The AHSN Network

NHS Improvement

Maternity and Neonatal Learning System 2nd Event

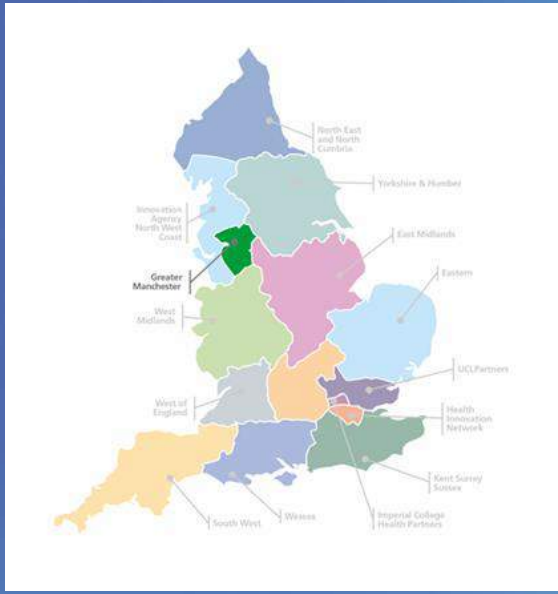
Tuesday 3rd July 2018

Greater Manchester & Eastern Cheshire

Patient Safety Collaborative

The AHSN Network

NHS Improvement



Welcome

Amanda Risino

Managing Director Health Innovation Manchester

Patient Safety Collaborative Steering Group (Chair)

Greater Manchester & Eastern Cheshire

Patient Safety Collaborative

The Patient Safety Collaborative – Our Mission

You said

- *"Learning system session was good but too long"*
- *"Thought the learning system session was a bit a bit long"*

- *"a lot of attendees left before the day was complete probably due to parking fees increasing to £15 after six hours"*
- *"Yes. Around the region to encourage local staff to attend by avoiding the need to travel."*

We did

- Shortened the learning session to 10:00-15:15

- Changed venue which offers free parking

You said

- *Women's experience was most highly rated with a score of 4.9/5*

We did

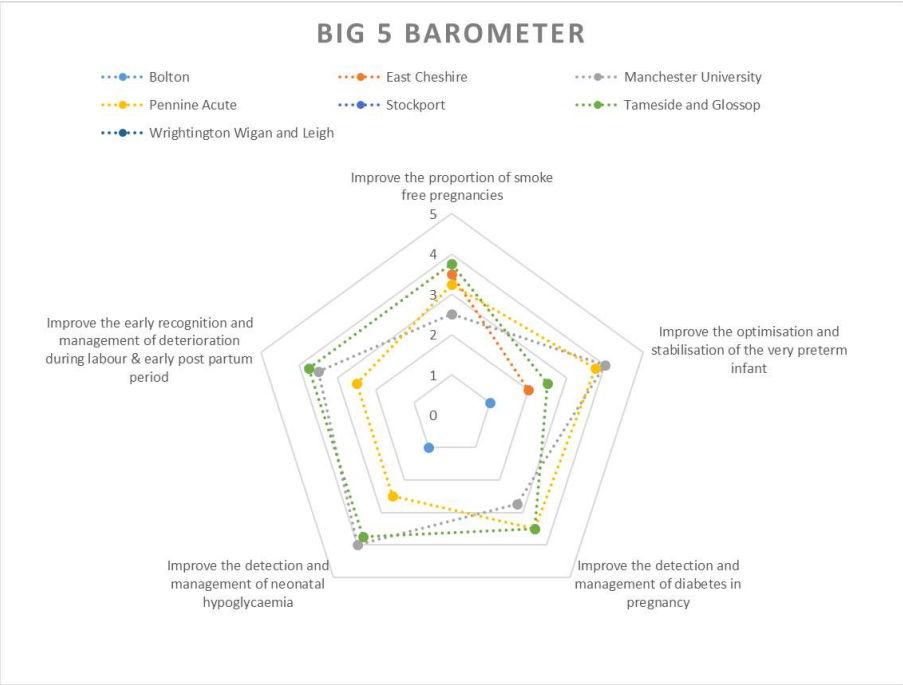
- Women, babies, partners and family are central today

You said

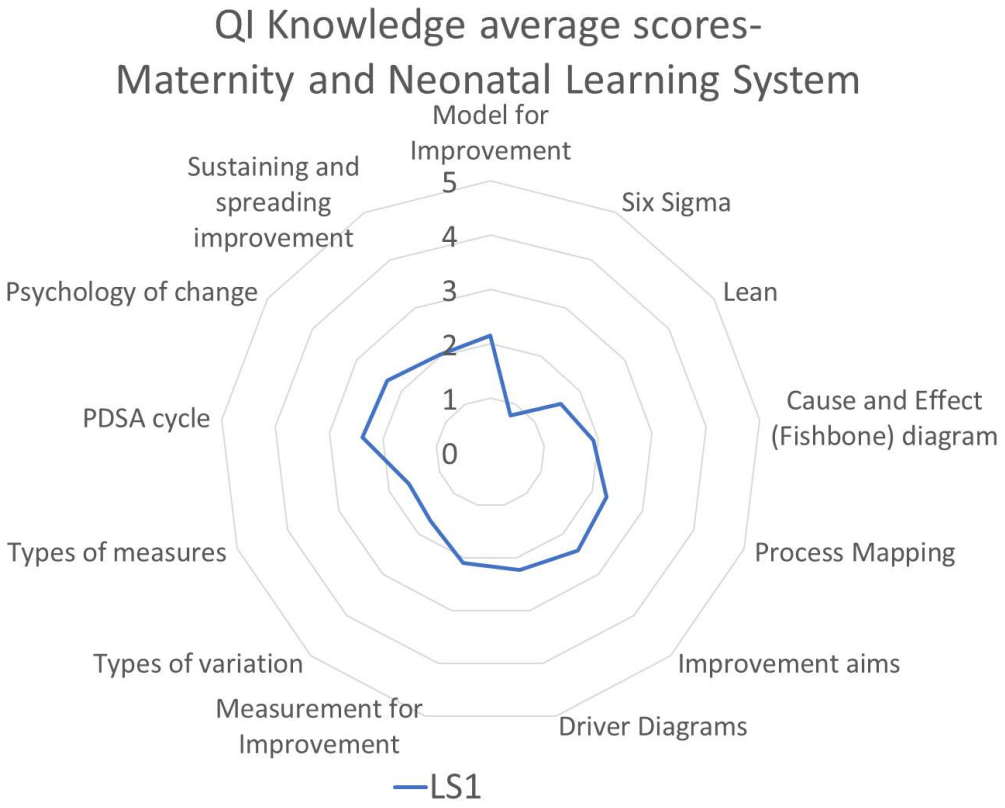
- "Neonatal Hypoglycaemia" and "Optimisation and stabilisation of the very preterm infant" was scored as least developed

We did

- PReCePT (PRevention of Cerebral Palsy in Pre-Term Labour (*Magnesium Sulphate for Neuroprotection*)) and hypoglycaemia is today's focus



You said



We did

- College of Quality Improvement
- Focus on process mapping today
  - With a hint of lean

For further information on Health Innovation Manchester Patient Safety Collaborative

Amanda Risino

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The AHSN Network

NHS Improvement

Patient Safety collaborative overview

Jay Hamilton

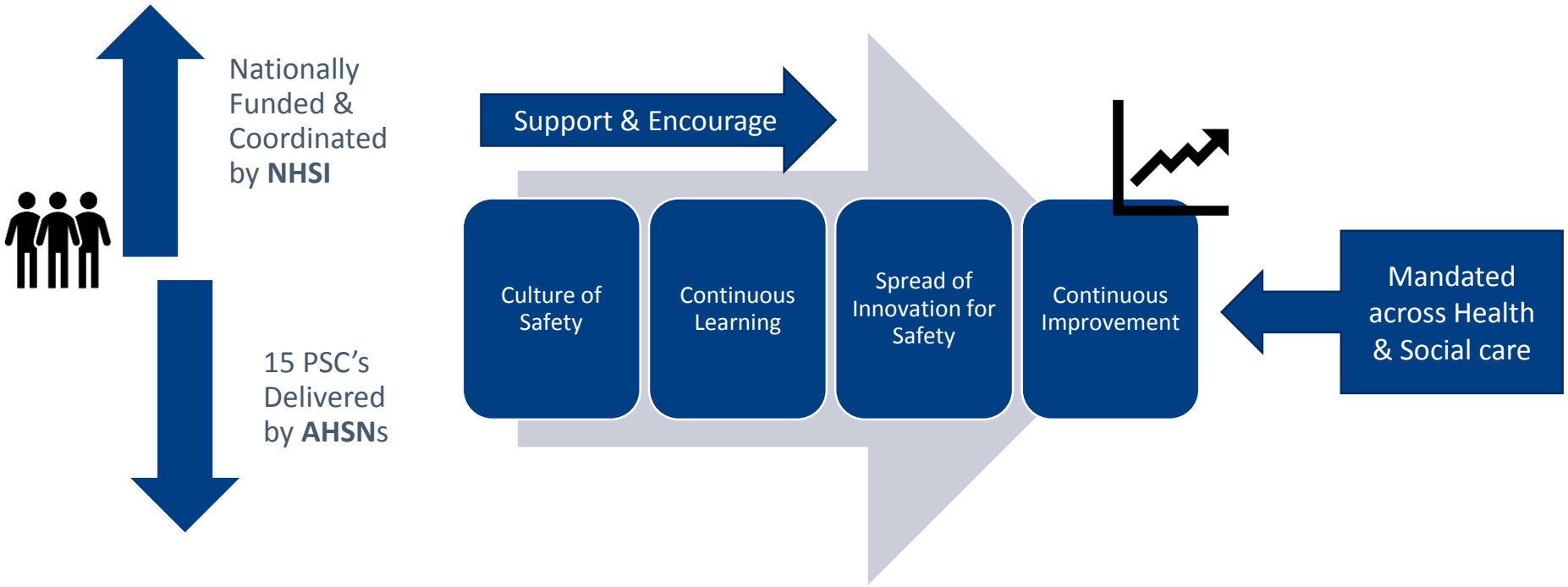
Associate Director Patient Safety Collaborative

Patient Safety Collaborative Steering Group (vice Chair)

Greater Manchester & Eastern Cheshire

Patient Safety Collaborative

National Patient Safety Collaboratives



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*

Achievements and working together

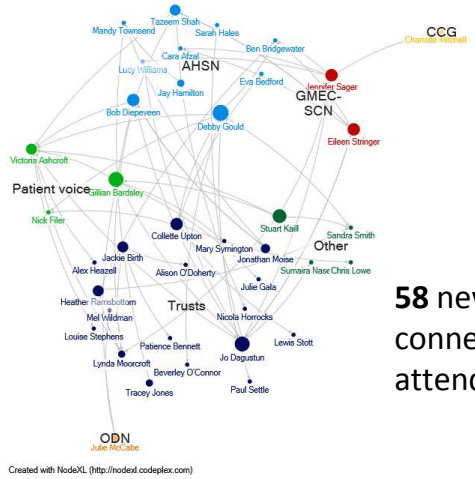
GMCA GREATER MANCHESTER COMBINED AUTHORITY

Maternity and Neonatal Learning system event 12th of March 2018

62 people attended from **15** organisations

including **7** trusts. Attendees rated the Learning

System as *"it met my expectations"*



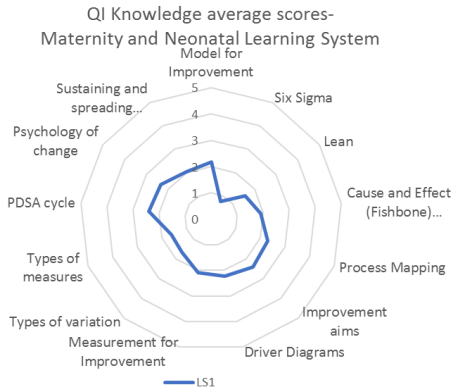
58 new registered connections made between attendees

Woman's story was the most appreciated session of the day with a score of

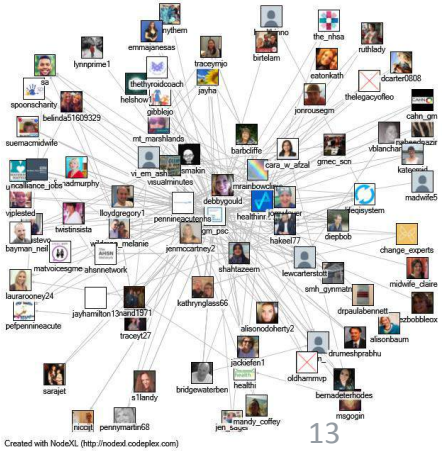
4.9 out of 5

"This is about ensuring all pregnant woman in Greater Manchester have the best experience ever."

Attendees rated their current Quality Improvement knowledge with a **1.96** out of 5



@GMEC_PSC
42 tweets
20,300 impressions **65** new followers



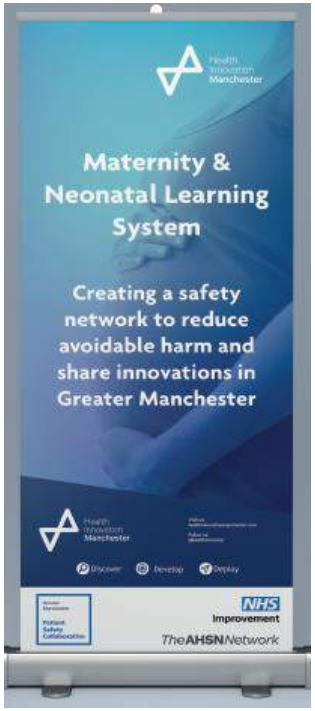
"this was such a thought-provoking day"

TheAHSNNetwork

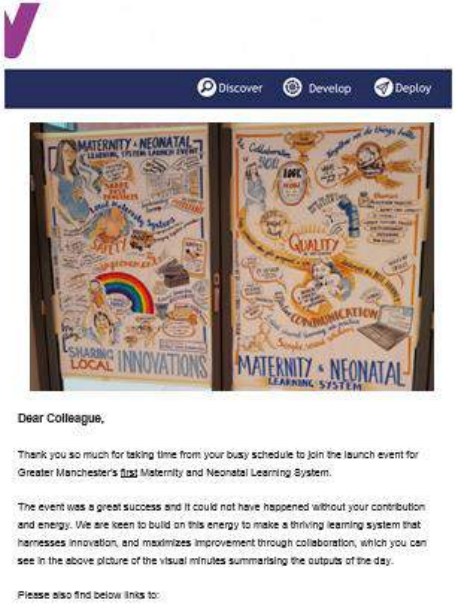
NHS Improvement

Maternity and Neonatal Learning System

#GMMatNeo

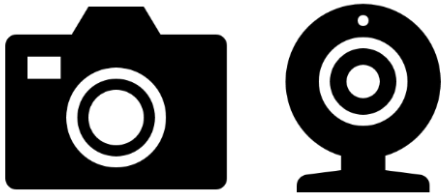


20,300 Tweet impressions



Housekeeping

@GM_PSC



For further information on Health Innovation Manchester Patient Safety Collaborative

Jay Hamilton

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TheAHSNNetwork

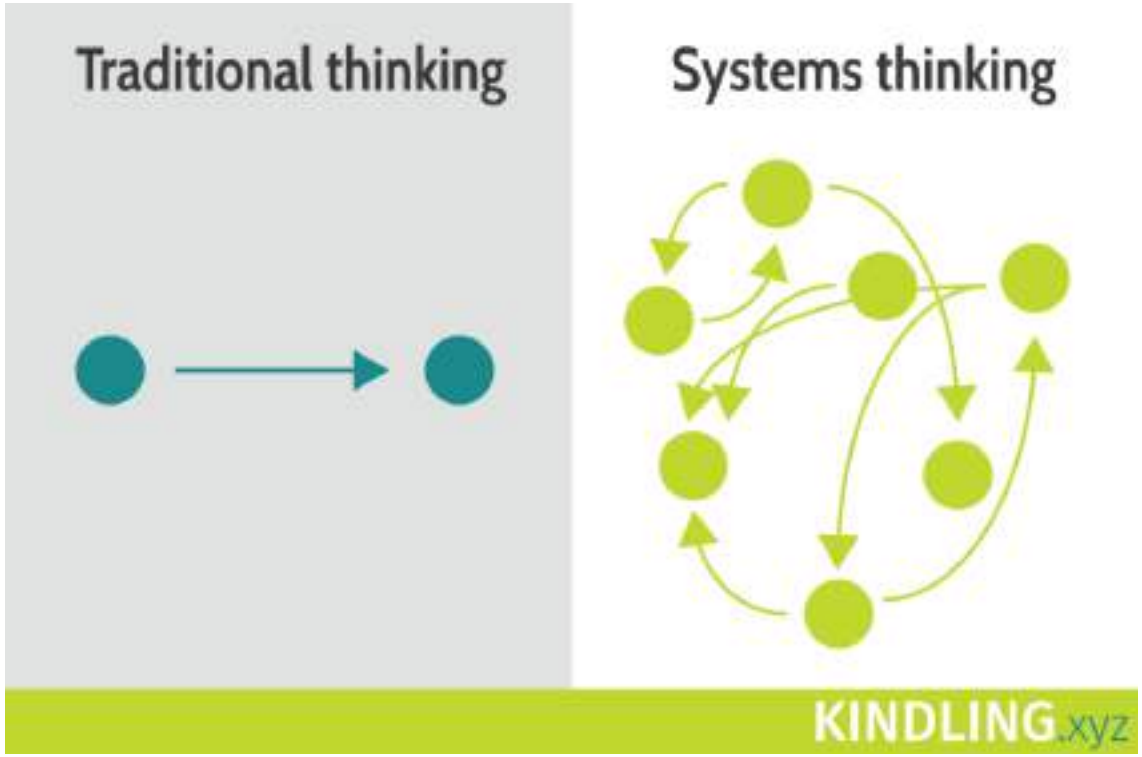
NHS Improvement

Building our Maternity and Neonatal System

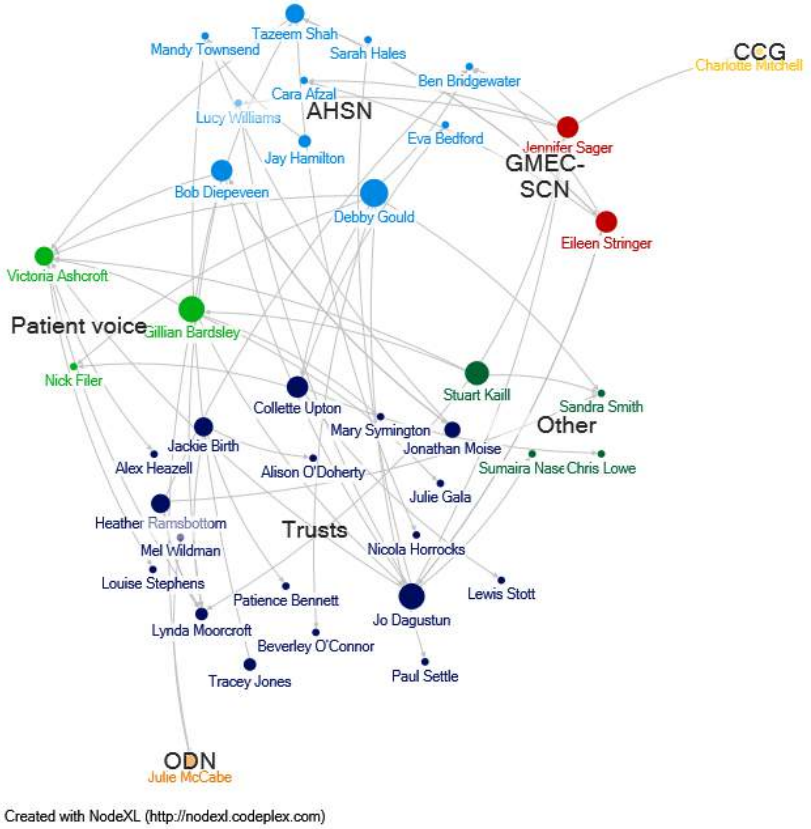
Debby Gould
GMEC PSC Mat Neo Clinical lead
@DebbyGould

Greater Manchester & Eastern Cheshire

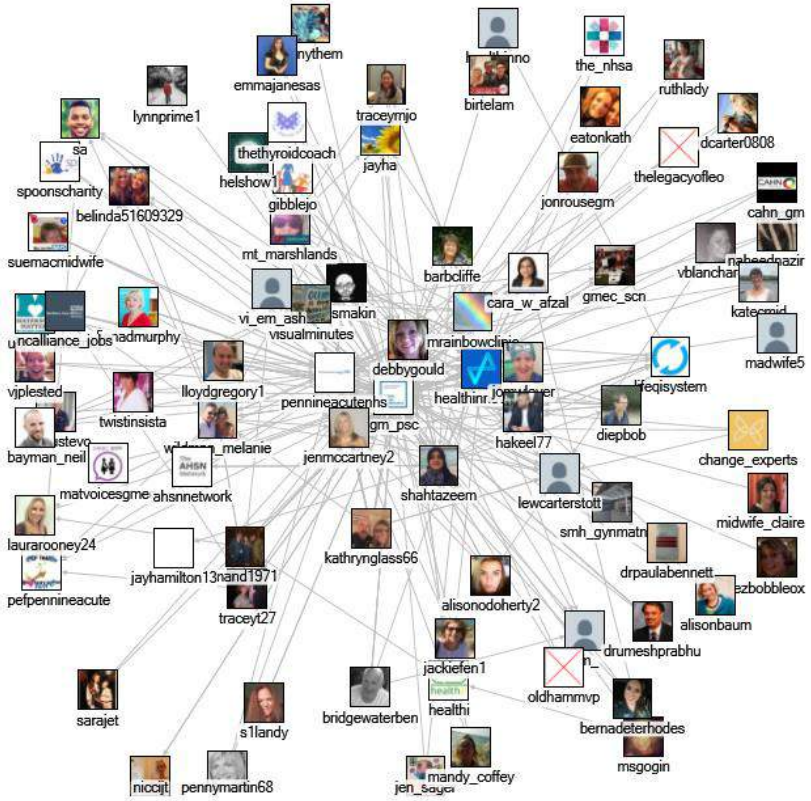
Patient Safety Collaborative


Traditional thinking
Systems thinking
KINDLING.xyz

Networking Activity – Learning System 1



Created with NodeXL (http://nodexl.codeplex.com)



Created with NodeXL (http://nodexl.codeplex.com)

rabbit

WOULD YOU LIKE AN ADVENTURE NOW, OR SHALL WE HAVE OUR TEA FIRST?

-ALICE IN WONDERLAND

movie

- https://www.youtube.com/watch?v=EPdNs93yyMw

Today's Networking Activity

- Share names for whom you've made a link with today

What do you want to get out of today?

- Find a person in the room that you don't know yet
- Ask them: What do you want to get out of today
- Time: 5 mins
- Go to slido.com
- Enter the event code: #Q463
- In max of 3 words answer the question

What improvement in maternity and neonatal care are you most proud of?

- Find a person in the room that you don't know yet
- Ask them: What improvement in maternity and neonatal care are you most proud of?
- Time: 5 mins
- Go to slido.com
- Enter the event code: #Q463
- In max of 3 words answer the question

For further information on Health Innovation Manchester Patient Safety Collaborative

Debby Gould

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The AHSN Network

NHS Improvement

College of Quality improvement – Process mapping

Bob Diepeveen
Improvement Advisor
@diepbob

Greater Manchester & Eastern Cheshire

Patient Safety Collaborative

What is Quality Improvement?

"The use of methods and tools to continuously improve quality of care and outcomes for patients"

https://www.kingsfund.org.uk/publications/making-case-quality-improvement

Other source: Quick guide health foundation
https://www.health.org.uk/sites/health/files/QualityImprovementMadeSimple.pdf

STEEEP

Source picture: https://em3.org.uk/foamed/4/1/2017/modified-valsalva-manoeuvre-svt

Source content: Crossing the Quality Chasm: A New Health System for the 21st Century, 2001 Institute of Medicine

EDITORIALS

BMJ 2018;361:k1924 doi: 10.1136/bmj.k1924 (Published 17 May 2018)

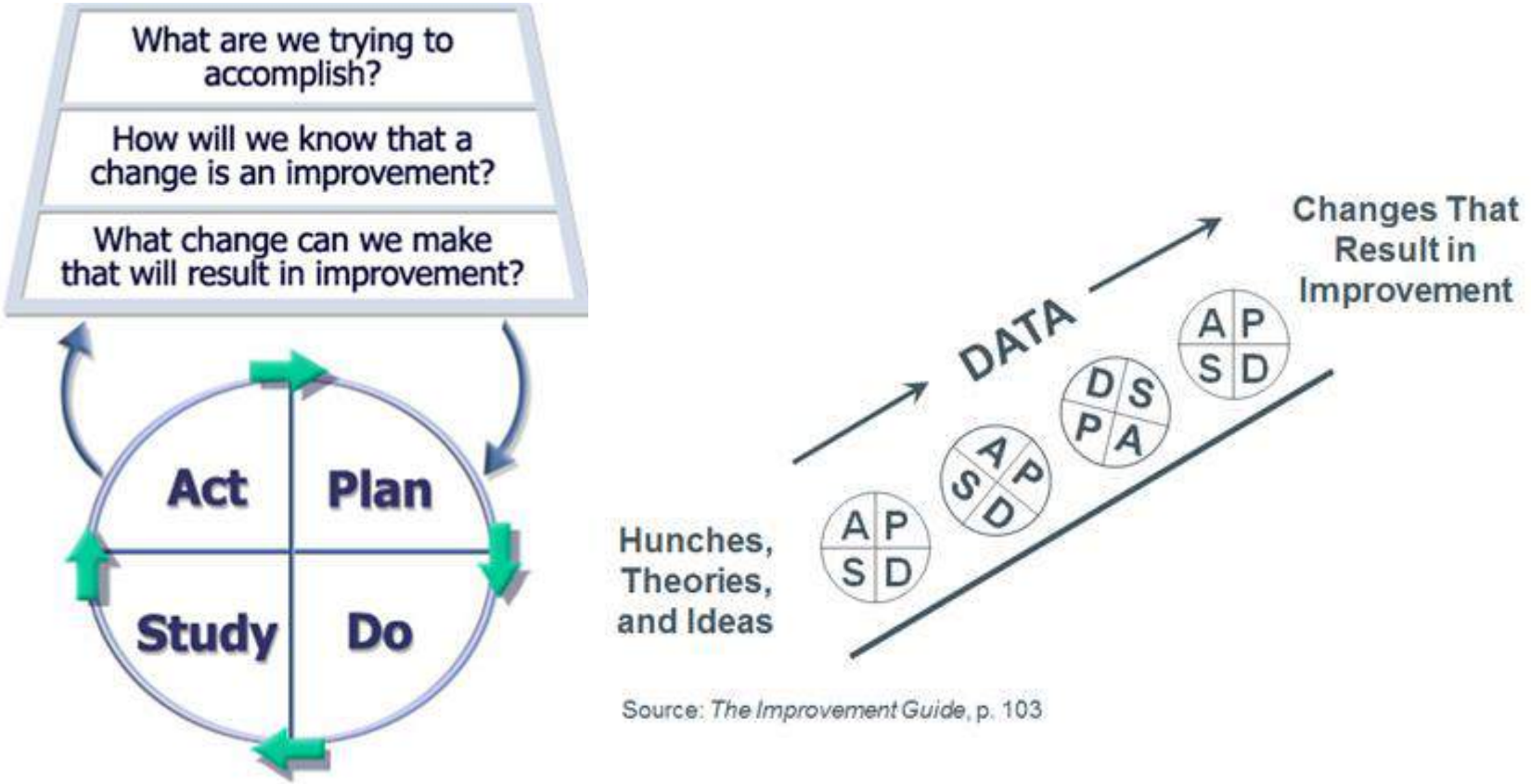
Creating space for quality improvement

Dominique Allwood *assistant director of improvement*, Rebecca Fisher *policy fellow*, Will Warburton *director of improvement*, Jennifer Dixon *chief executive*

Health Foundation, London, UK

"Clinicians already have the motivation; now they need time, skills, and support"

Model for Improvement



Langley G, Nolan K, Nolan T, Norman C, Provost L, editors. The improvement guide. San Francisco: Josey-Bass; 1996.

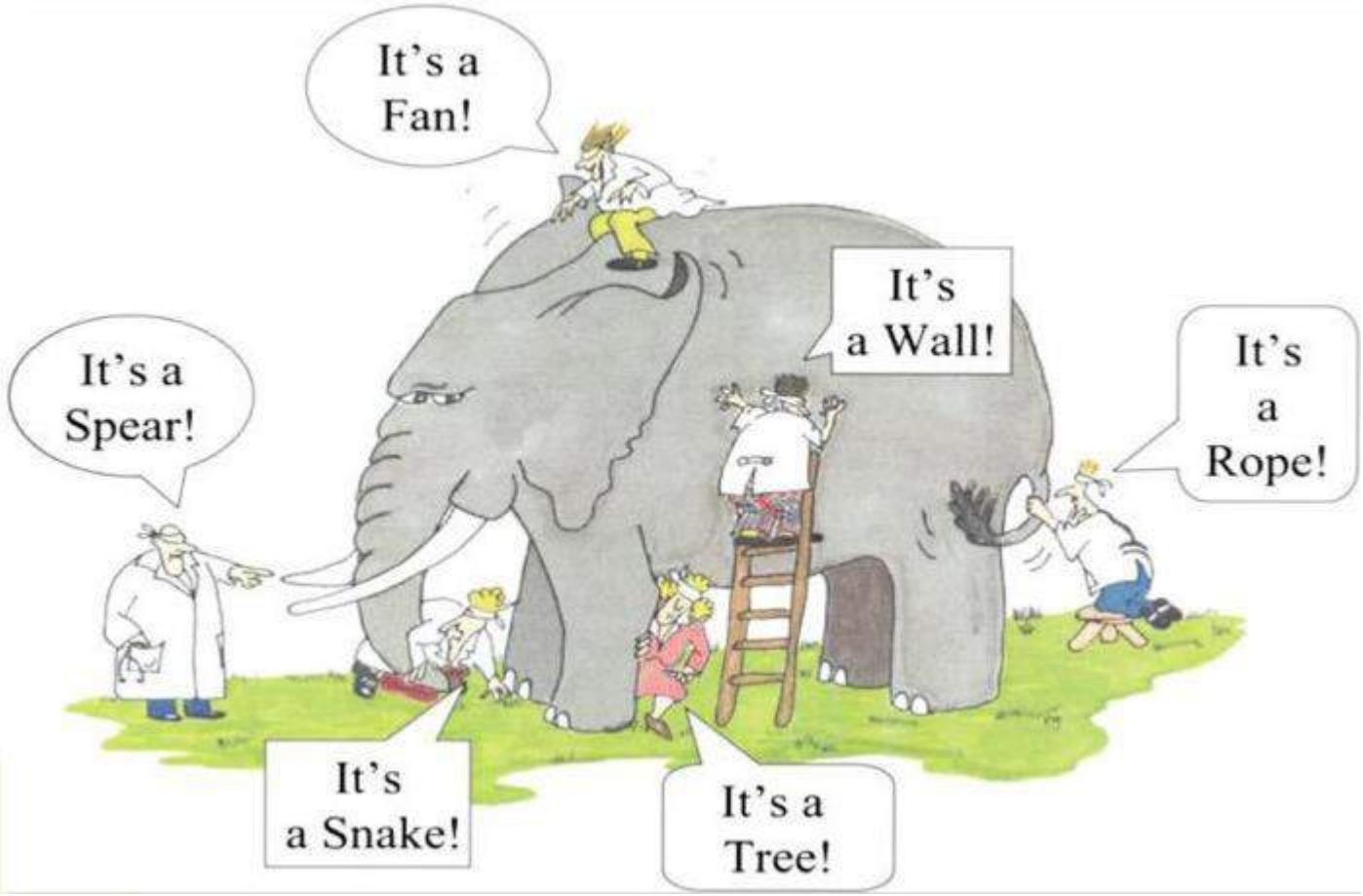
What is process mapping

Process Mapping is an activity during which all roles involved in the process create a graphic representation of all the steps, actions, and decision points taken to achieve an outcome.

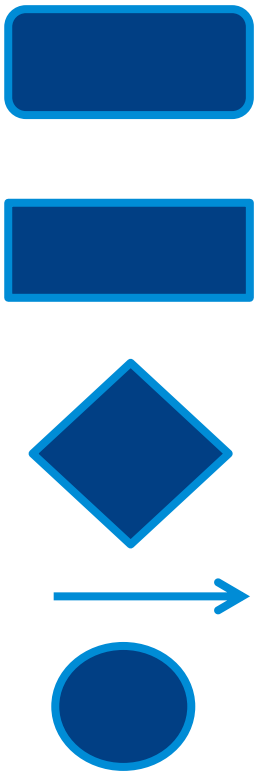
Benefits of Process Mapping

- Showing what the current process looks like
- A powerful tool for multi-disciplinary teams to understand the real problems from the customers' perspective
- Showing relationships between steps, roles or departments involved
- Identifying waste and improvement opportunities
- Use as a training aid (shows how the work should be done)
- Serving as process documentation and standardisation

Multiple perspectives

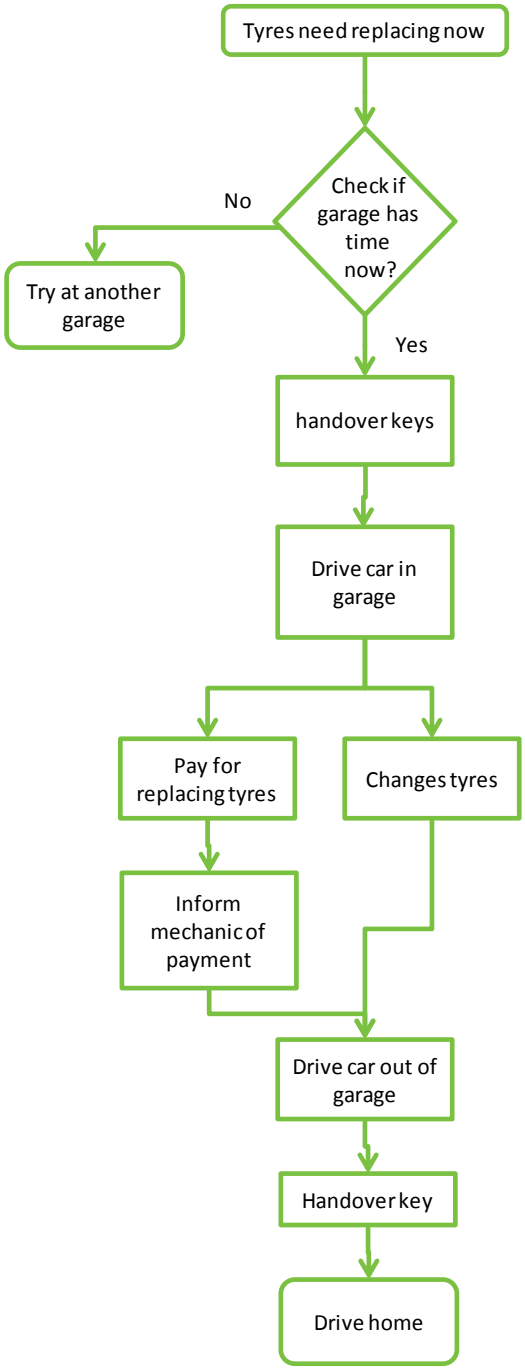


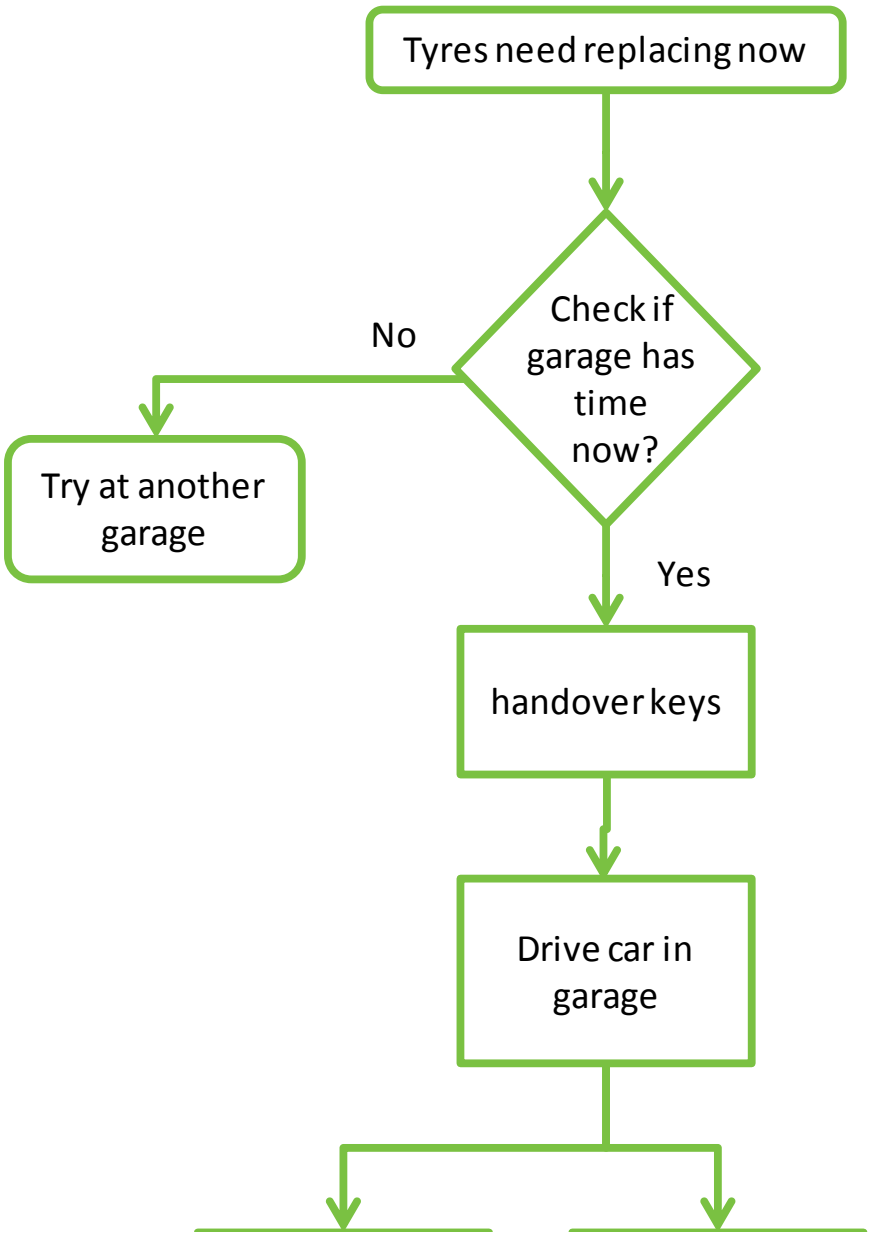
Symbols to use

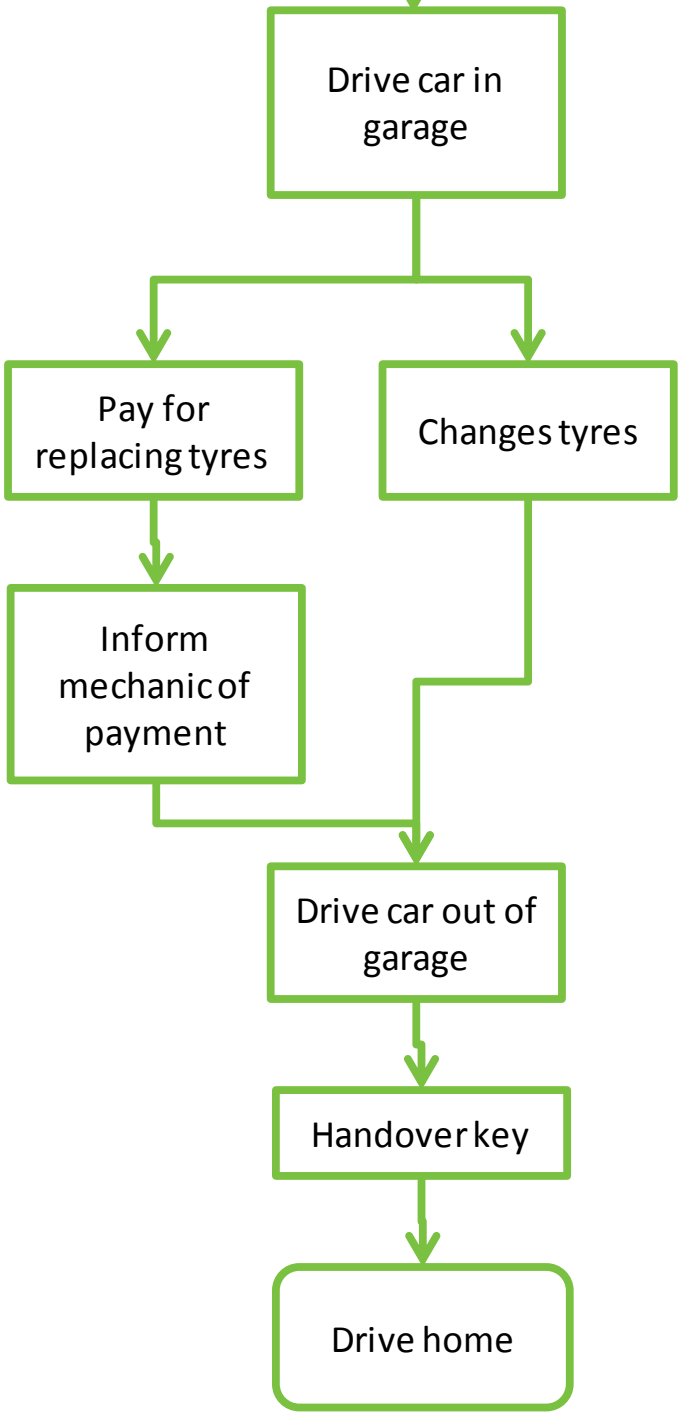


- Rectangle with rounded corners – start or end point of the process
- Square / Rectangle – process steps
- Diamond – decision point
- Arrows – connectors showing the flow through the chart
- Circles – off page connectors

Replace tyre



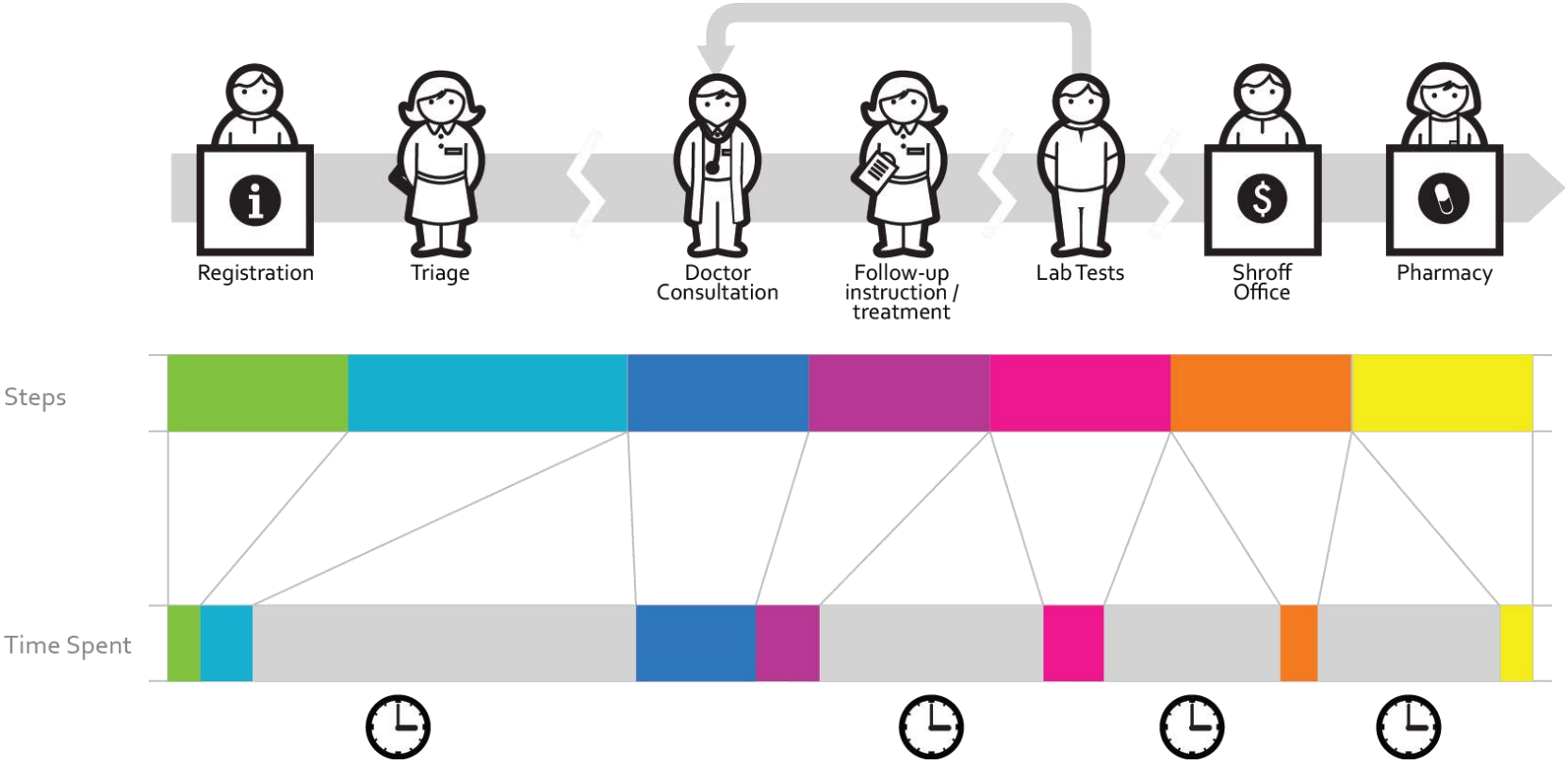

Tyres need replacing now
Check if garage has time now?
No
Try at another garage
Yes
handover keys
Drive car in garage


Drive car in garage
Pay for replacing tyres
Changes tyres
Inform mechanic of payment
Drive car out of garage
Handover key
Drive home

Four fields mapping

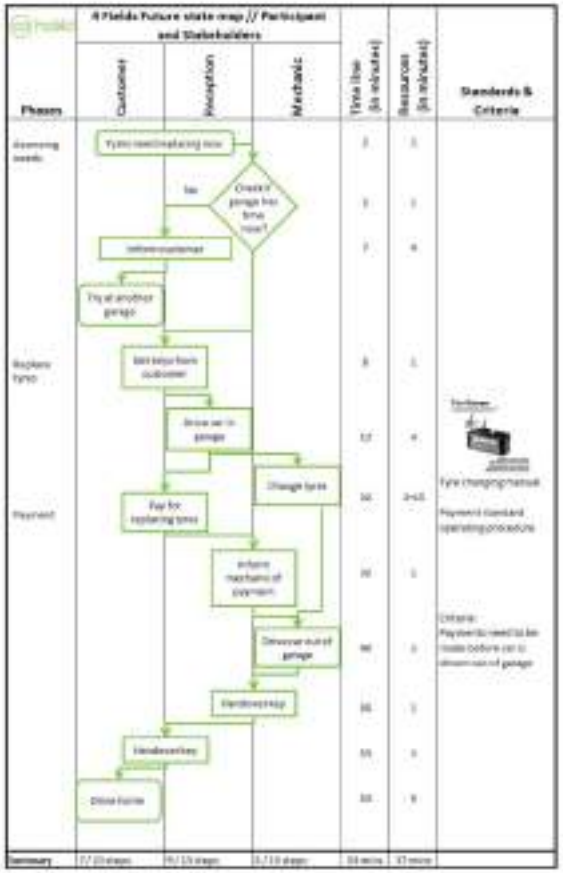
Phases	4 Fields Future state map // Participant and Stakeholders								Time line	Resources	Standards & Criteria

Time line vs resource time



Source: http://jacksonchoi.com/archives/100

Replace tires



4 Fields Future state map // Participant and Stakeholders

Phases	Customer	Reception	Mechanic	Time line (in minutes)	Resources (in minutes)	Standards & Criteria
Assessing needs	Tyres need replacing now			2	2	
		Check if garage has time now?		3	1	
		No → Inform customer		7	4	
	Try at another garage					
Replace tyres		Get keys from customer		8	1	
		Drive car in garage		12	4	
			Change tyres	32	3+15	
		Pay for				

Tyre changing manual

Payment	Drive car in garage			12	4	
		Change tyres		32	3+15	Tyre changing manual Payment standard operating procedure
	Pay for replacing tyres					
			Inform mechanic of payment	32	1	
			Drive car out of garage	40	2	Criteria: Payments need to be made before car is driven out of garage
			Handover key	50	1	
	Handover key			53	3	
	Drive home			53	0	
Summary	7 / 13 steps	9 / 13 steps	5 / 13 steps	53 mins	37 mins	

Level of detail

Vs

Top tips

- Define a clear start and end point for the process, before you start
- Have at least one representative per role, don't forget to include a patient (representative)
- Start high level and gradually add detail
- Use post it notes to build up the chart – this allows steps to be moved as additional detail is added
- Draw the arrows last
- Use different coloured post-it notes to differentiate between process steps, issues and ideas
- Stand while process mapping

Preparation

- Define topic (including start and end point) and objective
- Define length of mapping session <> what level of detail is required
- List all stakeholders/roles involved in the process
- Decide the process mapping technique (flow chart/ swimming lane / 4 fields mapping / etc)
- Arrange a room with ample wall space
- Arrange for materials:
  - post it notes (different colours if possible)
  - Sharpies
  - Butchers paper
- Invite at least one attendee per stakeholder/role
  - Don't forget about the patient
- Assign a facilitator
- Collect data prior to the session if possible (timings, number of patients, etc)
- Collect documentation (standards/ procedures/ guidelines)

During the session

- Introduce the topic and clarify start and end point
- Confirm the roles, and check every role is represented. If a role is missing, try to pull someone in, or decide how you'll get input after the session.
- Define the high level steps
- Start process mapping
- Time keeping is important, make sure the process gets finished
- Capture any issues, try to leave the discussing till the end
- Capture any improvement ideas, try to leave the discussing till the end

Afterwards

- Share the map with those involved. Keep the map as is or take photos, (you can digitise it, but takes effort)
- Could be a guideline/roadmap for your improvement project
  - Mark solved issues problems
- Prioritise issues/improvement ideas
- PDSA / test the improvements
- Capture improvement efforts

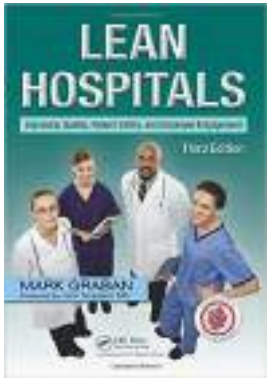
Task

- Create a process map on your tables: making the perfect cup of tea

Table 3.4 The Eight Types of Waste

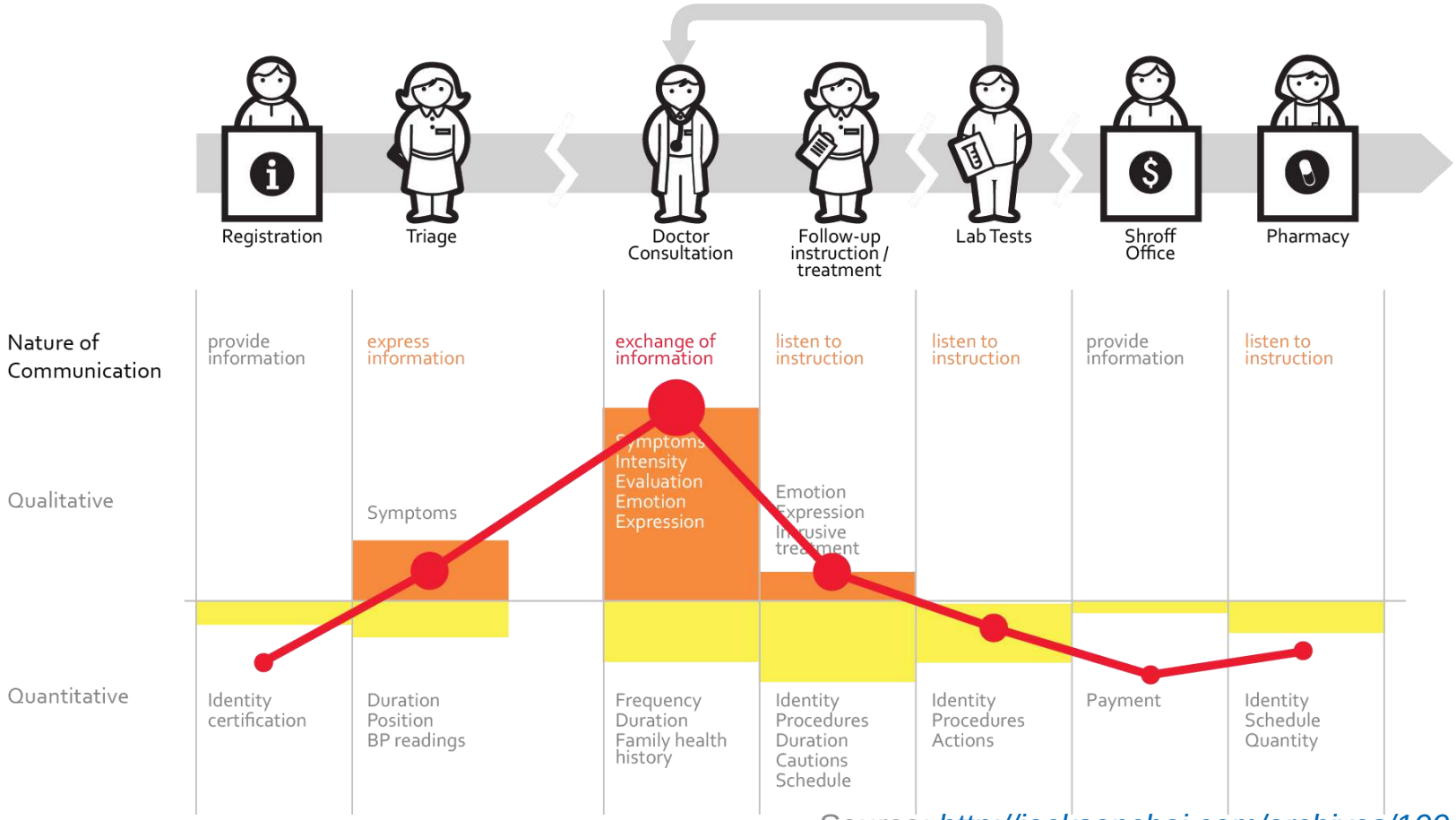
Type of Waste	*Brief Description*	*Hospital Examples*
Defects	Time spent doing something incorrectly, inspecting for errors, or fixing errors	Surgical case cart missing an item; wrong medicine or wrong dose administered to patient
Overproduction	Doing more than what is needed by the customer or doing it sooner than needed	Doing unnecessary diagnostic procedures
Transportation	Unnecessary movement of the "product" (patients, specimens, materials) in a system	Poor layout, such as the catheter lab being located a long distance from the ED
Waiting	Waiting for the next event to occur or next work activity	Employees waiting because workloads are not level; patients waiting for an appointment
Inventory	Excess inventory cost through financial costs, storage and movement costs, spoilage, wastage	Expired supplies that must be disposed of, such as out-of-date medications
Motion	Unnecessary movement by employees in the system	Lab employees walking miles per day due to poor layout
Overprocessing	Doing work that is not valued by the customer or caused by definitions of quality that are not aligned with patient needs	Time/date stamps put onto forms, but the data are never used
Human potential	Waste and loss due to not engaging employees, listening to their ideas, or supporting their careers	Employees get burned out and quit giving suggestions for improvement

Source:



How to analyse the process?

- Once the map has been completed the team can think about a series of questions such as :
  - How many steps add value for the “customer”?
  - How many steps add no value for the “customer”?
  - How many times does the process move from one person to another?
  - What is the approximate time taken for each step (task time)?
  - What is the wait time between each step?
  - What is the approximate time between the first and the last step?
  - What is the difference between the process time and the time line (elapsed time)
  - Where are the problems?
  - What distance is travelled by the stakeholders?



Source: http://jacksonchoi.com/archives/100

Steps	*Waiting in waiting room*	*Speaking to the nurse*	*Speaking to the doctor*	*Intervention*	*Planning new appointment*
Activity? *(Describe in your own words what happened)*					
Start time?					
End time?					
How do you feel? *(Please circle)*					
How would you describe your emotional state? *(circle one or more emotions, or describe it yourself on the dotted lines)*	Frustrated Disappointed Stressed Confused Nervous Happy Excited Comfortable Confident Supported ……………………………… ………………………………	Frustrated Disappointed Stressed Confused Nervous Happy Excited Comfortable Confident Supported ……………………………… ………………………………	Frustrated Disappointed Stressed Confused Nervous Happy Excited Comfortable Confident Supported ……………………………… ………………………………	Frustrated Disappointed Stressed Confused Nervous Happy Excited Comfortable Confident Supported ……………………………… ………………………………	Frustrated Disappointed Stressed Confused Nervous Happy Excited Comfortable Confident Supported ……………………………… ………………………………
Any further comments?					

Possible solutions / Change concepts

- Minimise hand offs
- Remove steps
- Do tasks in parallel
- Consider people as in the same system
- Find and remove bottlenecks
- Use automation
- Listen to patients
- Reduce set-up or start-up time
- Reduce wait time
- Eliminate multiple entries
- Use reminders
- Reduce classifications
- Match the amount to the need

Source: The Improvement Guide, 2nd Ed. Langley, Nolan, Nolan, Norman Provost, Appendix A; pgs. 357-408

Change concepts

Eliminate waste

1. Eliminate things that are not used
2. Eliminate multiple entry
3. Reduce or eliminate overkill
4. Reduce controls on the system
5. Recycle or reuse
6. Use substitution
7. Reduce classifications
8. Remove intermediaries
9. Match the amount to the need
10. Use Sampling
11. Change targets or set points

Improve work flow

12. Synchronize
13. Schedule into multiple processes
14. Minimize handoffs
15. Move steps in the process close together
16. Find and remove bottlenecks
17. Use automation
18. Smooth workflow
19. Do tasks in parallel
20. Consider people as in the same system
21. Use multiple processing units
22. Adjust to peak demand

Optimise Inventory

23. Match inventory to predicted demand
24. Use pull systems
25. Reduce choice of features
26. Reduce multiple brands of the same item

Change the work environment

27. Give people access to information
28. Use Proper Measurements
29. Take Care of basics
30. Reduce de-motivating aspects of pay system
31. Conduct training
32. Implement cross-training
33. Invest more resources in improvement
34. Focus on core process and purpose
35. Share risks
36. Emphasize natural and logical consequences
37. Develop alliances/cooperative relationships

Enhance the product/customer relationship

38. Listen to customers
39. Coach customer to use product/service
40. Focus on the outcome to a customer
41. Use a coordinator
42. Reach agreement on expectations
43. Outsource for “Free”
44. Optimize level of inspection
45. Work with suppliers

Manage time

23. Reduce setup or startup time
24. Set up timing to use discounts
25. Optimize maintenance
26. Extend specialist’s time
27. Reduce wait time

Manage variation

51. Standardization (Create a Formal Process)
52. Stop tampering
53. Develop operation definitions
54. Improve predictions
55. Develop contingency plans
56. Sort product into grades
57. Desensitize
58. Exploit variation

Design systems to avoid mistakes

59. Use reminders
60. Use differentiation
61. Use constraints
62. Use affordances

Focus on the product or service

63. Mass customize
64. Offer product/service anytime
65. Offer product/service anyplace
66. Emphasize intangibles
67. Influence or take advantage of fashion trends
68. Reduce the number of components
69. Disguise defects or problems
70. Differentiate product using quality dimensions
71. Move steps in process closer together
72. Manage variation, not tasks

Source: The Improvement Guide, 2nd Ed. Langley, Nolan, Nolan, Norman Provost, Appendix A; pgs. 357-408

Future state mapping

Quality Improvement knowledge

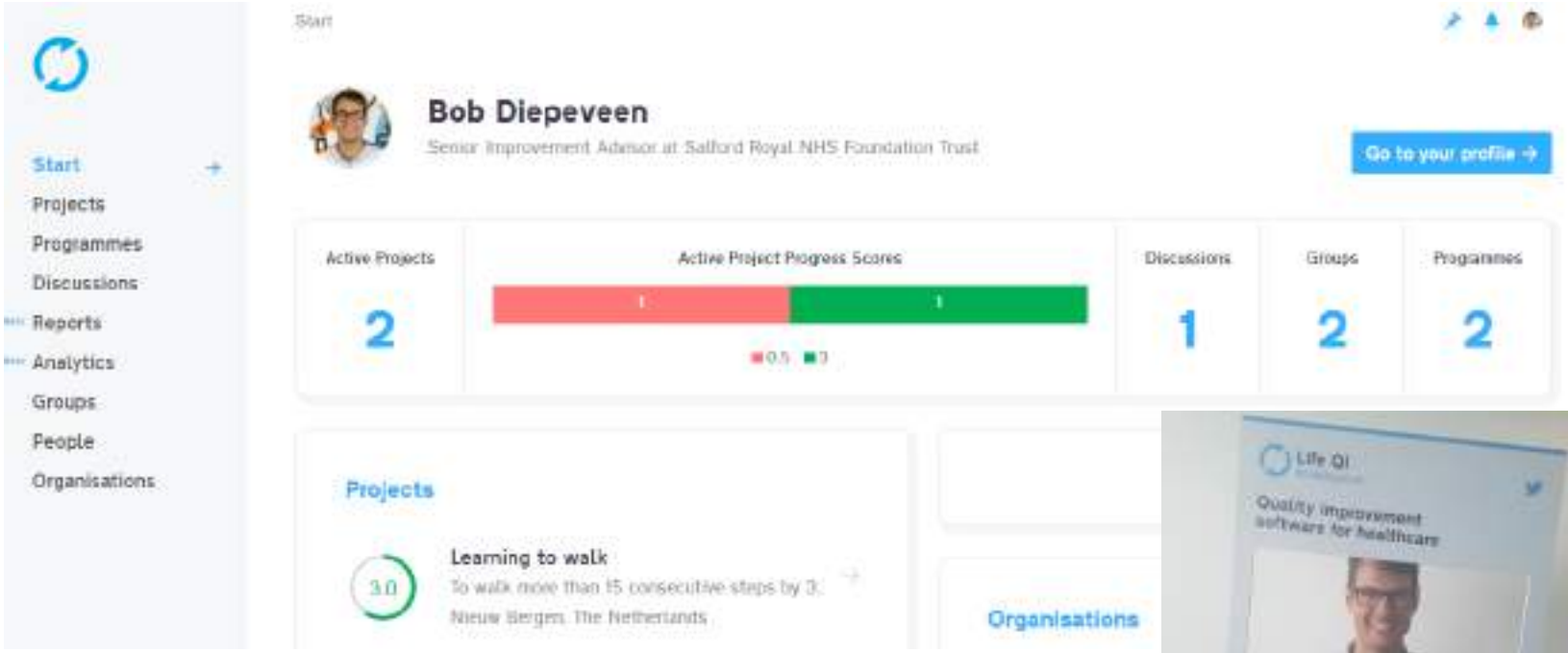
- Please fill out this short questionnaire :

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

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.

Life QI platform



https://uk.lifeqisystem.com/

LifeQI Webinar

- 5th July 10:00-11:00
- 11th July 10:00-11:00
- https://join.me/LifeQI-webinar

- *You won't need to install anything but you may need to allow pop-up alerts in order to access the meeting, so look out for any messages in your browser altering you to this. You can get audio through your computer if you have speakers and a microphone built in.*
- *Alternatively if you would prefer to dial in by phone the details are:*
  - *Tel:* ***020 3582 4515***
  - *Access Code:* ***723 655 835*** *#*


Q
A connected community working together to improve health and care quality across the UK
Delivered by
The Health Foundation

- Q's mission is to:

  foster continuous and sustainable improvement in health and care.

To achieve this, we are creating opportunities for people to come together and form a community – sharing ideas, enhancing skills and collaborating to make health and care better.

- Q is open for applications, visit https://q.health.org.uk/

For further information on Health Innovation Manchester Patient Safety Collaborative QI

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Improvement Advisor, GM Patient Safety Collaborative

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The AHSN Network

NHS Improvement

PReCePT

Karen Luyt, Clinical Neonatologist,
University of Bristol

Greater Manchester & Eastern Cheshire

Patient Safety Collaborative

PreCePT
The Case for Magnesium Sulphate

Karen Luyt
National Clinical Lead PReCePT
Consultant Senior Lecturer
Neonatal Medicine
UHBristol NHS Trust and University of Bristol

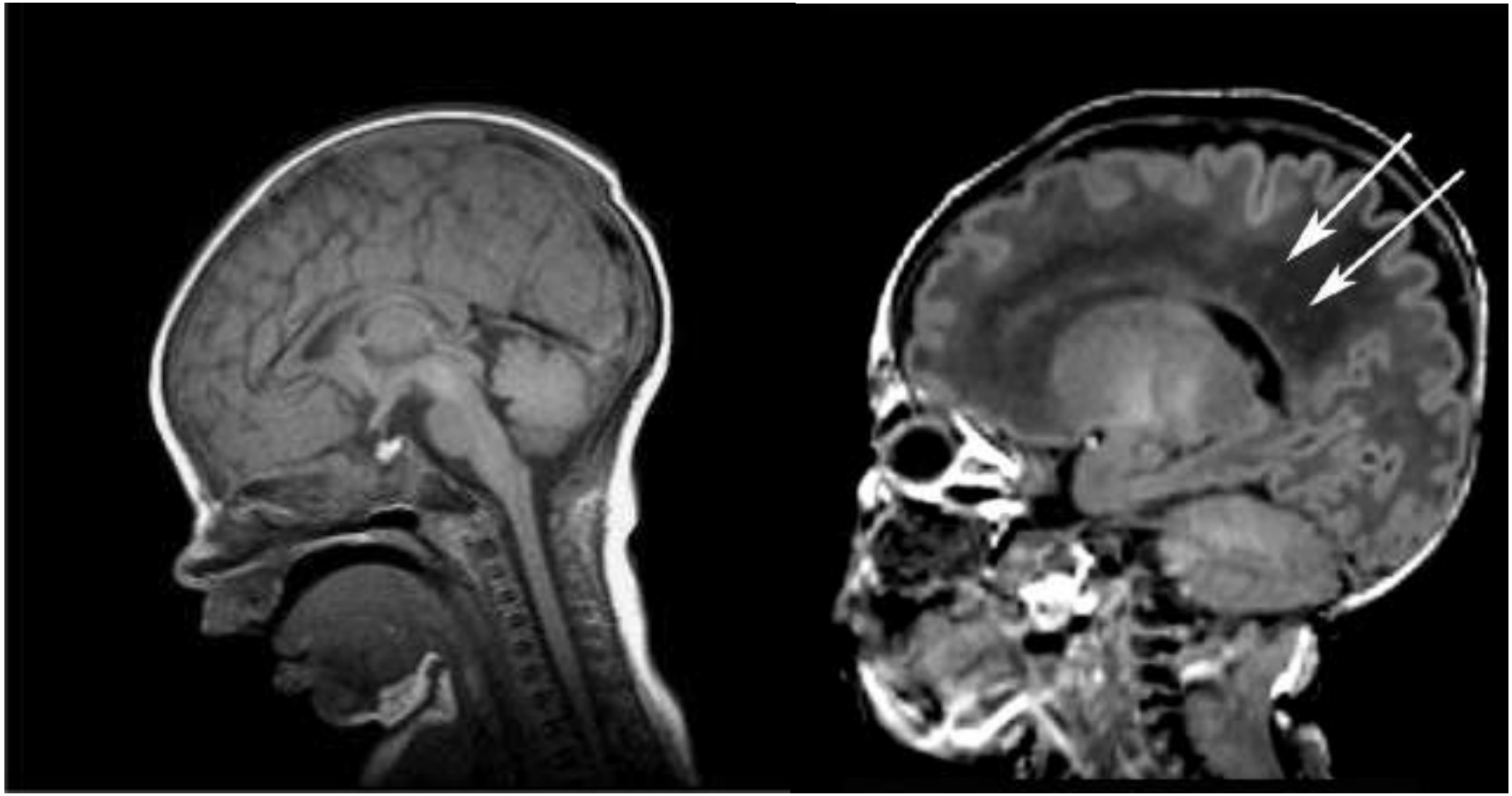
University Hospitals Bristol NHS Foundation Trust

West of England Academic Health Science Network

Background

Magnesium Sulphate as brain protection for preterm babies

Preterm Brain Injury



West of England Academic Health Science Network

Preterm Birth and Cerebral Palsy

- Preterm birth is the major risk factor for CP

- 10% of very low birth weight babies develop CP

Cerebral Palsy

- Average Health Care costs per individual: ~ £800,000
- The cost to the individual and their family is unquantifiable.
- Until recently no intervention available to prevent CP in preterm babies

Magnesium sulphate for women at risk of preterm birth for neuroprotection of the fetus (Review)

Doyle LW, Crowther CA, Middleton P, Marret S, Rouse D

THE COCHRANE COLLABORATION®

This is a reprint of a Cochrane review, prepared and maintained by The Cochrane Collaboration and published in *The Cochrane Library* 2010, Issue 1

http://www.thecochranelibrary.com

$MgSO_4$: Cerebral Palsy

Outcome: 4 Cerebral palsy

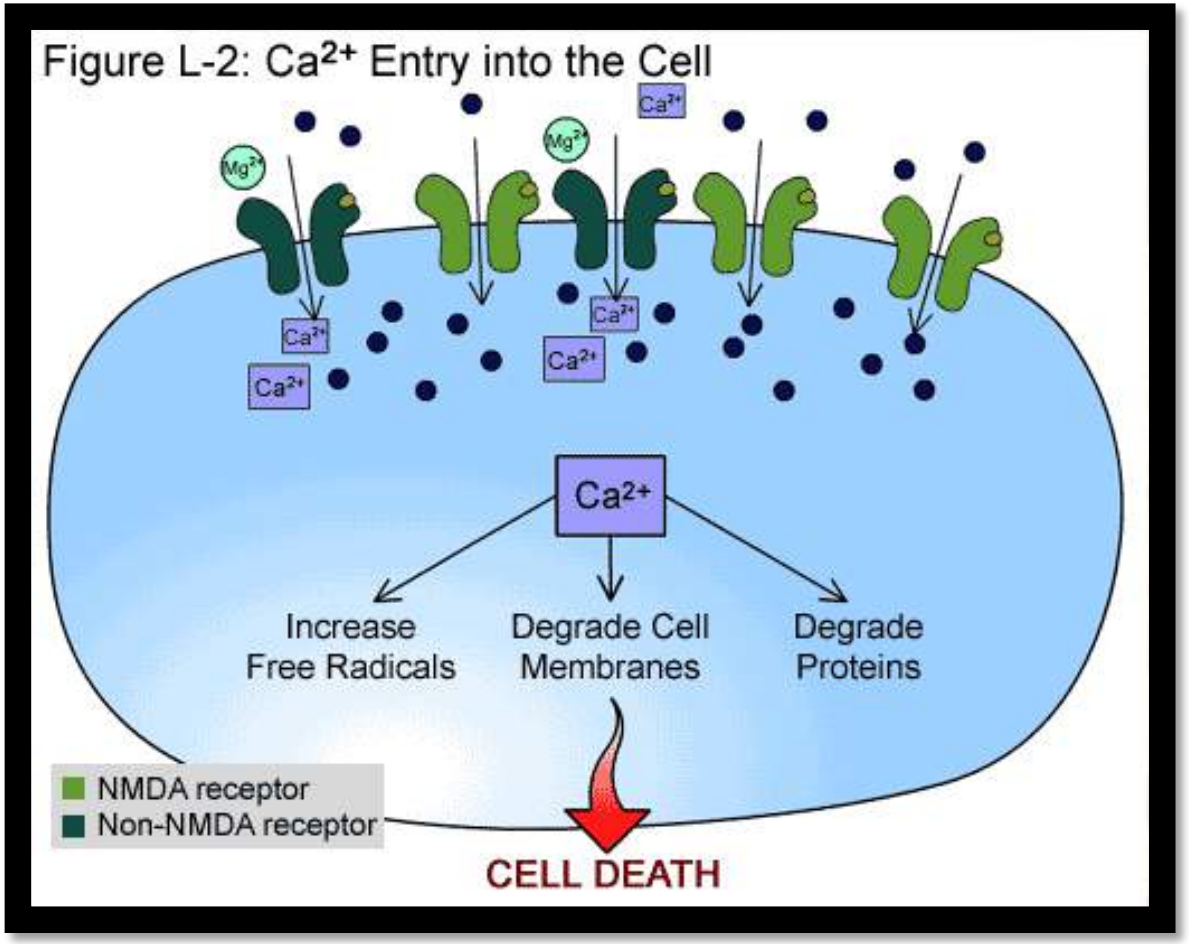
Study or subgroup	Magnesium n/N	No magnesium n/N	Risk Ratio M-H,Fixed,95% CI	Weight	Risk Ratio M-H,Fixed,95% CI
1 Neuroprotective intent any CP					
Crowther 2003	36/629	42/626		29.0 %	0.85 [0.55, 1.31]
Marret 2006	22/352	30/336		21.1 %	0.70 [0.41, 1.19]
Mittendorf 2002	3/30	0/29		0.3 %	6.77 [0.37, 125.65]
Rouse 2008	41/1188	74/1256		49.5 %	0.59 [0.40, 0.85]
Subtotal (95% CI)	**2199**	**2247**		**100.0 %**	**0.71 [0.55, 0.91]**

Doyle et al. Cochrane Library. 2010

THE COCHRANE COLLABORATION®

$MgSO_4$: Mechanism of Action

Rapidly crosses the placenta and enters the brain within minutes



$MgSO_4$: Cerebral Palsy

RESEARCH www.AJOG.org

OBSTETRICS

Magnesium sulfate therapy for the prevention of cerebral palsy in preterm infants: a decision-analytic and economic analysis

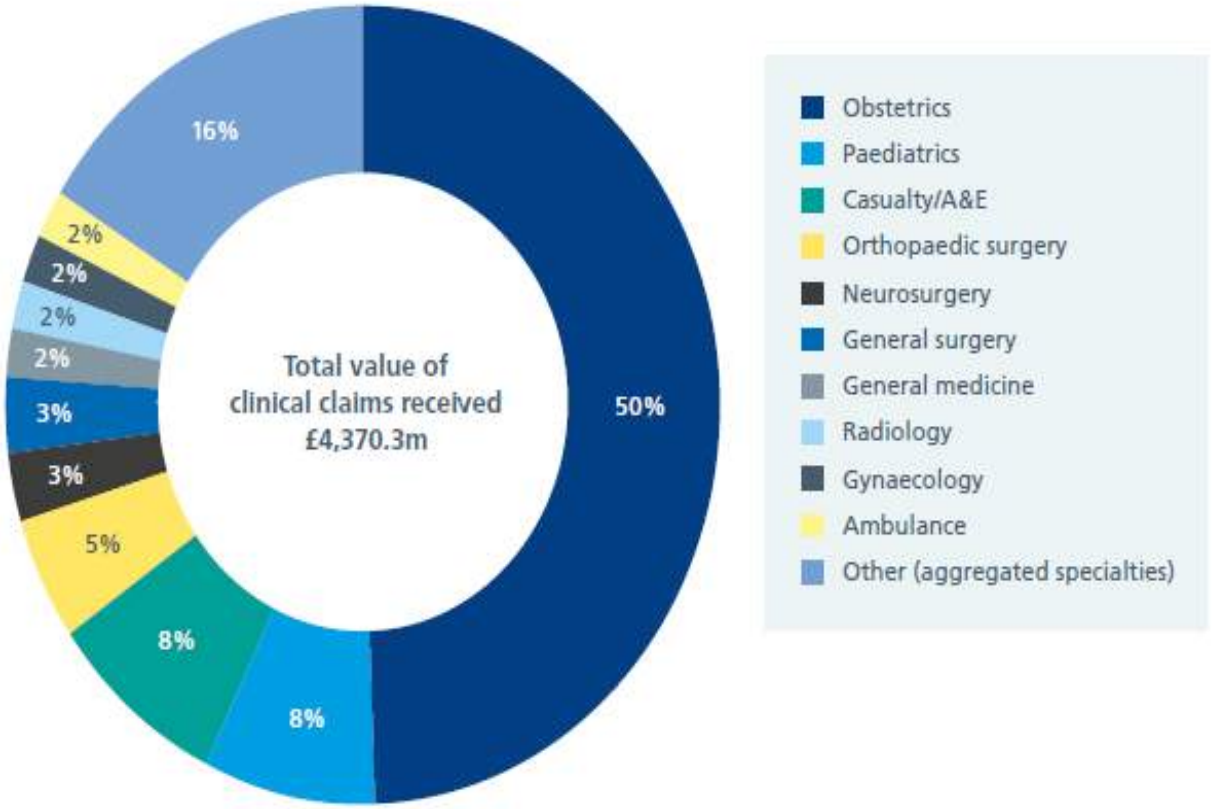
Alison G. Cahill, MD, MSCI; Anthony O. Odibo, MD, MSCE; Molly J. Stout, MD; William A. Grobman, MD, MBA; George A. Macones, MD; Aaron B. Caughey, MD, PhD

Am J Obstet Gynecol 2011;205:542.e1-7.

MgSO4 given at <32 weeks is cost-effective

NHS Litigation Cost for CP: £1.9 billion in 2016

Figure 10: Value of clinical negligence claims received in 2016/17 by specialty across all clinical negligence schemes[5]



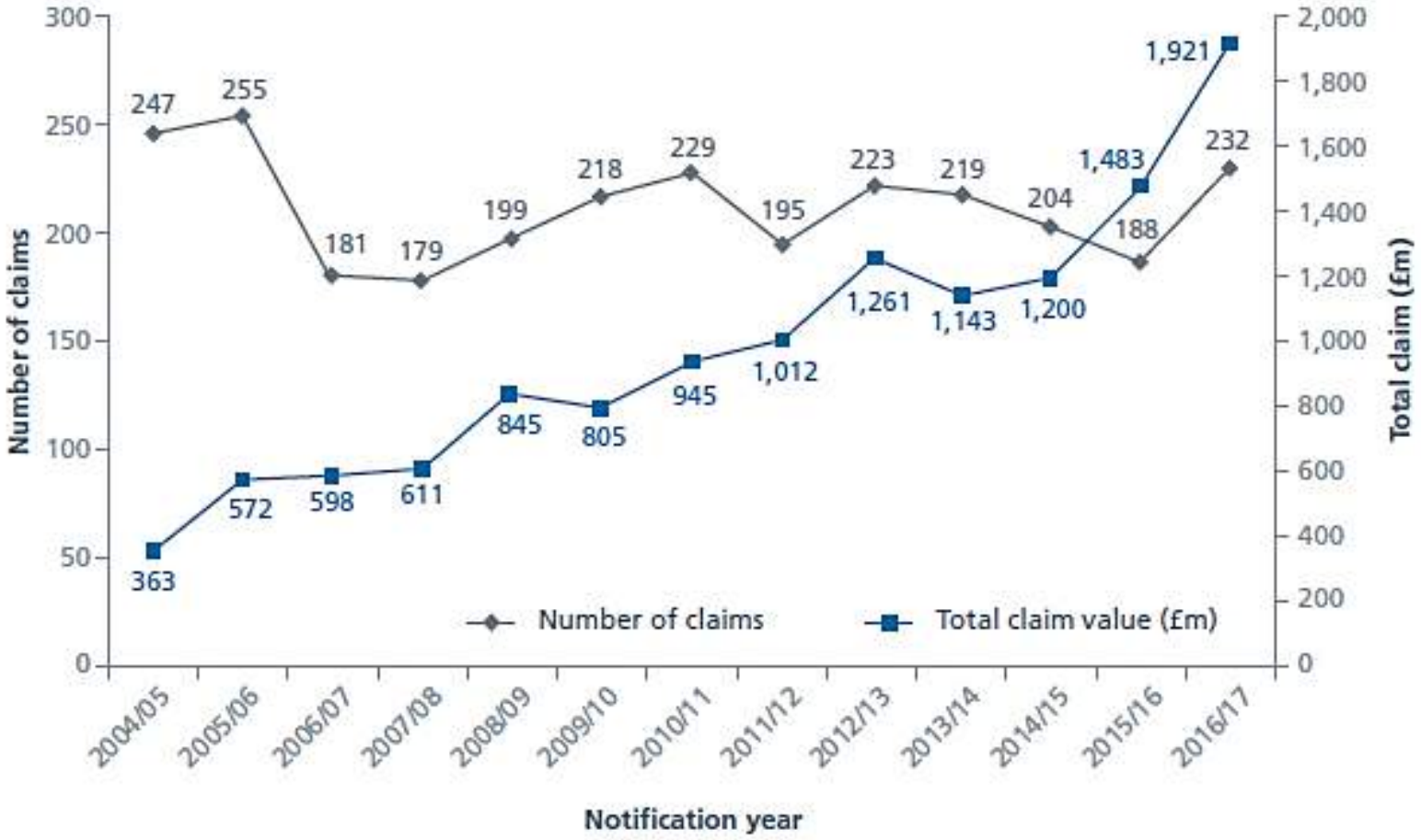
As in previous years, the greatest value of claims received across all our clinical negligence schemes relate to the obstetrics specialty.

NHS Resolution

Annual report and accounts 2016/17

And increasing……..

Figure 19: A comparison of the number and total value of claims for maternity cerebral palsy/brain damage claims over time across all clinical negligence schemes



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A £1 drug that can prevent brain injury in premature babies

Magnesium Sulphate has been shown to be a very effective neuroprotectant for babies born prematurely. The drug costs just £1 per patient and reduces the risk of preterm babies developing cerebral palsy by an astonishing 40%. Despite this, uptake in the UK has been poor. In order to improve awareness of the drug and to increase its usage a quality improvement project (PreCePT) has been carried out in the South

$MgSO_4$: Cerebral Palsy

Highest Level Evidence - Individual Participant Meta-analysis

PLOS | MEDICINE PLoS Med 14(10): e1002398.

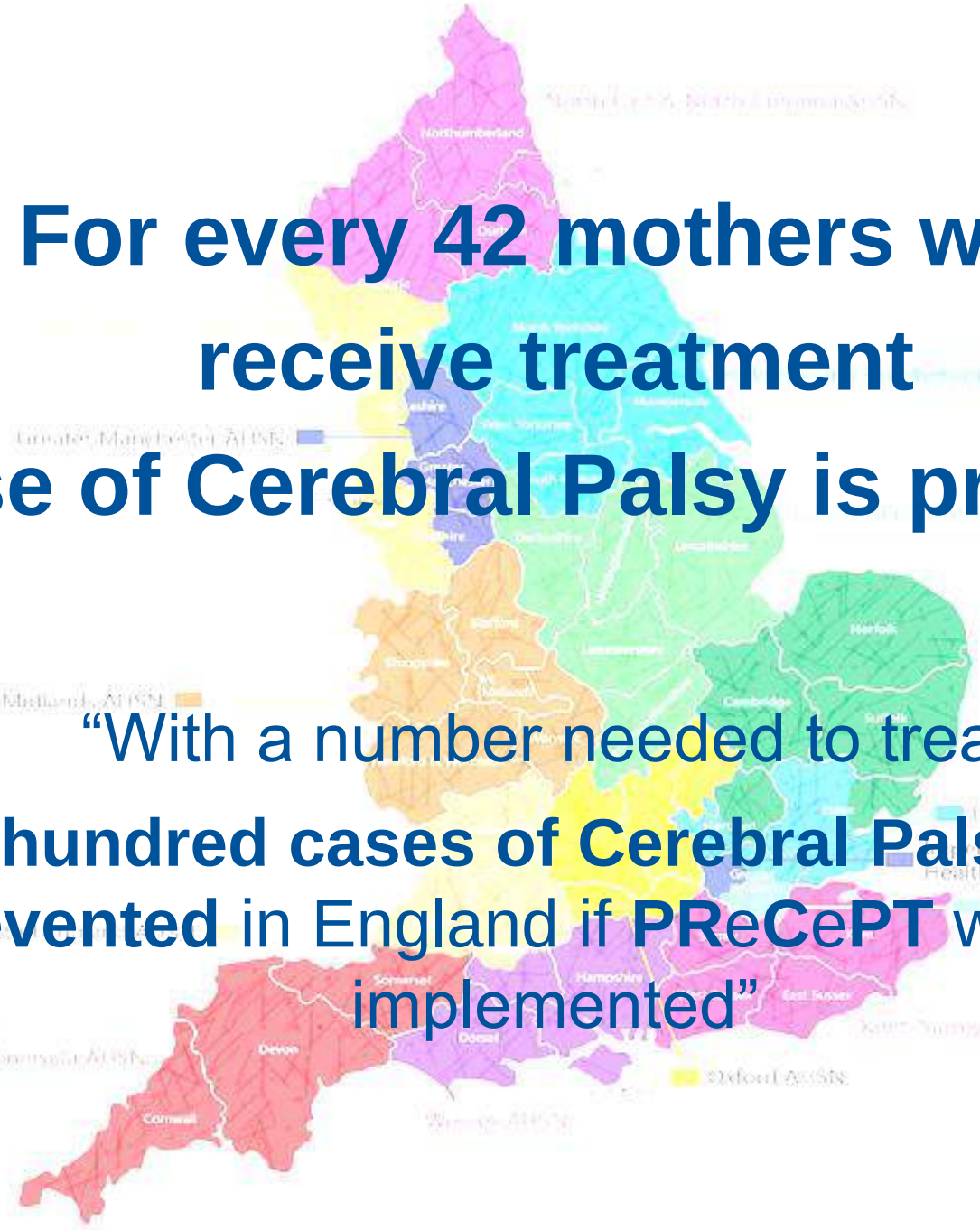
RESEARCH ARTICLE

Assessing the neuroprotective benefits for babies of antenatal magnesium sulphate: An individual participant data meta-analysis

Caroline A. Crowther[1,2*], Philippa F. Middleton[2,3], Merryn Voysey[4], Lisa Askie[5], Lelia Duley[6], Peter G. Pryde[7], Stéphane Marret[8,9], Lex W. Doyle[10,11,12], for the AMICABLE Group[¶]

Key Findings:

- **Number Needed to Treat = 42 to prevent 1 case of CP**
- **Reduction of All grades CP (32%)**
- **Reduction of moderate/severe (37%) and severe CP (46%)**
- **Effective even if given 0-4 hours before delivery**
- **4g loading dose + 1g/hr maintenance effective**
- **No risk to mother. No risk of respiratory depression for baby.**



For every 42 mothers who receive treatment 1 case of Cerebral Palsy is prevented

"With a number needed to treat of 42,

a few hundred cases of Cerebral Palsy may be prevented in England if **PReCePT** was fully implemented"

(Crowther 2017)

NICE Guidance

Magnesium sulfate for neuroprotection

1. Offer intravenous magnesium sulfate for neuroprotection of the baby to women between **24^{+0} and 29^{+6}** weeks of pregnancy who are:
•in established preterm labour **or**
•having a planned preterm birth within 24 hours.

2. Consider intravenous magnesium sulfate for neuroprotection of the baby for women between 30^{+0} and 33^{+6} weeks of pregnancy. 3. Give a 4 g intravenous bolus of magnesium sulfate over 15 minutes, followed by an intravenous infusion of 1 g per hour until the birth or for 24 hours (whichever is sooner).

3. For women on magnesium sulfate, monitor for clinical signs of magnesium toxicity at least every 4 hours.

PReCePT1

Open Access BMJ Quality Improvement Report

BMJ Open Quality

Preventing cerebral palsy in preterm labour: a multiorganisational quality improvement approach to the adoption and spread of magnesium sulphate for neuroprotection

Anna Burhouse,[1] Charlotte Lea,[2] Stephen Ray,[1] Hannah Bailey,[3] Ruth Davies,[4] Hannah Harding,[2] Rachel Howard,[5] Sharon Jordan,[6] Noshin Menzies,[1] Sarah White,[1] Kathryn Phillips,[1] Karent Luyt[7]

BMJ Open Quality 2017;6:e000189.doi:10.1136/bmjoq-2017-000189

Public and Patient Involvement

- Strong PPI in planning and governance of project

- Co-production of project materials
- Two public representatives as core members of project steering group

- Links with BLISS
  (The Premature Baby Charity)

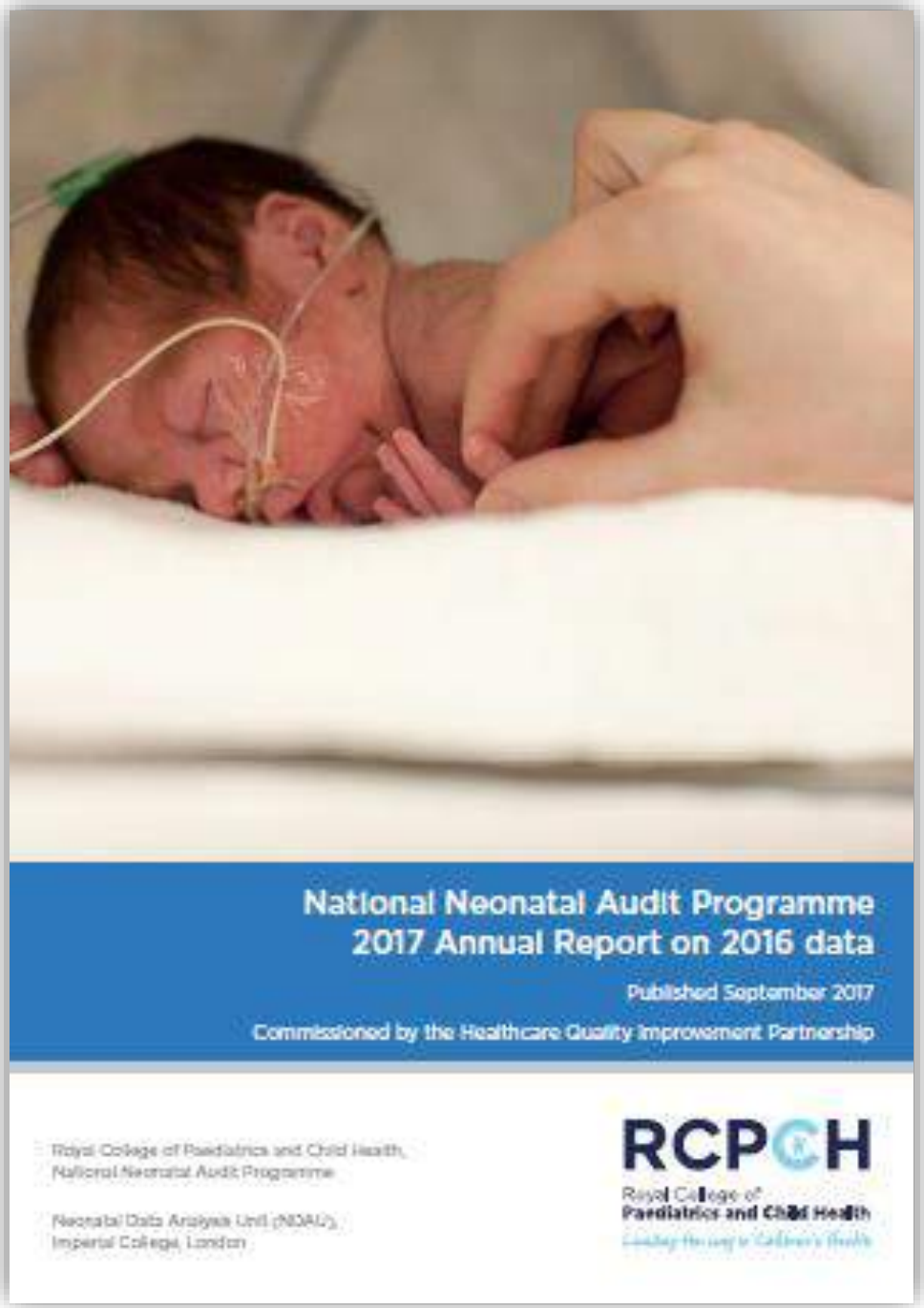
Bliss
for babies born
premature or sick

PReCePT1

- Adoption and spread to 4 WE units.
- Perinatal Approach (Maternal and Neonatal).
- Measurement: Developed the MgSO4 metric in BadgerNET + VON Data (2012, 2013) used for baseline.
- Central Team: QI Coach (AHSN), Clinical Lead (UHBristol – Neonatologist; K Luyt), Patient Reps (PPI), Project Management, Communications Team.
- Unit Level: Midwife Champion + Neonatal Champion.
- QI Methodology refined in each unit.
- More than 600 staff trained (“Tea Trolley training”).
- Quantitative and Qualitative Evaluation.
- Uptake increased from 20% to 88% in 6 months.

BMJ Open Quality 2017;6:e000189.doi:10.1136/bmjoq-2017-000189

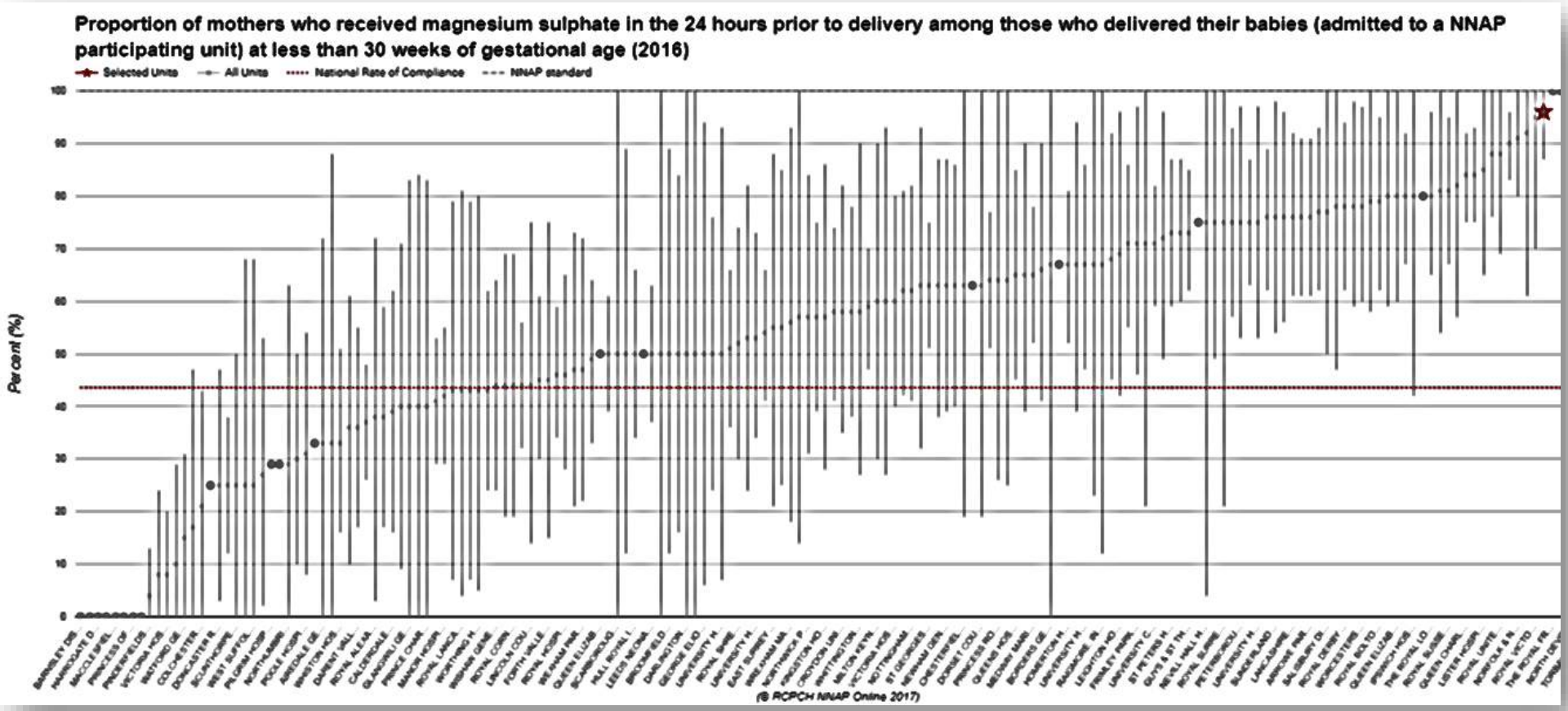
West of England Academic Health Science Network



MgSO4 NNAP metric, developed by PReCePT Clinical Lead

National Benchmarking

Influence of PReCePT1 –all 5 units in top 10th centile

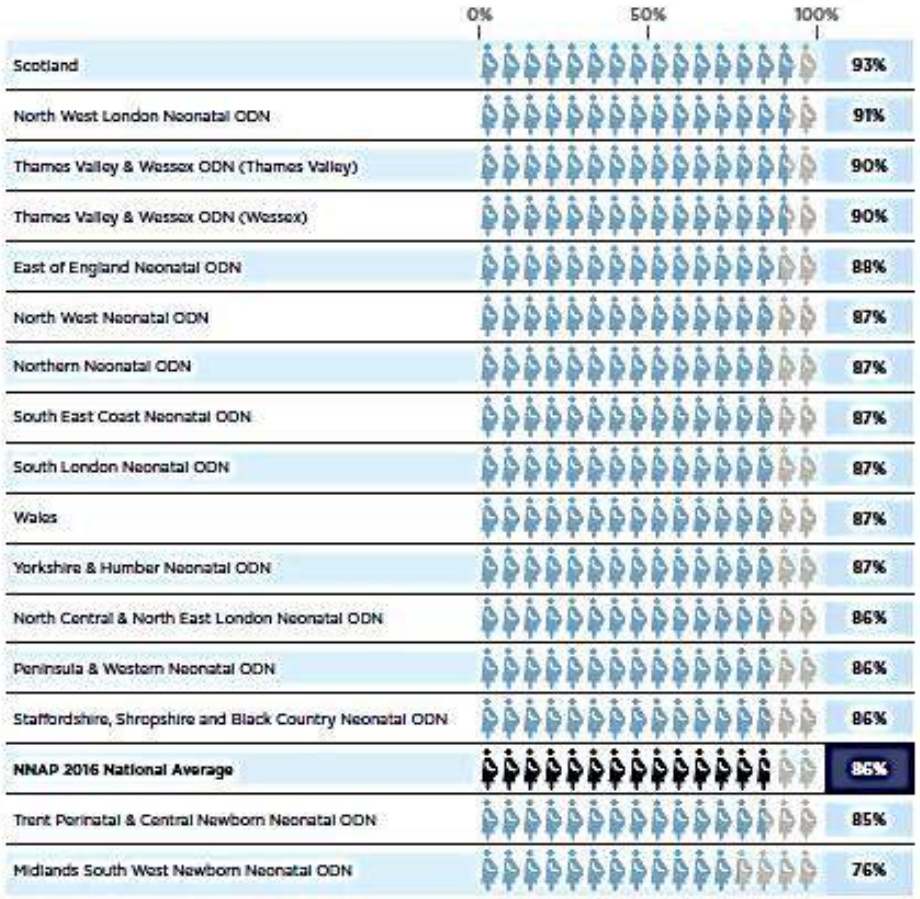


National Average = 43%

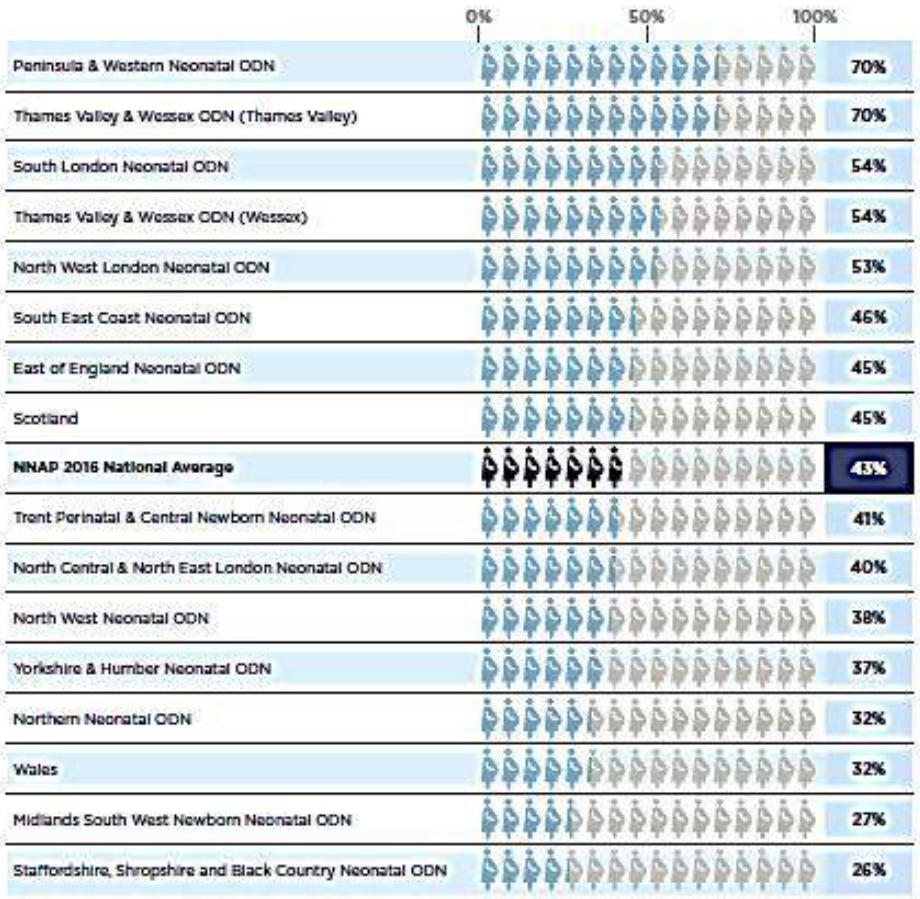
***St Michael's (UHBristol) = 96%**

Antenatal Steroids vs. $MgSO_4$

Antenatal steroids: Percentage of mothers who delivered their babies between 24 and 34 weeks gestation and received any dose of antenatal steroids.



Magnesium sulphate: Percentage of mothers who delivered their babies at less than 30 weeks gestation and received Magnesium sulphate 24 hours prior to delivery.



PReCePT Aims

- To improve compliance with NICE Guidance NG25 and increase the proportion of eligible women offered $MgSO_4$ in England.
- Long Term: Reduction in the incidence of cerebral palsy in babies born preterm.

PReCePT

Builds on Success……

- Proven evidence based intervention – NICE guidance
- PPI and co-production at every stage
- PReCePT1 Qualitative Evaluation
- PReCePT1 – Effect sustained
- Use of robust routinely collected data (BadgerNet)
- Added value by using network approach to National dissemination (AHSNs, NHS-I, NHS Clinical Delivery Networks)

THE COCHRANE
COLLABORATION®

PReCePT3

Our mission:

To give every eligible mother in preterm labour the choice

To enable every baby to reach their full potential

Bliss for babies born premature or sick

NHS University Hospitals Bristol NHS Foundation Trust

West of England Academic Health Science Network

The AHSN Network

NHS Improvement

Table discussion

Greater Manchester & Eastern Cheshire

Patient Safety Collaborative

Questions for the speaker

- Step 1: Individually write down questions on PReCePT, you might have? (1 min)
- Step 2: In pairs discuss the questions and you might be able to answer a few already. Prioritise the remaining questions in your pairs. (5 mins)
  - Step 3: Per table discuss the unanswered questions and prioritise these. (Similar as in the pairs, some answers might be known on your table) (10 mins).
- Step 4: Each table in the room can ask 1 question to Karen (15 mins).

The AHSN Network

NHS Improvement

Women's Experience

Greater Manchester & Eastern Cheshire

Patient Safety Collaborative

The AHSN Network

NHS Improvement

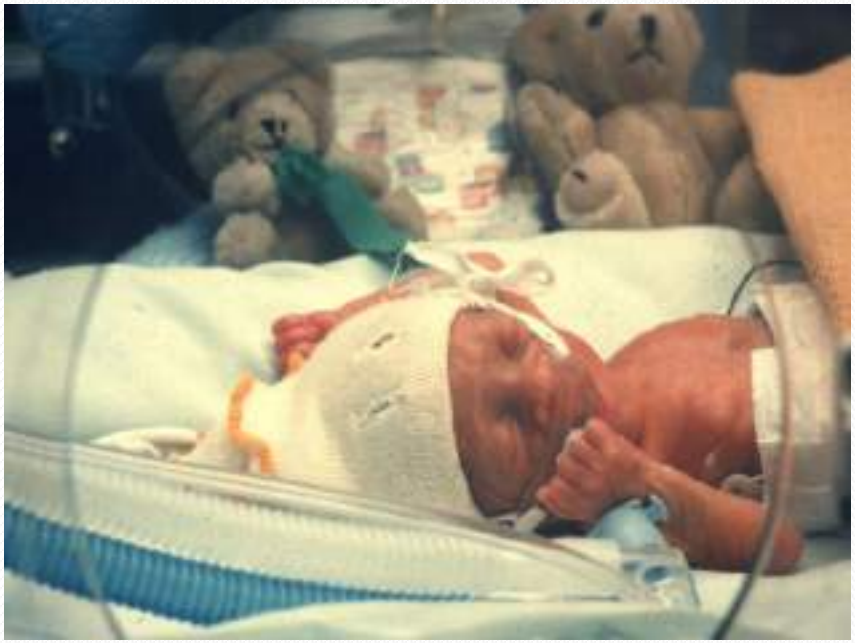
Lunch

Greater Manchester & Eastern Cheshire

Patient Safety Collaborative

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 neonatal 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

	Births	Code
Cheshire and Merseyside Neonatal Network	28,573	●
Lancashire and South Cumbria Neonatal Network	16,986	●
Greater Manchester Neonatal Network	37,215	●

- ● up to 10% higher than the average for the comparator group
- ● more than 10% higher than the average for the comparator group

NHS Improvement

Maternal and neonatal health safety collaborative: national learning event

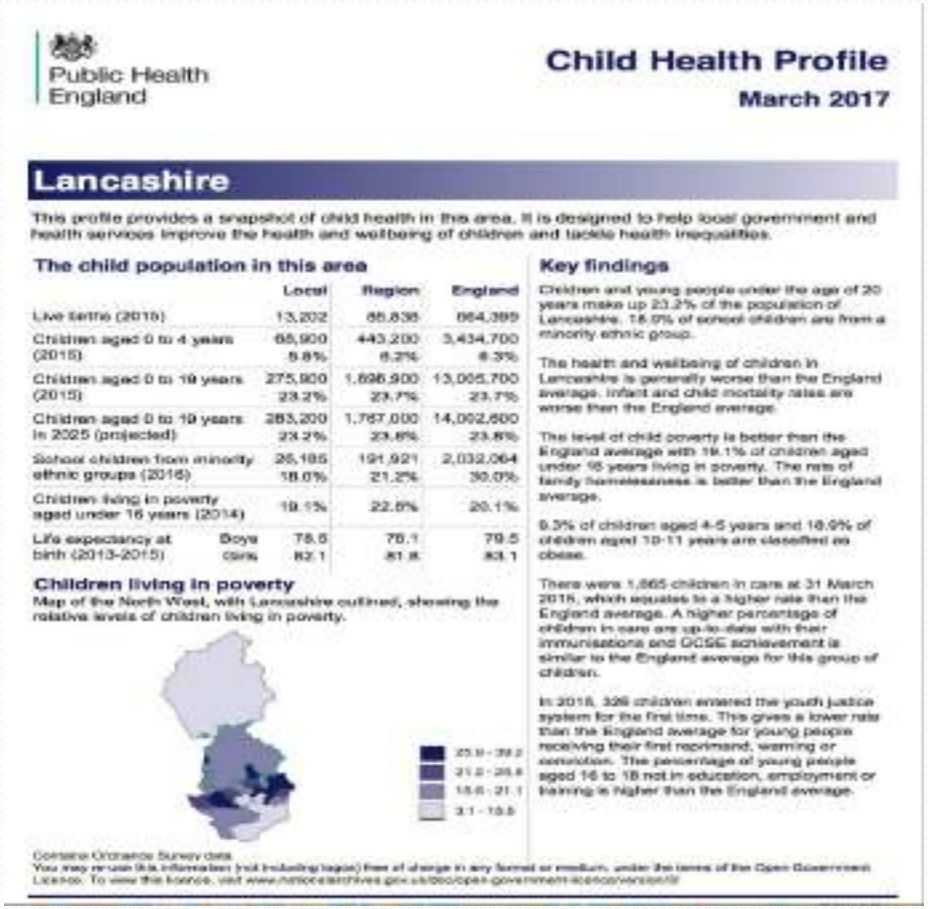
Thursday 1 March 2018

collaboration trust respect innovation courage compassion

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

Improve the proportion of smoke free pregnancies



Public Health England

Child Health Profile

March 2017

Lancashire

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

		Local	Region	England
Live births (2015)		13,202	85,838	664,389
Children aged 0 to 4 years (2015)		65,900 5.8%	443,200 6.2%	3,434,700 6.3%
Children aged 0 to 19 years (2015)		275,900 23.2%	1,696,900 23.7%	13,065,700 23.7%
Children aged 0 to 19 years in 2025 (projected)		283,200 24.2%	1,767,000 23.8%	14,002,600 23.8%
School children from minority ethnic groups (2016)		26,185 18.0%	191,921 21.2%	2,032,064 30.0%
Children living in poverty aged under 16 years (2014)		19.1%	22.6%	20.1%
Life expectancy at birth (2013-2015)	Boys	78.6	78.1	79.5
	Girls	82.1	81.8	83.1

Children living in poverty

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

Key findings

Children and young people under the age of 20 years make up 23.2% of the population of Lancashire. 18.0% of school children are from a minority ethnic group.

The health and wellbeing of children in Lancashire is generally worse than the England average. Infant and child mortality rates are worse than the England average.

The level of child poverty is better than the England average with 19.1% of children aged under 16 years living in poverty. The rate of family homelessness is better than the England average.

9.3% of children aged 4-5 years and 18.9% of children aged 10-11 years are classified as obese.

There were 1,665 children in care at 31 March 2016, which equates to a higher rate than the England average. A higher percentage of children in care are up-to-date with their immunisations and GCSE achievement is similar to the England average for this group of children.

In 2016, 326 children entered the youth justice system for the first time. This gives a lower rate than the England average for young people receiving their first reprimand, warning or conviction. The percentage of young people aged 16 to 18 not in education, employment or training is higher than the England average.

Contains Ordnance Survey data

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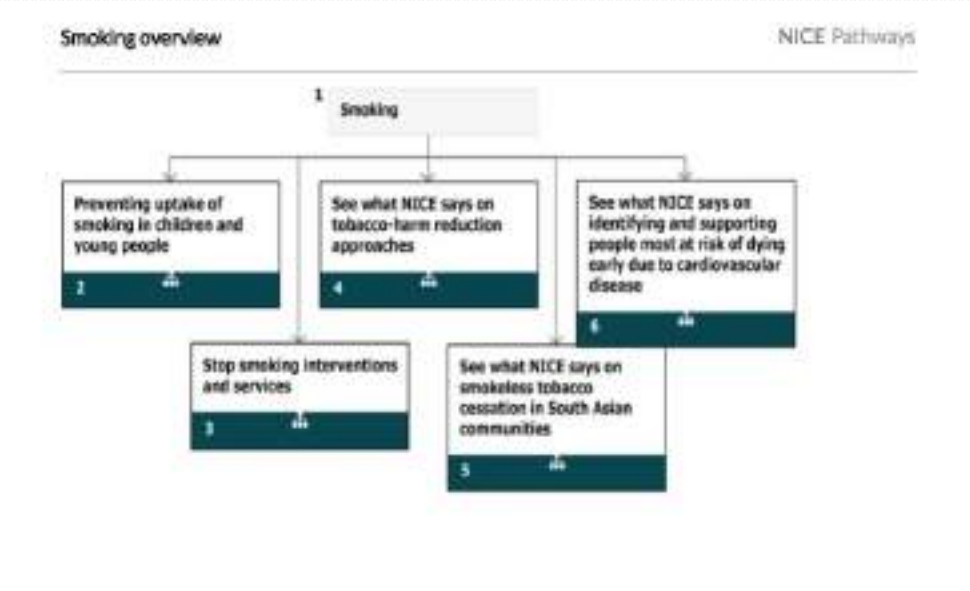
Improve the proportion of smoke free pregnancies



Improve the optimisation and stabilisation of the very preterm infant

<27 Week First Admissions Apr 16 – Mar 17

	IC %	
NICUs	2015/16	2016/17
Greater Manchester	89%	90%
Cheshire & Merseyside	73%	83%
Lancashire & South Cumbria	89%	91%

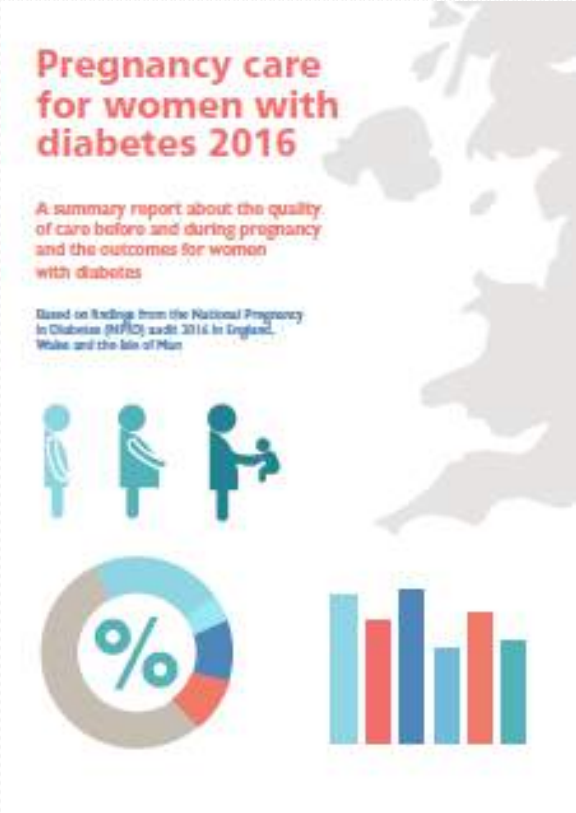
Optimising Outcomes

Administration of steroids 24- 34/40 2015-2017				
	Eligible Mothers	Steroids given (%) (N: National %)	Not given	Missing/Unknown
2015	2439	2098 (84%) (N: 85%)	330	9
2016	2353	2011 (85%) (N: 85%)	299	43
2017	2318	2017 (87%) (N: 82.6)	223	78

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

Administration of Magnesium Sulphate < 30/40 2016 -2017				
	Eligible Mothers	Magnesium Sulphate Given(%) (N: National %)	Not given	Missing/Unknown
2016	586	205 (35%) (N: 39%)	188	193
2017	532	321 (60%) (N: 57.4%)	140	71

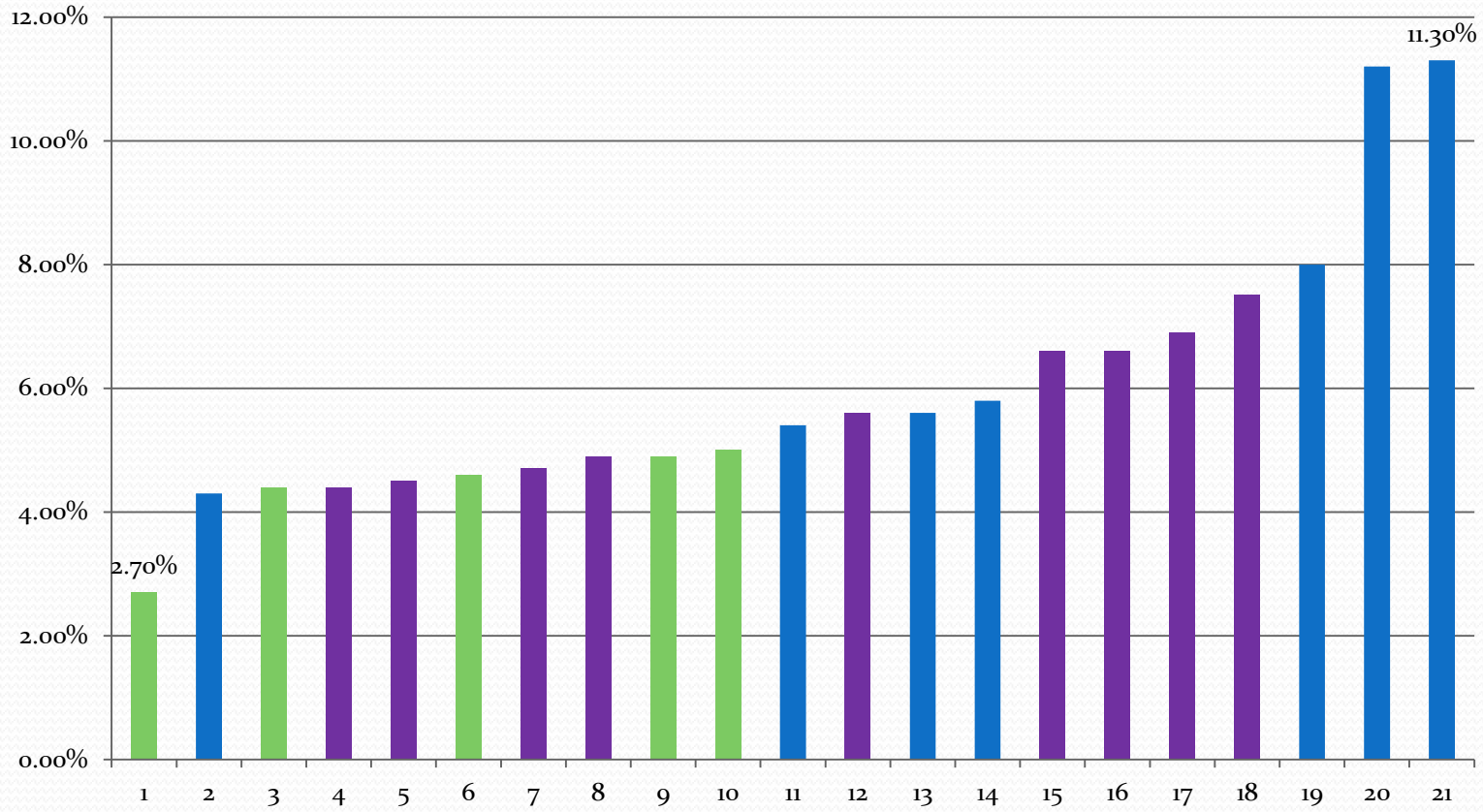
Improve the detection and management of diabetes in pregnancy



Improve the detection and management of neonatal hypoglycaemia

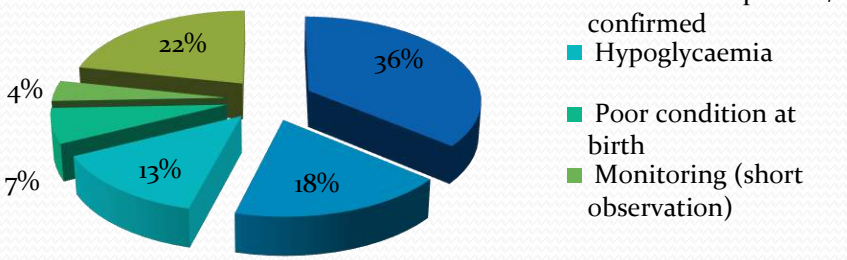
Term admissions by unit as % of total births

L&SC
GM&EC
C&M

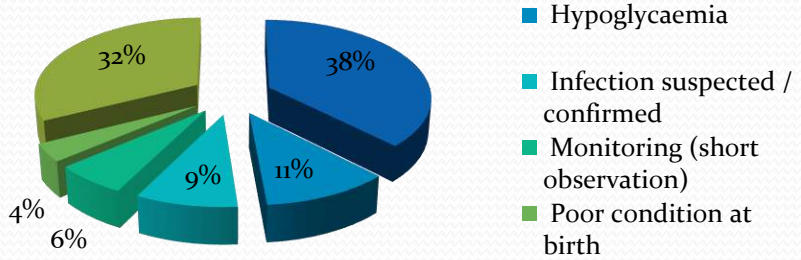


Top 5 reasons for Admission

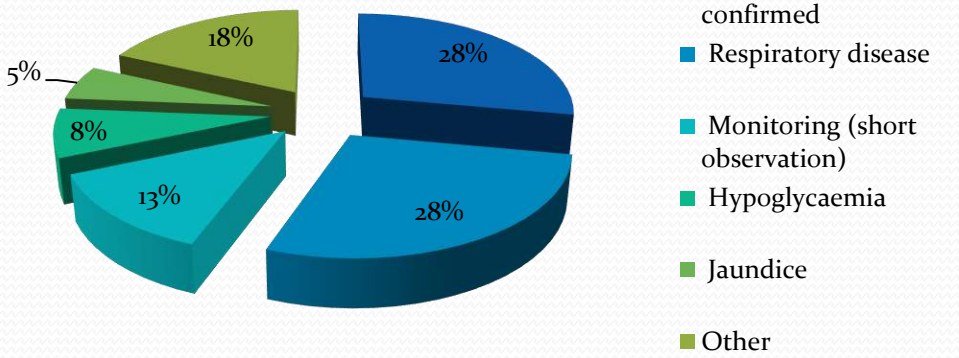
Lancashire and South Cumbria



Greater Manchester & East Cheshire



Cheshire & Merseyside



Reducing the Number of Babies Separated (RNBS) Programme

Incorporating

1. **ATAIN**
2. **NHS England Improving Value Scheme**

To support

1. **Local Maternity System Programme Plan**
2. **Maternity and Neonatal Safety Collaborative**
   - **Cheshire and Merseyside**
   - **Greater Manchester & EC**
   - **Lancashire and South Cumbria**

Changes required

- **Policy**
- **Practice**
- **Service**

NWNODN initiatives

Network Wide
Data collection and aggregation
Annual and quarterly reports
Dashboard
Network Guidelines

- Neonatal Hypoglycaemia

Provider Initiatives
Weekly term admission to NNU reviews
Learning from reviews cascaded to all staff any changes to practice identified
Change in hypoglycaemia policy
Change in Observations for babies with low cord pH policy
Gatekeeper arrangement for admission of babies from postnatal ward
Introduction of Early neonatal Care Pathway
Development of a neonatal septic screening box to facilitate the screening of neonates at the bedside.
Neonates are accompanying their mums into theatre if a MROP or perineal repair is required
Admissions to NNICU have reduced by ensuring that each room and theatre has a neonatal thermometer.

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

NHS North West Neonatal Operational Delivery Netw

Working together to provide the highest standard of care for babies and families

CRITERIA	QUERY	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Average
TERM ADMISSIONS	NUMBER OF TERM ADMISSIONS	332	352	328	373	336	363	319	356	364	380	365	336	350
	% OF TOTAL LIVE BIRTHS	4.7%	5.2%	4.8%	5.4%	5.5%	5.3%	4.8%	5.1%	5.6%	5.3%	5.2%	4.8%	5.1%
	% OF NNU ADMISSIONS	56%	52%	55%	49%	49%	48%	55%	52%	52%	48%	50%	52%	52%
	% of TERM BIRTHS (37+ weeks)	48.5%	49.2%	48.1%	54.5%	52.3%	51.9%	48.0%	50.6%	52.0%	52.1%	49.5%	50.0%	50.6%
<27 WEEKS IN LNU	TOTAL <27 WEEKS BORN IN LNU	3	2	1	5	2	1	6	0	4	4	3	4	2.9
	TOTAL <27 WEEKS STILL IN LNU AFTER 24 HRS	0	0	0	0	0	0	0	0	0	0	0	0	0.0
<32 WEEKS IN SCBU (FURNESS GENERAL HOSPITAL)	TOTAL <32 WEEKS BORN IN SCBU	0	0	0	0	1	0	0	0	1	0	0	0	0.2
	TOTAL <32 WEEKS STILL IN SCBU AFTER 24 HRS	0	0	0	0	0	0	0	0	0	0	0	0	0.0
% NETWORK IC ACTIVITY IN NICUs	NWNODN	87%	91%	91%	88%	87%	92%	89%	91%	89%	88%	86%	88%	89%
	CHESHIRE & MERSEYSIDE	86%	88%	86%	82%	83%	87%	79%	89%	85%	84%	84%	84%	85%
	GREATER MANCHESTER	88%	94%	93%	94%	88%	95%	96%	91%	93%	90%	87%	89%	91%
	LANCASHIRE & SOUTH CUMBRIA	87%	94%	89%	80%	91%	95%	87%	92%	90%	88%	88%	93%	90%
INAPPROPRIATE TRANSFERS OUT OF NWNODN (TARGET <5%)	% TRANSFERS OUT OF NWNODN	0.00%	0.28%	0.00%	0.00%	0.16%	0.14%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.05%
	CHESHIRE & MERSEYSIDE	0.00%	0.78%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.06%
	GREATER MANCHESTER	0.00%	0.00%	0.00%	0.00%	0.00%	0.30%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.03%
	LANCASHIRE & SOUTH CUMBRIA	0.00%	0.00%	0.00%	0.00%	0.76%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.06%

Activity | Transfers | Clinical | Outcomes | Nurse Staffing

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

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The AHSN Network

NHS Improvement

Capsule Exercise

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Patient Safety Collaborative

Capsule Exercise

All teach all learn capsule instructions

1. Have one **team present the barrier or issue** their team is trying to address, their structure, and a point they are feeling stuck on. Be as specific as you can. **(3 minutes)**
2. The group asks any **brief clarifying questions** of the organisation that presented their challenge. **(2 minutes)**
3. The presenting team **goes in to a capsule and become invisible**; they can, from their new vantage point, see and hear what is going (and take notes on it), but no one can hear them.
4. The rest of the **group then assumes responsibility for successful achievement** of the goal. It is now their project, their organisation, and their challenge. Everything should be in the first or second person “I think we should…”, “Let’s try doing this….” (**10 minutes)**
5. The team **emerges from the capsule to share reflections** on what they heard. What surprised you? What resonated? What ideas could you act on? (**5 minutes)**

How will we do this

- 2 rounds of capsule exercise 20 mins each.
- Make sure that each table has 2 provider trusts who will present their barrier or issue.
- Non-provider trust attendees, please spread yourself over the tables to take part in the exercise.
- Please adhere to the signals to move on to the next step of the exercise
- We might use this exercise in future events, we'll test our way to the perfect execution.

The AHSN Network

NHS Improvement

Collaborate Out Loud

Eve Holt

Greater Manchester & Eastern Cheshire

Patient Safety Collaborative

Collaborate Out Loud creates surprising, simple and social spaces for public service innovation and flourishing.

Collaborate Out Loud

#CollabOutLoud

We exist to serve those delivering, participating and accessing public services to:

Challenge thinking, practice and leadership

Connect the unusual suspects across different boundaries

Create capacity and **capability** for change

Co-curate our collective wisdom and nurture communities to thrive

Co-create novel solutions that break all the rules and make a difference

Collaborate Out Loud's Values:

surprising

we do the unexpected. This might be bring in practice and thinking from unusual places or helping people to connect across unusual boundaries.

social

we work out loud, share, work with others and connect with existing agendas and ideas. We lead with generosity, openness and trust

simple

we know the world is complicated enough so we are easy to work with, straightforward and keep things as simple as we can, believing that less can be more

#CollabOutLoud

THE 11 PRINCIPLES OUR COMMUNITIES EMBRACE TO GET STUFF DONE TOGETHER

Collaborate Out Loud is all about creating surprising, simple and social shared spaces between the formal and informal and this is what we have learnt so far about how this happens.....

1. Embrace and harness the energy and magic of difference and the crowd
2. Create surprising, simple, and social spaces between the formal structures and informal networks
3. Spend time building a community, trust, and a shared intent where people bring their whole selves
4. Embrace the principles of transparency, democracy, and openness
5. Be social, share with generosity and kindness
6. Work on real and often complex challenges collaboratively, sense making through meaningful conversations
7. Borrow learning and thinking from anywhere and everywhere to learn collectively
8. Co-create novel solutions and ideas to tackle collective challenge
9. Rapidly test ideas and iterate them together using technology to enable collaboration
10. Work out loud as you go— attributing ideas and inspirations
11. Spread the best ideas and help people to adopt them (as well as the learning from what didn't work) far and wide

#CollabOutLoud

Collaborate Out Loud

Today we will focus on:

Embrace and harness the energy and magic of difference and the crowd

Create surprising, simple, and social spaces between the formal structures and informal networks crowd

Borrow learning and thinking from anywhere and everywhere to learn collectively crowd

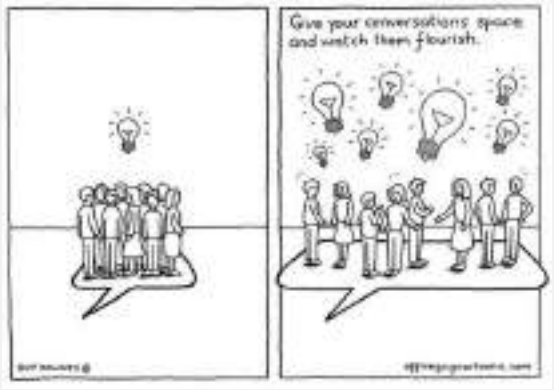
Spread the best ideas and encourage adoption (as well as the learning from what didn't work) far and wide crowd

Embrace and harness the energy and magic of difference and the crowd

Find someone in the room you don't know

Have a chat with them

Note on a post it something surprising you are taking away, put it up on the wall



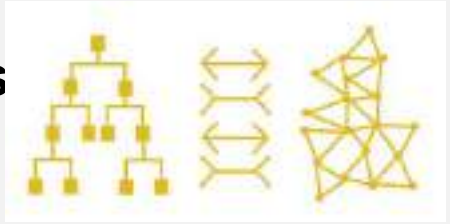
Create surprising, simple, and social spaces between the formal structures and informal networks

How do the formal spaces look and feel?

How do the informal spaces look and feel?

Where are your simple, surprising and social spaces for learning about maternity and neonatal patient safety?

How do you work with the unusual suspects across the formal and informal spaces and networks



Borrow learning and thinking from anywhere and everywhere to learn collectively

Think about something you have learnt or experienced outside of the working environment that can help you to collaborate as a neonatal and maternity learning system.

This may be thinking, feeling and doing from other parts of your life.

Spread the best ideas and encourage adoption (as well as the learning from what didn’t work) far and wide

What is your best idea?

What is your best failure?

How far can you share?

It’s all about what happens next...

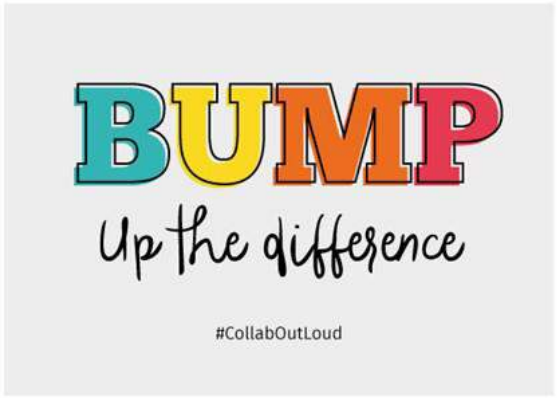
Take a Love Note and write a note to yourself about what you will start to do differently today, put your contact details on this and swap with someone.

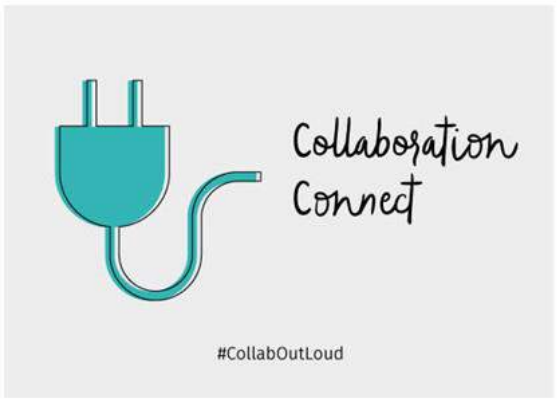
Get in touch on Friday to see how you are getting on – help keep each other accountable for your commitments

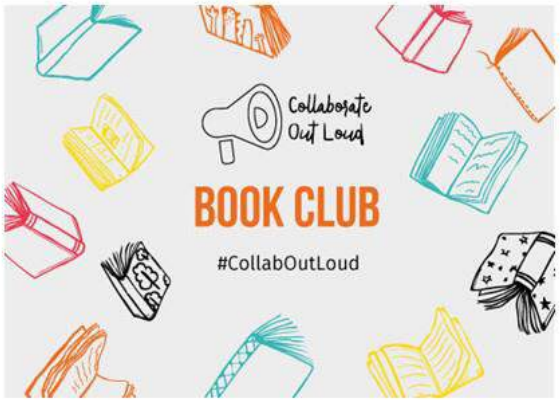
Ways to engage in the broader Collaborate Out Loud Community


Collaborate
Out Loud
GATHERINGS SPACES TO COME
TOGETHER AS A COMMUNITY
#CollabOutLoud


Collaborate
Out Loud
LIVE A SHARED VIRTUAL
SPACE FOR EXPLORING
#CollabOutLoud







#CollabOutLoud


Coffeehouse
CHALLENGE
Collaborate
Out Loud
#cupofchange
#CollabOutLoud

We would love to talk to you about how we can help:

Whether you want to:

- Attend or set up a Collaborate Out Loud Community where you live, work, play or study
- Find out we can help you with your public service challenge wherever you live through a coffeehouse challenge
- Are interested in funding our work

We have a number of way you can connect with us

Email: Hello@CollaborateOutLoud.org

Call: 07464 612 568

Twitter: @CollabOutLoud #CollabOutLoud

Web: CollaborateOutLoud.org

Collaborate Out Loud

The AHSN Network

NHS Improvement

Summary and next steps

Jay Hamilton

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

Greater Manchester & Eastern Cheshire

Patient Safety Collaborative

In 1-3 words, what is your take home message today?

- Go to slido.com
- Enter the event code: #Q463
- In 1-3 words answer the question

Evaluation

Resources

- Website

Next Steps and Dates for your diary

- **GMPSC Learning Systems Next Event September 2018**
- LifeQI Webinar:
  - 5th July 10:00-11:00
  - 11th July 10:00-11:00
  - https://join.me/LifeQI-webinar

- Second Wave Learning sets dates (Bolton Foundation Trust and East Cheshire)
  - May ‘18 9/10/11
  - Sept ‘18 11/12/13
  - Jan ‘19 16/17/18

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NHS Improvement

Thank you

Greater Manchester & Eastern Cheshire

Patient Safety Collaborative