BP results and proteinuria (optional). The app has an inbuilt algorithm - if an unsafe reading is provided the mother and hospital are immediately informed.
- With a safe reading the mother is reassured and continues home monitoring.
- Information is shared real time with clinician web portal, allowing clinicians to review data any time and track ‘unsafe’ patients.
Hampton App - Benefits

- 53% reduction in BP MAU/Triage visits
- >90% of women feel empowered and have reduced anxiety
- Average BP appointment time reduces from 116 to 44 mins

Cost of Home Monitoring via Hampton App:

\[
1 \text{ DAU visits/2 week} = 0.5 \times \left( \text{Midwife compensation} + \text{Doctor compensation} + \text{(Blood tests’ cost)} + \text{(Fetal CTG cost)} \right) = 0.5 \times \left( \frac{44 \times 40 \text{ min}}{60 \text{ min}} + \frac{103.33 \times 20\text{ min}}{60\text{ min}} + 2.65 + 2.78 + 2.12 \right) + 27 = £49.16
\]

Cost of Standard Pathway:

\[
3 \text{ DAU visits/week} = 3 \times \left( \text{Midwife compensation for 40min} + \text{Doctor compensation for 20min} + \text{(Blood tests’ cost)} + \text{(Fetal CTG cost)} \right) = 3 \times \left( \frac{44 \times 40 \text{ min}}{60 \text{ min}} + \frac{103.33 \times 20\text{ min}}{60\text{ min}} + 2.65 + 2.78 + 2.12 \right) + 27 = £294.96
\]

- Weekly saving per patient of £245.80
- Greater Manchester Region has c3,400 hypertensive patients, this could lead to £835,720/week
- Hampton app costs £24/patient and lasts 12 months - current users provide antenatal and 6 week postnatal monitoring.
Thank you

For more information about the innovations showcased contact:

Cara Afzal, Senior Programme Development Lead
Email: cara.Afzal@healthinnovationmanchester.com

Alexander J. Fisher, Director, Advanced Global Health
Email: alex.fisher@aghealth.co.uk
Tel: 0207 0788 867
Women’s Experience

Victoria Ashcroft
Break
Improving Care in Pregnancy after Stillbirth

Louise Stephens
Specialist Midwife
Manchester Rainbow Clinic
St Mary’s Hospital
Risk factors and Stillbirth

The majority of stillbirths occur in women with no apparent risk factors (81%)

• Majority confer moderately increased risk

Why is previous stillbirth important?

- **Biomedical**
  - Risk of recurrence

- **Psychological**
  - Anxiety / stress during pregnancy
  - Mother-infant bonding

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What are women’s experiences in subsequent pregnancies?
What is Rainbow Clinic?

• Multidisciplinary Specialist Clinic
• Consultant Led
  – Additional midwifery Support
  – Continuity of Care/Carers
  – Directed investigations
• Placental profile at 23 weeks
• Shared care with relevant services
  – Diabetes / Hypertension Clinic
Referral Criteria

- Previous stillbirth after 24 weeks
- More than one previous stillbirth after 24 weeks
- Previous fetal death in utero between 20-24 weeks
- Previous neonatal death due to placental cause

![Source of referral graph]

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Clinical Care After Stillbirth

Continuous Pathway

- Diagnosis
- Induction of Labour
- Complications during birth
- Investigations
- Bereavement Support
- Preconception Care
- Care in Subsequent Pregnancy
Care in Subsequent Pregnancy

- 10-16 weeks: Review History
- 16 weeks: Appropriate Intervention
- 17 weeks: Anomaly Scan
- 23 weeks: Placental Profile
- 28 weeks: Growth + Doppler scans
- 29 weeks: GTT
- Awareness of FMS + Support
- Plan for birth
Interventions in Subsequent Pregnancy

• **Stop cigarette smoking [B]**
  - Räisänen S et al. 2013 – Smoking cessation in first trimester reduced risk of stillbirth to same as non-smokers
  - Cnattingius et al. 2006 – smoking in next pregnancy reduced in women had experienced a stillbirth (OR 0.76) compared to non-fatal outcomes

• **Aspirin [A]**
  - Roberge et al. 2013 - 75-150mg Aspirin <16/40 has greater effect in reducing perinatal death (RR = 0.41 vs. 0.93)

• **Low molecular weight heparin [B-]**
  - Kupferminic et al.2011 – LMWH in women with inherited thrombophilia 0% recurrence vs. 7% untreated
  - Kupferminic et al. 2011b – LMWH in women with placental findings without thrombophilia 6% treated vs 22% in untreated
Compassionate Care
# Outcome Data

- Preterm birth rate has remained lower than before Rainbow Clinic (6.5% vs. 21%)
- High Caesarean section rate (dependent on previous IPSB)
- NICU admission reducing in frequency

<table>
<thead>
<tr>
<th>Year</th>
<th>Period</th>
<th>Births &lt;37w (%)</th>
<th>IOL (%)</th>
<th>EI CS (%)</th>
<th>Em CS (%)</th>
<th>SVD (%)</th>
<th>Instrumental Delivery (%)</th>
<th>NICU (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>Q1</td>
<td>0</td>
<td>41.7</td>
<td>20.7</td>
<td>37.9</td>
<td>37.9</td>
<td>3.4</td>
<td>17.2</td>
</tr>
<tr>
<td></td>
<td>Q2</td>
<td>18.8</td>
<td>68.4</td>
<td>18.8</td>
<td>12.5</td>
<td>65.6</td>
<td>3.1</td>
<td>12.5</td>
</tr>
<tr>
<td></td>
<td>Q3</td>
<td>22.2</td>
<td>79.2</td>
<td>24.4</td>
<td>24.4</td>
<td>44.4</td>
<td>6.7</td>
<td>17.7</td>
</tr>
<tr>
<td></td>
<td>Q4</td>
<td>5.71</td>
<td>38.6</td>
<td>37.1</td>
<td>11.4</td>
<td>45.7</td>
<td>5.71</td>
<td>8.5</td>
</tr>
<tr>
<td>2017</td>
<td></td>
<td>6.5</td>
<td>22.8</td>
<td>24.4</td>
<td>9</td>
<td>50</td>
<td>7.95</td>
<td>12.5</td>
</tr>
</tbody>
</table>
Patient Experience Questionnaire

- Median score increased to be consistently >20
- 6 points of consecutive improvement since September 2016
Qualitative Data - Experience

“I would recommend the Rainbow Clinic without any hesitation. This pregnancy has been tough but it would have been so much more difficult without the support and expertise of the Rainbow Clinic.”

“I would recommend the Rainbow Clinic to another family. The midwife and doc have been lovely and help me after the loss of our little boy.”

“Feels like there should be one in every hospital.”
Rainbow Clinic Website

http://www.mahsc.ac.uk/projects/rainbowclinic/

Follow Us on Twitter

@MRainbowclinic
@MCR_SB_Research
@louloustev
Table discussion

• Half of the tables starts with Episcissors
• Other half starts with Rainbow clinic
• On your tables answer the following questions:
  1. What is your current practice?
  2. What do you need to get it working in your system?
  3. What are some of the barriers
  4. Who might be the champions who could help you unblock these barriers

10 minutes
National Maternity and Neonatal collaborative – role of the Patient Safety Collaborative

Debby Gould
Clinical lead maternity and neonatal GM
Patient safety Collaborative, Health Innovation Manchester
What is the ambition of the maternity and neonatal collaborative?

By 2020 each Trust, local maternity system and network should have:

• significant capability (& capacity) for **improvement**
• detailed knowledge of local cultural issues
• developed a locally sensitive **improvement** plan
• made significant **improvement** to local service quality and safety
• data to share with their board, staff and commissioners that reflect these **improvements**
• …to create the conditions for a safety culture and a **national maternal and neonatal learning system**
Aim

To improve outcomes and reduce unwarranted variation by providing a safe, high quality healthcare experience for all women, babies and families across maternity care settings in England.

Reduce the rate of stillbirths, neonatal death and brain injuries occurring during or soon after birth by 20% by 2020.

Primary Drivers

- Improve the proportion of smoke free pregnancies
- Improve the optimisation and stabilisation of the very preterm infant
- Improve the detection and management of diabetes in pregnancy
- Improve the detection and management of neonatal hypoglycaemia
- Improve the early recognition and management of deterioration during labour & early post partum period

Secondary Drivers

- Creating the conditions for a culture of safety and continuous improvement
- Develop safe and highly reliable systems, processes and pathways of care
- Improve the experience of mothers, families and staff
- Learn from excellence and harm
- Improving the quality and safety of care through Clinical Excellence
What additional support do organisations in the national learning set receive?

SCORE
Culture
Survey & Debrief
Support

Wave learning sessions (per wave)

Annual national learning event

Site Support (per wave)

Improvement & capability development (per wave)

PSC Local Learning System

Measurement for improvement support

Tailored resources and networks

Access to LIFE improvement platform
Framework for Safe, Reliable and Effective Care

- Creating an environment where people feel comfortable and have opportunities to raise concerns or ask questions.
- Being held to act in a safe and respectful manner given the training and support to do so.
- Developing a shared understanding, anticipation of needs and problems, agreed methods to manage these as well as conflict situations.
- Gaining genuine agreement on matters of importance to team members, patients and families.

Culture
- Psychological Safety
- Accountability
- Teamwork & Communication
- Negotiation

Leadership

Openly sharing data and other information concerning safe, respectful and reliable care with staff and partners and families.

Transparency

Reliability

Improvement & Measurement

Continuous Learning

Learning System
- Applying best evidence and minimizing non-patient specific variation with the goal of failure free operation over time.
- Regularly collecting and learning from defects and successes.
- Improving work processes and patient outcomes using standard improvement tools including measurements over time.

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Psychological Safety

We are our own image consultants and best image protectors

To protect one’s image, if you don’t want to look:

- **STUPID**
  - Don’t ask questions

- **INCOMPETENT**
  - Don’t ask for feedback

- **NEGATIVE**
  - Don’t be doubtful or criticize

- **DISRUPTIVE**
  - Don’t suggest anything innovative

*Source: Amy Edmondson*
What is Safety Culture?

- Shared basic assumptions
- Discovery, creation or development of those assumptions by a defined group
- Group learning of how to cope with its problem of external adaptation and internal integration
- Identification of ways that have worked well enough to be considered valid
- Teaching new members of the group the correct way to perceive, think and feel in relation to any problems

DEVELOPING A GROWTH MINDSET

INSTEAD OF...
I’m not good at this.
I give up.
It’s good enough.
I can’t make this any better.
This is too hard.
I made a mistake.
I just can’t do this.
I’ll never be that smart.
Plan A didn’t work.
My friend can do it.

TRY THINKING...
What am I missing? ??
I’ll use a different strategy.
Is this really my best work?
I can always improve.
This may take some time.
Mistakes help me learn.
I’m going to train my brain.
I’ll learn how to do this.
There’s always a Plan B.
I’ll learn from them.

The Power of the GROWTH MINDSET says, “I believe in you,
give it a try, you just haven’t gotten it, YET !!! You will !!!”
For further information on Health Innovation Manchester Patient Safety Collaborative

Debby Gould
Clinical Lead Maternity Neonatal Collaborative
Debby.gould@healthinnovationmanchester.com
@healthinnovmcr
Tel: 0161 206 7979

HInM, Suite C, Third Floor, Citylabs, Nelson St, Manchester, M13 9NQ
Pennine Acute NHS Trust

Our Journey So Far ..

Meet the team

Penny Martin - Divisional Managing Director
Jen McCartney - Divisional Support Manager
Lewis Stott - Assistant Directorate Manager
CQC 2016......

Inadequate
Staff felt......
Led to…….

Create Governance team - Systems and Processes

New leadership team established early 2016 in response to CQC report

CQC improvement Action plan

Staff engagement - New approach

Review of service
What happened next...

May 2017 successful application to join wave 1 of the NHSI Maternity & Neonatal Safety Collaborative

Our Approach
Focus on
• “Saving babies” A framework for improvement
• Improving the identification and management of sepsis in babies
• Improving the reliability of fetal monitoring and neonatal resuscitation
• Human Factors - Break the Rules for Better Care

Our Challenges
• Time
• Staff engagement
• Focus
Our focus today?

Break the Rules for Better Care
4.a) Work with Mothers and families to improve their experience of safer care. - Run the ‘Break the Rules for great care programme’ to collate minimum 500 responses from women and families and staff and report findings by 31st January 2018.

- **Stakeholder Engagement**

  - TED (Time; Escalation; Decision)

  - Teaching resource to be used to lead improvement

- **Implement**

  - ‘Listen to me’ programme

- **Run**

  - ‘Break the rules for great care programme’

- Patient experience midwife role links with careopinion /Healthwatch engagement events ie @whose shoes

  - MLAG members and representatives to be involved in work streams of their choice

  - Interactive workshop using TED at ‘Saving babies’ launch 18th October 2017

  - Develop TED cascade training for all staff

  - Develop guideline using the ‘Listen to me’ resource

  - Launch & cascade teach ‘Listen to me’

  - Embed ‘Listen to me’ in mandatory training

- 5 day event aiming for 500 responses from staff/women/ families

  - Collate, respond and disseminate findings

**Measures:**

- ‘Break The Rules For Great Care’
How to get involved

Cascade approach with an aim of 500 responses

Survey monkey
Paper survey

Completely anonymous
“If you could **break one rule** for better care what would it be and why?”

“If you could **change one aspect** of your care what would it be and why?”
Categories...

- Myth-busting!
- Rules that need clarity
- Rules that need redesign
- Rules that need advocacy
PDSA Testing

**Cycle 1A:** Posters and launch presentation to management team

**Cycle 1B:** Email sent to all managers with links to survey monkey and signposting paper survey (cascade approach)

**Cycle 1C:** Email sent to all staff signposting ways to respond

**Cycle 1D:** Small team floor walking to spread the word

**Cycle 1E:** Collate information review PDSA - 495 responses received

**Aim:** To receive 500 responses in 5 day period
Analysis and themes

Themes
- Medication processes
- Agency staff capability
- IT systems
- Lumber puncture process
- Birth companions
- Paperwork
- Pain relief

Results
- Myths / rules that need clarity
- Rules that need advocacy
- Rules for redesign
- Compliments

Myth / clarity fact sheet to go out to all staff

Break the rules compliment board to display all the positive comments for our service

Rules that need redesign / clarity will be themed and established as workstreams
Women and Families at the heart of everything

Care Opinion

Maternity Quality Improvement Forum

Whose Shoes

Maternity Voices

Patient Experience Midwife
Lessons Learned

• Recognition of slow start

• Strengthen relationship and utilise support from Health Innovation and AQUA

• Build on engagement from Break the Rules to continuously improve services in conjunction with staff and patients

• Using Life system share knowledge and learn from other Trusts

• Celebrate success of Break the Rules Campaign with teams and share compliments received during the campaign to continuously boost morale
And our advice to you ...

Start small

Go where the energy is ..

Use your data!
Any Questions
Maternity and Neonatal Safety Collaborative

Safety is the state of being "safe", the condition of being protected from harm or other non-desirable outcomes

Julie McCabe
Network Director
RGN RM BA MSc
## Neonatal Work Programme

### Better Health
**Improving Outcomes**
- Family integrated care
- Reducing the number of babies separated from their mothers
- Optimising Place of delivery
- Network approach to the reduction in neonatal mortality
- Workforce development

### Better care
**Improving Quality**
- Cardiac pathway
- Integrated palliative care
- Surgical pathway
- Single surgical service
- Neonatal outreach CQUIN
- Network education and training
- Workforce development

### Better value
**Right care, right place, right professional**
- Activity Capacity Demand review
- Central capacity cot/bed management system
- Network procurement
- New Pricing and contracting models
- Workforce planning
Quality Improvements

- NWNODN quality improvement programme
- Maternity and Neonatal Transformation – local Maternity Systems
  - Better births implementation plan
- Maternity and Neonatal Health Safety collaborative
  - Support maternal and neonatal care services to provide a safe, reliable and quality healthcare experience to all women, babies and families across maternity care settings in England
  - Create the conditions for continuous improvement, a safety culture and a national maternal and neonatal learning system.
  - Contribute to the national ambition of reducing the rates of maternal and neonatal deaths, stillbirths, and brain injuries that occur during or soon after birth by 20% by 2020.
## Neonatal Mortality

**EMBRRACE 2017**

<table>
<thead>
<tr>
<th>Network</th>
<th>Births</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cheshire and Merseyside Neonatal Network</td>
<td>28,573</td>
<td>●</td>
</tr>
<tr>
<td>Lancashire and South Cumbria Neonatal Network</td>
<td>16,986</td>
<td>●</td>
</tr>
<tr>
<td>Greater Manchester Neonatal Network</td>
<td>37,215</td>
<td>●</td>
</tr>
</tbody>
</table>

- up to 10% higher than the average for the comparator group
- more than 10% higher than the average for the comparator group
Maternal and neonatal health safety collaborative: national learning event

Thursday 1 March 2018
5 key Clinical Interventions

1. Improve the proportion of smoke free pregnancies
2. Improve the optimisation and stabilisation of the very preterm infant
3. Improve the detection and management of diabetes and management of diabetes in pregnancy
4. Improve the detection and management of neonatal hypoglycaemia
5. Improve the early recognition and management of deterioration of either mother or baby during or soon after birth
Manchester

This profile provides a snapshot of child health in this area. It is designed to help local government and health services improve the health and wellbeing of children and tackle health inequalities.

The child population in this area

<table>
<thead>
<tr>
<th></th>
<th>Local</th>
<th>Region</th>
<th>England</th>
</tr>
</thead>
<tbody>
<tr>
<td>Live births (2015)</td>
<td>8,051</td>
<td>85,838</td>
<td>664,399</td>
</tr>
<tr>
<td>Children aged 0 to 4 years (2015)</td>
<td>38,700</td>
<td>443,200</td>
<td>3,434,700</td>
</tr>
<tr>
<td>Children aged 0 to 19 years (2015)</td>
<td>135,500</td>
<td>1,698,900</td>
<td>13,005,700</td>
</tr>
<tr>
<td>Children aged 0 to 19 years in 2025 (projected)</td>
<td>150,400</td>
<td>1,767,000</td>
<td>14,002,600</td>
</tr>
<tr>
<td>School children from minority ethnic groups (2016)</td>
<td>39,424</td>
<td>191,921</td>
<td>2,032,064</td>
</tr>
<tr>
<td>Children living in poverty aged under 16 years (2014)</td>
<td>35.6%</td>
<td>22.8%</td>
<td>20.1%</td>
</tr>
<tr>
<td>Life expectancy at birth (2013-2015)</td>
<td>Boys 75.6</td>
<td>78.1</td>
<td>79.5</td>
</tr>
<tr>
<td></td>
<td>Girls 79.8</td>
<td>81.8</td>
<td>83.1</td>
</tr>
</tbody>
</table>

Key findings

Children and young people under the age of 20 years make up 25.6% of the population of Manchester, 60.9% of school children are from a minority ethnic group.

The health and wellbeing of children in Manchester is generally worse than the England average. The infant mortality rate is worse than the England average. The child mortality rate is similar to the England average.

The level of child poverty is worse than the England average with 38.6% of children aged under 16 years living in poverty. The rate of family homelessness is worse than the England average.

Children in Manchester have worse than average levels of obesity; 11.4% of children aged 4-5 years and 25.1% of children aged 10-11 years are classified as obese.

In 2015/16, children were admitted for mental health conditions at a similar rate to that in England as a whole. The rate of inpatient admissions during the same period because of self-harm was lower than the England average.

In 2015/16, there were 31,975 A&E attendances by children aged four years and under. This gives a rate which is higher than the England average. The hospital admission rate for injury in children is higher than the England average, and the admission rate for injury in young people is lower than the England average.

[Map of the North West, with Manchester outlined, showing the relative levels of children living in poverty.]

Contains Ordnance Survey data
You may re-use this information (not including logos) free of charge in any format or medium, under the terms of the Open Government Licence. To view this licence, visit www.nationalarchives.gov.uk/doc/open-government-licence/version/3/
Improve the optimisation and stabilisation of the very preterm infant

<27 Week First Admissions Apr 16 – Mar 17

<table>
<thead>
<tr>
<th>Locality/Unit</th>
<th>&lt;27 weeks first admissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greater Manchester</td>
<td>127</td>
</tr>
<tr>
<td>A (NICU)</td>
<td>50</td>
</tr>
<tr>
<td>B</td>
<td>3</td>
</tr>
<tr>
<td>C</td>
<td>1</td>
</tr>
<tr>
<td>D (NICU)</td>
<td>35</td>
</tr>
<tr>
<td>E (NICU)</td>
<td>28</td>
</tr>
<tr>
<td>F</td>
<td>5</td>
</tr>
<tr>
<td>G</td>
<td>0</td>
</tr>
<tr>
<td>H</td>
<td>5</td>
</tr>
<tr>
<td>Cheshire &amp; Merseyside</td>
<td>69</td>
</tr>
<tr>
<td>Lancashire and South Cumbria</td>
<td>52</td>
</tr>
<tr>
<td>Grand Total</td>
<td>248</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NICUs</th>
<th>2015/16</th>
<th>2016/17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greater Manchester</td>
<td>89%</td>
<td>90%</td>
</tr>
<tr>
<td>Cheshire &amp; Merseyside</td>
<td>73%</td>
<td>83%</td>
</tr>
<tr>
<td>Lancashire &amp; South Cumbria</td>
<td>89%</td>
<td>91%</td>
</tr>
</tbody>
</table>
## Optimising Outcomes

### Administration of steroids 24-34/40 2015-2017

<table>
<thead>
<tr>
<th>Year</th>
<th>Eligible Mothers</th>
<th>Steroids given (%) (N: National %)</th>
<th>Not given</th>
<th>Missing/Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>2439</td>
<td>2098 (84%) (N: 85%)</td>
<td>330</td>
<td>9</td>
</tr>
<tr>
<td>2016</td>
<td>2353</td>
<td>2011 (85%) (N: 85%)</td>
<td>299</td>
<td>43</td>
</tr>
<tr>
<td>2017</td>
<td>2318</td>
<td>2017 (87%) (N: 82.6)</td>
<td>223</td>
<td>78</td>
</tr>
</tbody>
</table>

**PReCePT: Reducing cerebral palsy through improving uptake of magnesium sulphate in preterm deliveries**

### Administration of Magnesium Sulphate < 30/40 2016-2017

<table>
<thead>
<tr>
<th>Year</th>
<th>Eligible Mothers</th>
<th>Magnesium Sulphate Given (%) (N: National %)</th>
<th>Not given</th>
<th>Missing/Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>586</td>
<td>205 (35%) (N: 39%)</td>
<td>188</td>
<td>193</td>
</tr>
<tr>
<td>2017</td>
<td>532</td>
<td>321 (60%) (N: 57.4%)</td>
<td>140</td>
<td>71</td>
</tr>
</tbody>
</table>
Improve the detection and management of diabetes in pregnancy
Improve the detection and management of neonatal hypoglycaemia
Term admissions by unit as % of total births
Top 5 reasons for Admission
Lancashire and South Cumbria

- Respiratory disease: 36%
- Infection suspected / confirmed: 7%
- Hypoglycaemia: 13%
- Poor condition at birth: 4%
- Monitoring (short observation): 22%

Greater Manchester & East Cheshire

- Respiratory disease: 38%
- Infection suspected / confirmed: 6%
- Hypoglycaemia: 11%
- Monitoring (short observation): 9%
- Poor condition at birth: 32%

Cheshire & Merseyside

- Infection suspected / confirmed: 28%
- Respiratory disease: 28%
- Monitoring (short observation): 18%
- Hypoglycaemia: 13%
- Jaundice: 8%
- Other: 5%
Improve the early recognition and management of deterioration of either mother or baby during or soon after birth

Surveillance, Benchmarking, Learning

NWNODN Dashboard - Activity and Transfers

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>QUERY</th>
<th>Oct-16</th>
<th>Nov-16</th>
<th>Dec-16</th>
<th>Jan-17</th>
<th>Feb-17</th>
<th>Mar-17</th>
<th>Apr-17</th>
<th>May-17</th>
<th>Jun-17</th>
<th>Jul-17</th>
<th>Aug-17</th>
<th>Sep-17</th>
<th>Average</th>
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</thead>
<tbody>
<tr>
<td>NUMBER OF TERM ADMISSIONS</td>
<td></td>
<td>352</td>
<td>352</td>
<td>328</td>
<td>373</td>
<td>356</td>
<td>363</td>
<td>319</td>
<td>356</td>
<td>364</td>
<td>380</td>
<td>336</td>
<td>356</td>
<td>350</td>
</tr>
<tr>
<td>% OF TOTAL LIVE BIRTHS</td>
<td></td>
<td>4.7%</td>
<td>5.2%</td>
<td>4.8%</td>
<td>5.5%</td>
<td>5.5%</td>
<td>5.3%</td>
<td>4.8%</td>
<td>5.1%</td>
<td>5.6%</td>
<td>5.3%</td>
<td>5.2%</td>
<td>4.8%</td>
<td>5.3%</td>
</tr>
<tr>
<td>% OF NNU ADMISSIONS</td>
<td></td>
<td>56%</td>
<td>52%</td>
<td>52%</td>
<td>49%</td>
<td>49%</td>
<td>48%</td>
<td>35%</td>
<td>52%</td>
<td>52%</td>
<td>48%</td>
<td>30%</td>
<td>52%</td>
<td>52%</td>
</tr>
<tr>
<td>% OF TERM BIRTHS (37+ weeks)</td>
<td></td>
<td>48.5%</td>
<td>49.2%</td>
<td>48.1%</td>
<td>54.5%</td>
<td>52.3%</td>
<td>51.9%</td>
<td>48.0%</td>
<td>50.0%</td>
<td>52.0%</td>
<td>52.1%</td>
<td>49.5%</td>
<td>50.0%</td>
<td>50.6%</td>
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<tr>
<td>TOTAL &lt;27 WEEKS IN LNU</td>
<td></td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>2</td>
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<td>0</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>2.9</td>
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<tr>
<td>TOTAL &lt;27 WEEKS STILL IN LNU AFTER 24 HRS</td>
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<tr>
<td>TOTAL &lt;32 WEEKS BORN IN SCBU</td>
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<tr>
<td>% NETWORK IC Activity in NICUs</td>
<td></td>
<td>NWNODN</td>
<td>87%</td>
<td>91%</td>
<td>91%</td>
<td>88%</td>
<td>87%</td>
<td>92%</td>
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<tr>
<td></td>
<td></td>
<td>CHERES &amp; MERSEYSIDE</td>
<td>85%</td>
<td>88%</td>
<td>85%</td>
<td>82%</td>
<td>87%</td>
<td>79%</td>
<td>89%</td>
<td>85%</td>
<td>84%</td>
<td>54%</td>
<td>84%</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>GREATER MANCHESTER</td>
<td>88%</td>
<td>94%</td>
<td>93%</td>
<td>94%</td>
<td>88%</td>
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<td></td>
<td></td>
<td>LANCASHIRE &amp; SOUTH CUMBERIA</td>
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<td>94%</td>
<td>89%</td>
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<td>92%</td>
<td>90%</td>
<td>88%</td>
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<td>91%</td>
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<tr>
<td>INAPPROPRIATE TRANSFERS OUT OF NWNODN</td>
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<td>0.28%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.16%</td>
<td>0.14%</td>
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<tr>
<td></td>
<td></td>
<td>GREATER MANCHESTER</td>
<td>0.00%</td>
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<tr>
<td></td>
<td></td>
<td>LANCASHIRE &amp; SOUTH CUMBERIA</td>
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</tr>
</tbody>
</table>
Strategy for Success

- Focus on patient
- Focus on quality improvement
- Quality improvements that will make a difference
- Identify priorities
- Evidence and Data to inform change and evaluation of impact
- Working at different levels, local teams network wide, ODN wide and Nationally
- Articulate what good looks like
- Share good practice
- Link and build relationships with people that can make change happen and ensure it is sustainable
- Robust Governance
Thank You

Julie.mccabe@alderhey.nhs.uk
07725515999
# Big 5 Barometer

*Mark where you think your organisation is on the improvement journey for the following topics*

<table>
<thead>
<tr>
<th></th>
<th>Don’t know</th>
<th>Getting started</th>
<th>Solved it</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improve the proportion of smoke free pregnancies</td>
<td></td>
<td></td>
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<tr>
<td>Improve the optimisation and stabilisation of the very preterm infant</td>
<td></td>
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<tr>
<td>Improve the detection and management of diabetes in pregnancy</td>
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<td>Improve the detection and management of neonatal hypoglycaemia</td>
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<tr>
<td>Improve the early recognition and management of deterioration during labour &amp; early post partum period</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Lunch
Learning Systems – how do we work together?
## Facilitators all set?

<table>
<thead>
<tr>
<th>Facilitator Name</th>
<th>Table Number</th>
<th>Colour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debby Gould</td>
<td>1</td>
<td>Grey</td>
</tr>
<tr>
<td>Tazeem Shah</td>
<td>2</td>
<td>White</td>
</tr>
<tr>
<td>Joanna Casby</td>
<td>3</td>
<td>Yellow</td>
</tr>
<tr>
<td>Hakeel Qureshi</td>
<td>4</td>
<td>Brown</td>
</tr>
<tr>
<td>Bob Diepeveen</td>
<td>5</td>
<td>Light pink</td>
</tr>
<tr>
<td>Eva Bedford</td>
<td>6</td>
<td>Purple</td>
</tr>
<tr>
<td>Krishna Agravat</td>
<td>7</td>
<td>Red</td>
</tr>
<tr>
<td>Farah Irfan-Khan</td>
<td>8</td>
<td>Bright pink</td>
</tr>
</tbody>
</table>
Take 5 minutes to discuss how you would define a maternity/neonatal learning system across GM?
What is a Local Learning System?

• Local Learning Systems will be the Improvement community aligned to support each LMS
• Waves and stakeholders will share and learn from each other
• Groups to meet four times per year
• All providers and other key stakeholders to be included from the outset
• Opportunity for system level improvement / scale up within each LMS
• Operating model needs to be sensitive to current local activity and network / LMS maturity
What should a local learning system provide?

• A forum for local improvement to thrive
• An opportunity for all network partners to work collaboratively
• Effective collaboration between local partners
• Opportunities for system level improvement
• An opportunity for increasing local improvement capability
• A sustainability solution for maternal and neonatal improvement
Pre-Mortem / TRIZ

• Make a list of all you can do to:

  * make the Maternity and Neonatal Learning System fail

• First take about 2 minutes to create your individual list
• After that share your ideas on your table and capture them on flipchart

10 minutes
Pre-Mortem / TRIZ

Step 2:

• Have you ever experienced any of the items on your list, Please circle these items.
• Have a discussion per circled item and share your experiences.
How can these circled items be turned into ideas for our network?
- What can I / We (Learning System) / Patient Safety Collaborative / Others contribute to stop this from happening?
- Capture your output in a table like this:

<table>
<thead>
<tr>
<th>List Barrier/Issue</th>
<th>I</th>
<th>We (Learning System)</th>
<th>GMPSC</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

15 minutes
Use of Quality improvement in the Patient Safety Collaborative

Bob Diepeveen
Improvement Advisor
@diepbob
Quality Improvement knowledge

• Please fill out this short questionnaire:

https://www.surveymonkey.co.uk/r/BNLBVLR

Please rate yourself for each of the following theories, methodologies or skills of Quality Improvement using the scoring below:

Level 0  I have no knowledge of this.
Level 1  I have some awareness of this but I do not know how to apply it.
Level 2  I am able to apply this in limited scenarios with some assistance.
Level 3  I know when, where and how to apply this and am able to do so on my own.
Level 4  I have good experience of using this and am able to adapt to use in a multitude of situations.
Level 5  I can teach this theory, methodology or skill to others.
My first improvement project

• What is the problem?

• (Video not included on the website)
What are you trying to accomplish?

Criteria for a good aim

- Specific
- Measurable
- Timely

Example

- Reduce the number of Grade 4 Pressure Ulcers in Greater Manchester by 25% by 31st of December 2018
AIM

• What’s an aim for my first improvement project

To walk more than 15 consecutive steps by 31/03/1985
How do we know that a change is an improvement?
Operational definition

• (Video not included on the website)
What changes can we make that will result in improvement?
What’s your Theory?

Driver diagram serves as tool for building and testing theories for improvement

by Brandon Bennett and Lloyd Provost

Bennet B, Provost L. What’s your theory, QP, 2015-07:36-43
What change can we make that will result in improvement?

- **Aim:** To walk more than 15 consecutive steps by 31/03/1985
- **Primary Drivers:** Motivation, Technique
- **Secondary Drivers:** Use of attributes, Celebrate successes, Training, Peer to peer learning
- **Change Ideas:**
  - Use a car
  - Give treats
  - Provide verbal feedback after walk
  - Hours training course
  - Have the older sisters show off their skills
PDSA 1

• (Video not included on the website)
Is this an improvement?
Plan Do Study Act

Source: The Improvement Guide, p. 103

Next PDSA

• (Video not included on the website)
Unexpected observations

• (Video not included on the website)
What did we learn?
Stretching your goal
My highest point
Start Small

scary stuff :(

→

definitely do-able!

think big, start small

© The Work Experiment 2018

www.theworkexperiment.com
Building knowledge, asking questions

Greg Ogrinc and Kaveh G Shojania


Challenges

Complexity

Opportunities

Time

P = Plan  D = Do  = Barrier
S = Study  A = Act  = Direct flow of impact
= Lingering background impact  Arrowhead = Feedback or feedforward

Different sizes of letters and cycles and bold letters = denotes differences in importance/impact
Model for Improvement

Simple, sound solutions
Team roles

- Clinical Leader
- Day to day leader
- Technical expert (data analyst / improvement advisor / LifeQI)
- Subject matter expert
- Patient representative
- Project Sponsor

http://www.ihi.org/resources/Pages/HowtoImprove/ScienceofImprovementFormingtheTeam.aspx
Life QI platform

https://uk.lifeqisystem.com/
Framework for Safe, Reliable and Effective Care

- Creating an environment where people feel comfortable and have opportunities to raise concerns or ask questions.
- Being held to act in a safe and respectful manner given the training and support to do so.
- Developing a shared understanding, anticipation of needs and problems, agreed methods to manage these as well as conflict situations.
- Gaining genuine agreement on matters of importance to team members, patients and families.

Culture

- Psychological Safety
- Accountability
- Teamwork & Communication
- Negotiation

Engagement of Patients & Family

- Leadership
- Transparency
- Reliability
- Improvement & Continuous Learning
- Improvement & Measurement
- Regularly collecting and learning from defects and successes.

Learning System

- Openly sharing data and other information concerning safe, respectful and reliable care with staff and partners and families.
- Applying best evidence and minimizing non-patient specific variation with the goal of failure free operation over time.
- Improving work processes and patient outcomes using standard improvement tools including measurements over time.
“If one can figure out how to effectively reuse rockets just like airplanes, the cost of access to space will be reduced by as much as a factor of a hundred. A fully reusable vehicle has never been done before. That really is the fundamental breakthrough needed to revolutionize access to space.”

Elon Musk
How not to launch a rocket
For further information on Health Innovation Manchester Patient Safety Collaborative QI

Bob Diepeveen
Improvement Advisor, GM Patient Safety Collaborative
Bob.Diepeveen@healthinnovationmanchester.com
@diepbob
@healthinnovmcr
Tel: 0161 206 7945

HInM, Suite C, Third Floor, Citylabs, Nelson St, Manchester, M13 9NQ
Plan next period

Bob Diepeveen
Improvement Advisor
**Aim**

To improve outcomes and reduce unwarranted variation by providing a safe, high quality healthcare experience for all women, babies and families across maternity care settings in England.

Reduce the rate of stillbirths, neonatal death and brain injuries occurring during or soon after birth by 20% by 2020.

---

**Primary Drivers**

- Improve the proportion of smoke free pregnancies
- Improve the optimisation and stabilisation of the very preterm infant
- Improve the detection and management of diabetes in pregnancy
- Improve the detection and management of neonatal hypoglycaemia
- Improve the early recognition and management of deterioration during labour & early post partum period

---

**Secondary Drivers**

- Creating the conditions for a culture of safety and continuous improvement
- Develop safe and highly reliable systems, processes and pathways of care
- Improve the experience of mothers, families and staff
- Learn from excellence and harm
- Improving the quality and safety of care through Clinical Excellence
Start your plan

• What is your problem?
• What is the size of your problem?
• Understand your system?
• What is your priority
• Who should be part of your team?

Share your details

• Write on the sheet for HInM:
  • Organisation
  • Who is your champion + email
  • What can we help you with?
Summary and next steps

Jay Hamilton
Associate Director, Lead for GM Patient Safety Collaborative, Heath Innovation Manchester
Evaluation

https://www.surveymonkey.co.uk/r/KDVJ5ML
Resources

• Website
• National documents
• etc
Next Steps and Dates for your diary

- **GMPSC Learning Systems Next Event 5th June 2018 CityLabs**
- **SCORE survey Wave 1 Trust March 2018; Wave 2 April 2018**
- **WebEx TBC**
- **National Sessions**
- **Second Wave Learning sets dates (Bolton Foundation Trust and East Cheshire)**
  - May 9/10/11
  - Sept 11/12/13
  - Jan 16/17/18
Thank you