

Maternity and Neonatal Safety Improvement Network (MatNeoSIP) Event

Monday 13 December 2021, 1-4pm

 @NatPatSIP / @MatNeoSIP

www.improvement.nhs.uk

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*The***AHSN***Network*

**North East and North
Cumbria Patient Safety
Collaborative**



**Maternity and
Perinatal Mental Health
Clinical Networks**
North East and North Cumbria



Northern Neonatal Network

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**NHS England
NHS Improvement**



**North East and North Cumbria
Local Maternity System**

Welcome and Introductions

Tony Roberts

Deputy Director (Clinical Effectiveness) – South Tees Hospitals NHS FT

Deputy Director - North East Quality Observatory Service (NEQOS)

Patient Safety Lead – AHSN NENC



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13:00	Welcome and Introduction	Tony Roberts Deputy Director (Clinical Effectiveness) – South Tees Hospitals NHS FT Deputy Director - North East Quality Observatory Service (NEQOS) Patient Safety Lead – AHSN NENC
13:05	MatNeoSIP National Overview	Charlie Merrick Senior Improvement Manager – Patient Safety Improvement Team NHS England and NHS Improvement
13:25	MatNeoSIP Regional Overview	Julia Wood MatNeoSIP Lead – NENC Academic Health Science Network NENC
13:35	Preterm Birth Update	Professor Steve Robson Clinical Lead (Obstetrics) for the Maternity Network and Local Maternity Systems (LMSs)
13:45	Place of Birth & Magnesium Sulphate	Karen Hooper MatNeoSIP Midwife Lead Academic Health Science Network NENC
14:00	Questions	All
14:10	Break	
14:20	Maternal Breast Milk	Ailie Hodgson Care Coordinator Northern Neonatal Network Sue Thompson Care Coordinator Northern Neonatal Network
15:00	Questions	All
15:05	Break	
15:10	Equity and Equality	Nicola Jackson Local Maternity System Programme Lead Local Maternity Systems for West, North and East Cumbria
15:20	Health Inequalities	Liz Lingard Transformation Lead (North East & Yorkshire) NHS England and NHS Improvement
15:40	Questions	All
15:50	Close	Tony Roberts Deputy Director (Clinical Effectiveness) – South Tees Hospitals NHS FT Deputy Director - North East Quality Observatory Service (NEQOS) Patient Safety Lead – AHSN NENC

MatNeoSIP National Update

Charlie Merrick
Senior Improvement Manager – Patient Safety Improvement Team
NHS England and NHS Improvement

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Updates from national Team

Deterioration

- Prototype testing completed for the escalation and response component of NEWTT2 tool,
- MEWS tool adjusted to accommodate the changing physiology two days postnatally,
- Building system readiness
- Newly appointed MatNeoSIP PPV representatives

Smoke Free Pregnancies

- Joint working with our system partners

Optimisation Preterm infant

- Finalising our adoption and spread plan.
- Further development of the decision support tool
- Further curation of the NHS futures site.
- Version 51 of clevermed system live

MatNeoSIP Regional Update

Julia Wood
MatNeoSIP Lead – NENC
Academic Health Science Network NENC

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Opportunity to work together across the region



North Tees and Hartlepool
NHS Foundation Trust



Northern Neonatal Network



The Newcastle upon Tyne Hospitals
NHS Foundation Trust



South Tees Hospitals
NHS Foundation Trust



South Tyneside and Sunderland
NHS Foundation Trust



Northumbria Healthcare
NHS Foundation Trust



North Cumbria Integrated Care
NHS Foundation Trust



Gateshead Health
NHS Foundation Trust




County Durham and Darlington
NHS Foundation Trust

National Patient Safety Improvement Programmes



North East and North Cumbria Local Maternity System



Maternity and Perinatal Mental Health Clinical Networks
North East and North Cumbria



Maternity and Neonatal

Aim

To reduce the national rate of preterm births from 8% to 6% and reduce the rate of stillbirths, neonatal death and brain injuries occurring during or soon after birth by 50% by 2025

Primary Drivers

Provide safe antenatal care

Provide safe peripartum care

Provide safe postnatal and neonatal care

Secondary Drivers

Access and referral to specialist smoking cessation services

Brief intervention training for maternity and neonatal staff

CO monitoring offered to all pregnant women

Develop system-wide pathways to achieve a smoke-free pregnancy

Utilise the PIER framework to identify and respond to deterioration throughout the entire pathway of care

Antenatal corticosteroids offered to women in threatened preterm labour

Intrapartum antibiotic prophylaxis offered to all women in established preterm labour

Magnesium sulphate offered to women where preterm birth is imminent or planned

All babies born in appropriate care setting for gestation (place of birth)

Effective use of Maternity Early Warning Score (MEWS) to identify and respond to maternal deterioration

Optimal cord management received by all babies less than 34 weeks gestation

Continuation of the care pathway to ensure babies are discharged to a smoke-free home

Effective use of MEWS and Neonatal Early Warning Trigger and Track (NEWTT) to identify and respond to both maternal and neonatal deterioration

Optimal normothermic range for all babies less than 34 weeks gestation

Maternal breast milk received within 6 hours of birth by all babies less than 34 week gestation

Workstream Key

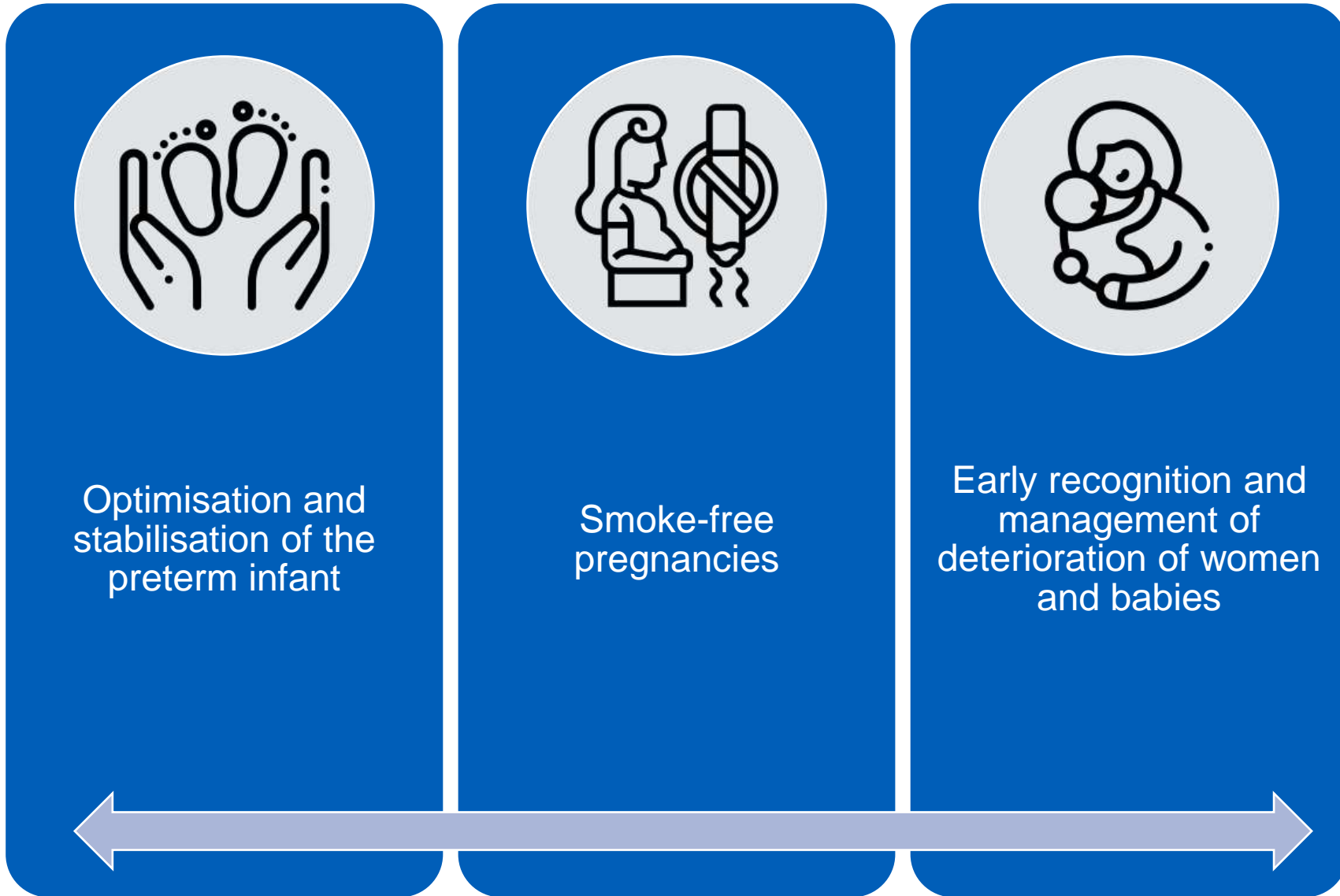
Smoke-free pregnancies

Early recognition and management of deterioration of women and babies

Optimisation and stabilisation of the preterm infant

Key enablers

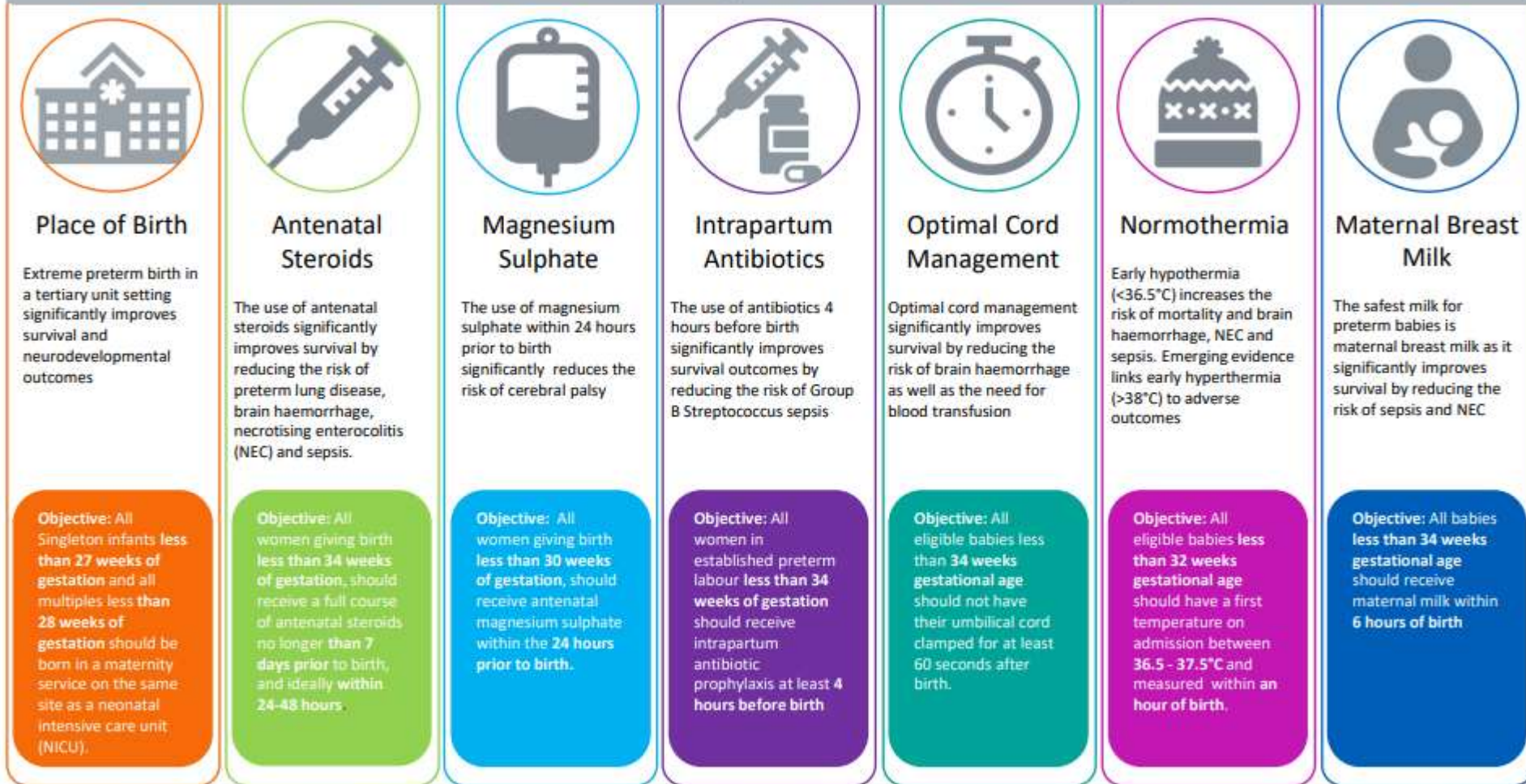
1. **Addressing inequalities** – understand local health inequalities to ensure selected interventions improve the lives of those with the worst health outcomes fastest
2. **Patient and carer co-design** – employ a co-production approach with patients, carers and service users who represent the diversity of the population served
3. **Safety culture** – use safety culture insights to inform quality improvement approaches
4. **Patient safety networks** – co-ordinate and facilitate patient safety networks to provide the sub-regional delivery architecture for improvement
5. **Improvement leadership** – identify and nurture leadership, including clinical leaders, to lead improvement through the networks
6. **Building QI capacity and capability** – use a dosing approach to build quality improvement capacity and capability
7. **Measurement** – develop a robust measurement plan including relevant process, balancing and outcomes metrics
8. **Improvement and innovation pipeline** – undertake horizon scanning and prioritisation to inform future national workstreams



Optimisation and Stabilisation of the Preterm Infant



Preterm Perinatal Optimisation Care Pathway



A group of multidisciplinary interventions clinically proven to reduce morbidity and mortality, resulting in significantly improved outcomes for preterm babies

Developed with
BAPM
Based on clinical
evidence

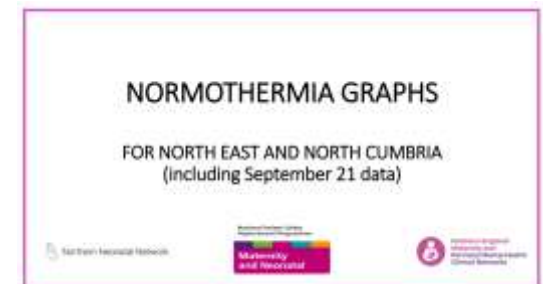
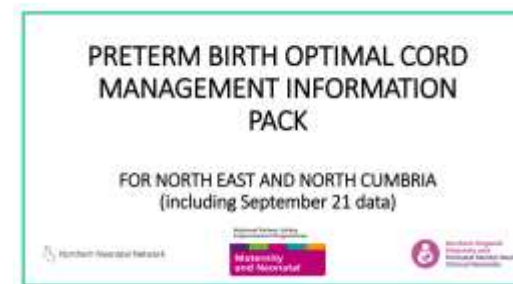


British Association of
Perinatal Medicine

National **ambition**
(not target) for
MatNeoSIP is to
achieve 95%
compliance
across all seven
interventions

Optimisation and Stabilisation of the Preterm Infant

- > Regional guideline (launched on 17th November) – Regional PTB Group
- > Data collection for all seven interventions
- > Optimal Cord Management and Normothermia Collaborative
- > Maternal Breast Milk
- > Place of Birth and Magnesium Sulphate
- > Trust Projects



Smoke-free pregnancies



- > Merging of the Risk Education Group and the Relapse Prevention Group
- > Change of name from Risk Education to Smoking Cessation Enhanced Support
- > Focus is currently on images and display of data

Early recognition and management of deterioration of women and babies



- > **NEWTT2:**
- > *QE Gateshead testing this tool*

- > **MEWS: Heart rate prototype testing**
- > *QE Gateshead*
- > *Newcastle*
- > *South Tyneside and Sunderland*
- > *North Tees*

FutureNHS

- > Hub for all things NENC MatNeoSIP
- > Forum for how most information will be shared
- > [MatNeoSIP Patient Safety Network for North East and North Cumbria - FutureNHS Collaboration Platform](#)

MatNeoSIP Patient Safety Network for North East and North Cumbria

92 members

- Only visible to registered users. Anyone may join
- Contact the workspace manager

We are one of 15 regions involved in the National Maternity and Neonatal Safety Improvement Programme (MatNeoSIP). For North East and North Cumbria this will be our collaborative working space for our MatNeoSIP Patient Safety Network.

MatNeoSIP Event 16th September 2021. Register here

MatNeoSIP Event will take place in:

8 days 3 hours 31 minutes

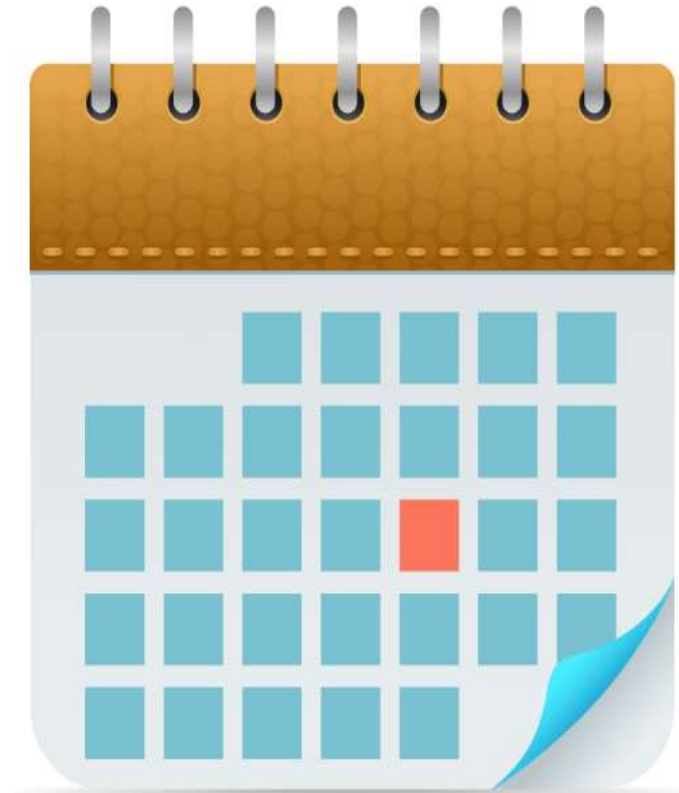
Useful information about MatNeoSIP | Discussion Forum | Past MatNeoSIP Events: Presentations

Did You Know?

Improvement Toolkit AHSN NENC | NENC MatNeoSIP Newsletters

MatNeoSIP Leadership Team Sharing Space

Date for your diary



24th March 2022

Get involved



julia.wood@ahsn-nenc.org.uk



Preterm Birth Update

Professor Steve Robson
Clinical Lead (Obstetrics) for the Maternity Network and Local Maternity Systems (LMSs)

 @NatPatSIP / @MatNeoSIP

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Northern England



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Preterm Birth Initiative – Update

Professor Stephen Robson

Clinical Lead LMS/CN North East & North Cumbria

5. Reducing preterm birth

This is an additional element to the care bundle developed in response to The Department of Health's '[Safer Maternity Care](#)' report which extended the 'Maternity Safety Ambition' to include reducing preterm births from 8% to 6%. This new element focuses on three intervention areas to improve outcomes which are prediction and prevention of preterm birth and better preparation when preterm birth is unavoidable.

[Saving Babies' Lives \(V2\) Element 5: 2019](#)

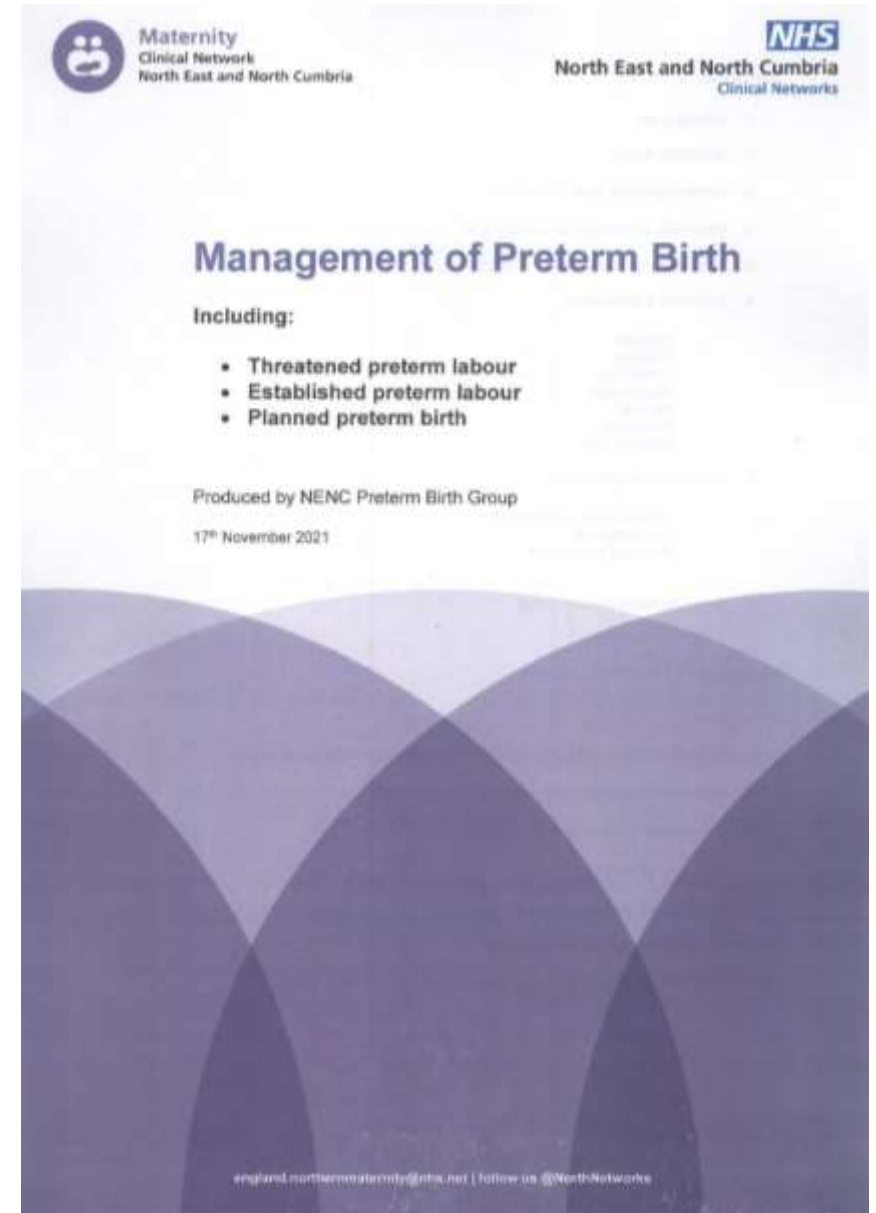


LMNS

Local Maternity Neonatal Systems
Northern England

- **Launch NENC Preterm Birth Management Guideline**
Dr Alex Patience & Dr Gareth Waring
on behalf of the NENC Preterm Birth Group

Northern England
Clinical Networks





LMNS

Local Maternity Neonatal Systems
Northern England

- Launch NENC Preterm Birth Management Guideline
- **Release of LMNS funding to providers to support Preterm Birth Clinics (£386K)**
 - Time of specialised (consultant, midwife, sonographer) & support staff (including time to participate in regional MDTs)
 - Support for qFFN measurement
 - Cervical cerclage costs (3 centres providing TVC, 1 centre providing TAC)
 - Sonographer training in TVUS cervical length measurement



LMNS

Local Maternity Neonatal Systems
Northern England

- Launch NENC Preterm Birth Management Guideline
- Release of LMNS funding to providers to support Preterm Birth Clinics (£386K)
- **Appointment of co-funded ARC/LMNS lead to evaluate PTB initiative**
 - Dr Cath McParlin (Research Midwife)
 - Project Steering Group
Chair Prof. Judith Rankin (NU)
MatNeoSiP
 - Jan 2022 for 2 years

NIHR | Applied Research Collaboration
North East and North Cumbria



LMNS

Local Maternity Neonatal Systems
Northern England



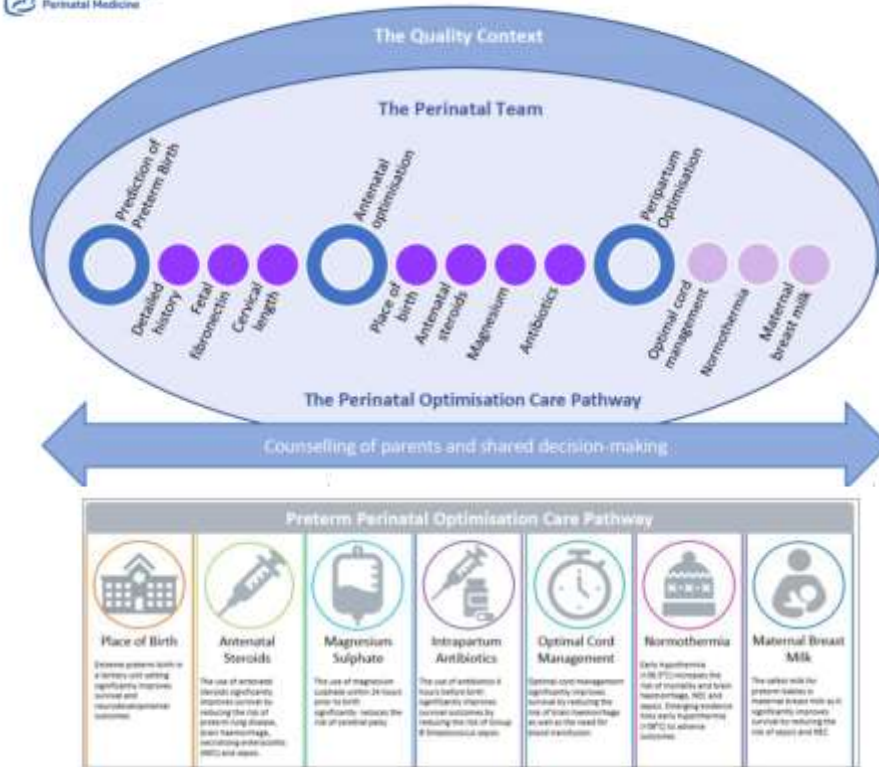
Northern England
Clinical Networks

- Launch NENC Preterm Birth Management Guideline
- Release of LMNS funding to providers to support Preterm Birth Clinics (£386K)

• Appointment of co-funded ARC/LMNS lead to evaluate

• Agreement on key outcome measures for PTB initiative

- Establishment of PTB clinics
- Number asymptomatic high risk women screened (QUiPP)
- Screen positive rate (and interventions)
- Number symptomatic women screened (QUiPP)
- Rates antenatal optimisation (PoB, Steroids, Mg, Abs)
- Rates preterm and extremely preterm birth
- Rates peripartum optimisation (OCM, NT, MBM)





LMNS

Local Maternity Neonatal Systems
Northern England

- Launch NENC Preterm Birth Management Guideline
- Release of LMNS funding to providers to support Preterm Birth Clinics (£386K)
- Appointment of co-funded ARC/LMNS lead to evaluate PTB initiative
- Agreement on key outcome measures for PTB initiative
- **Discussions about optimal means of collecting key outcome measures**
 - People resource (preterm birth midwives/consultants, Precept leads)
 - Digital resource (LMNS Digital leadership, Clevermed [maternity & neonatal])
 - Analytic resource (ARC, Performance Analysis Team (NE&Y), National MatNeoSiP)

Place of Birth & Magnesium Sulphate

Karen Hooper
MatNeoSIP Midwife Lead, Academic Health Science Network NENC

 @NatPatSIP / @MatNeoSIP

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“Wrong Place of Delivery Audit” Northern Region

January 2020- September 2021

Thanks to Helen Simpson for collating audits & producing this report

Method

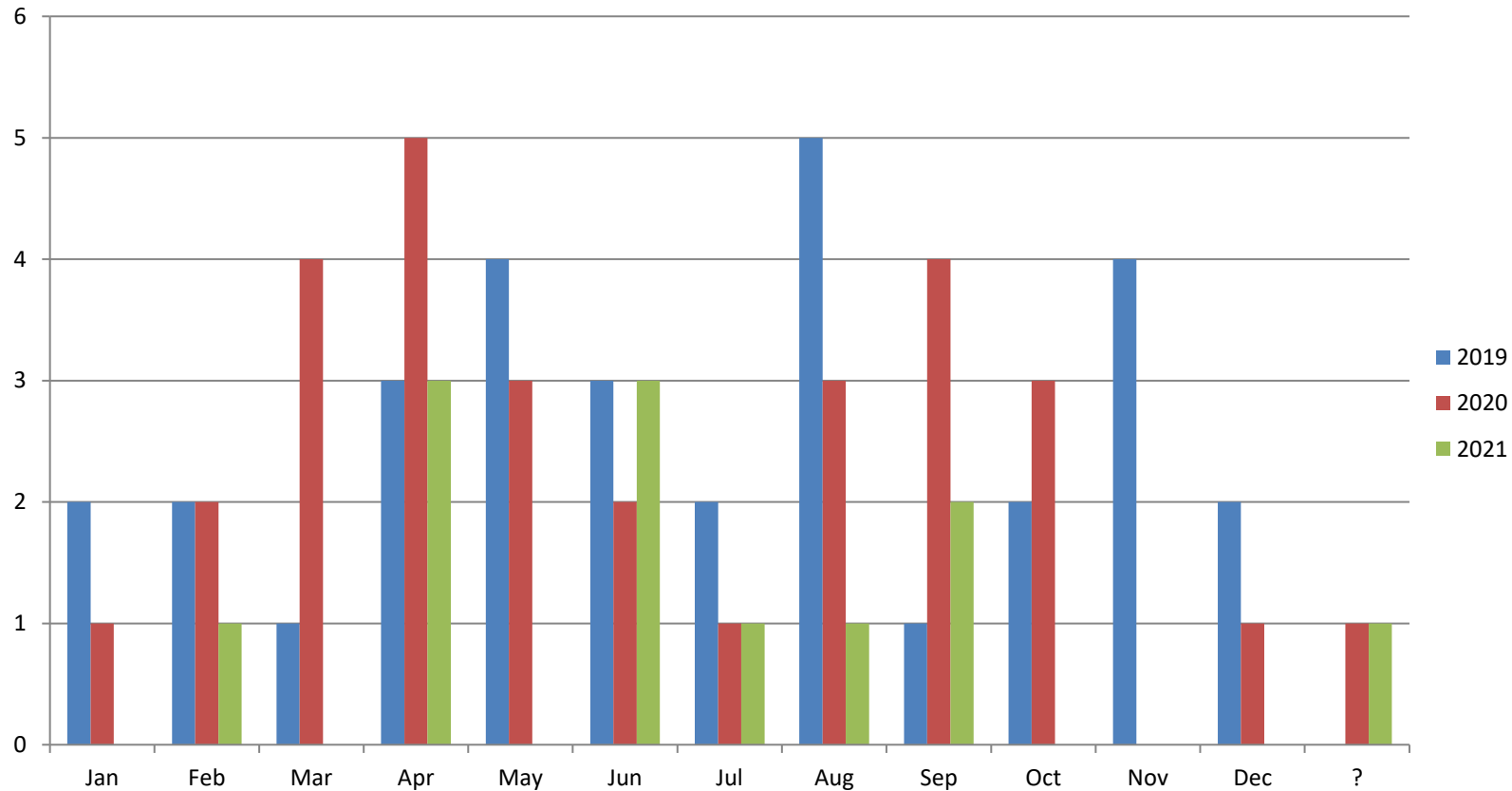
- Data collection form completed by the delivering unit
- Excluded BBA
- Excluded deliveries > 29+6 – not within the terms of the audit
- 42 cases for 2020- Sept 2021 have been audited

Northern	No. of Deliveries (with an admission to NNU) below 27/40				
	Q1 2019/20 (Apr - Jun)	Q2 2019/20 (Jul - Sep)	Q3 2019/20 (Oct - Dec)	Q4 2019/20 (Jan - Mar)	2019/20 Total
Total <27/40 born in NICU	26	18	14	24	82
Total <27/40 born in LNU or SCU	3	5	2	3	13
Total <27/40 born in all unit categories	29	23	16	27	95
% <27/40 born in NICU	90%	78%	88%	89%	86%

Northern	No. of Deliveries (with an admission to NNU) below 27/40				
	Q1 2020/21 (Apr - Jun)	Q2 2020/21 (Jul - Sep)	Q3 2020/21 (Oct - Dec)	Q4 2020/21 (Jan - Mar)	2020/21 Total
Total <27/40 born in NICU	17	8	14	15	54
Total <27/40 born in LNU or SCU	3	4	2	0	9
Total <27/40 born in all unit categories	20	12	16	15	63
% <27/40 born in NICU	85%	67%	88%	100%	86%

Northern	No. of Deliveries (with an admission to NNU) below 27/40				
	Q1 2021/22 (Apr - Jun)	Q2 2021/22 (Jul - Sep)	Q3 2021/22 (Oct - Dec)	Q4 2021/22 (Jan - Mar)	2021/22 Total
Total <27/40 born in NICU	16	15			31
Total <27/40 born in LNU or SCU	5	6			11
Total <27/40 born in all unit categories	21	21			42
% <27/40 born in NICU	76%	71%			74%

Number of cases per month

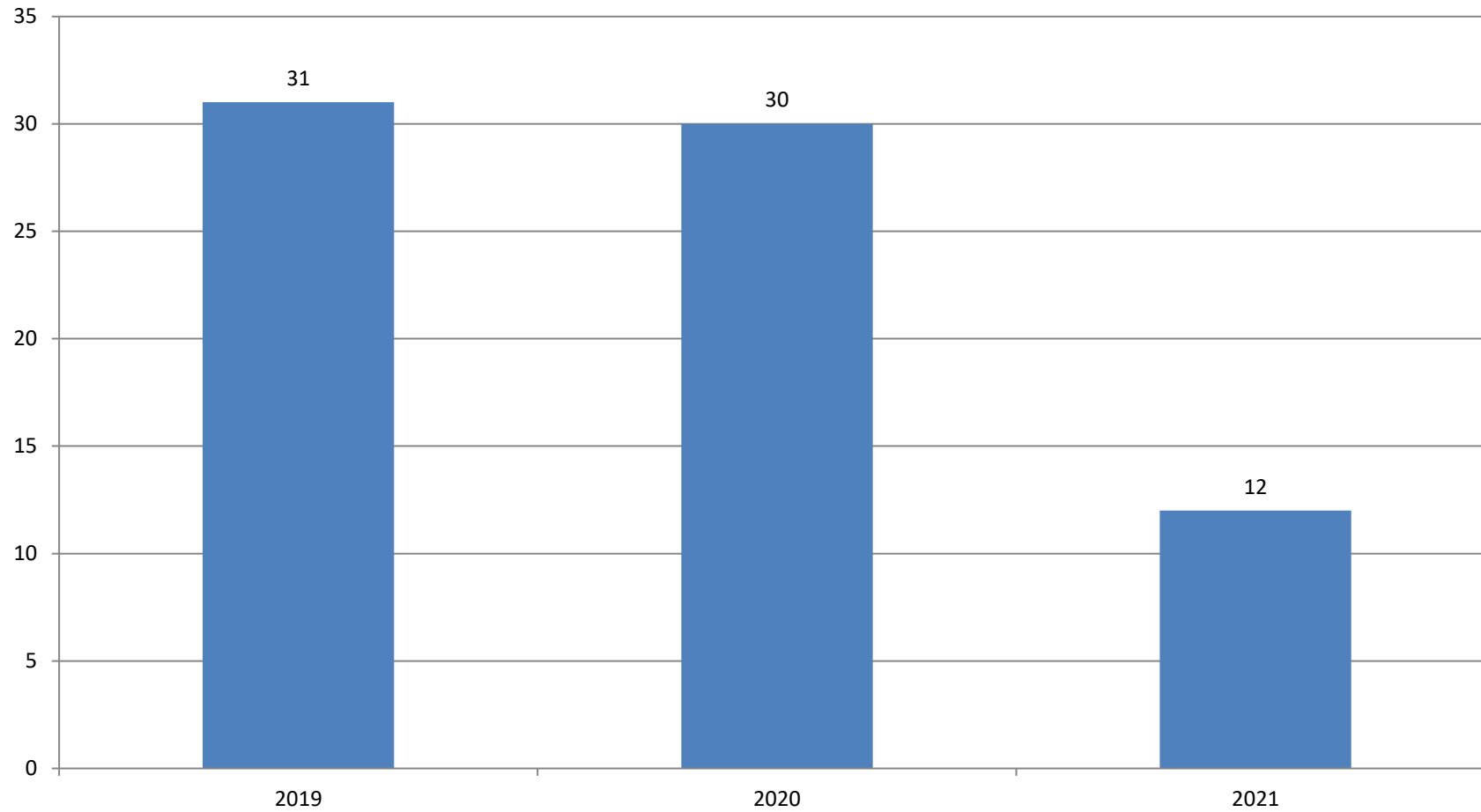


2 forms didn't have dates on hence are marked with a ?

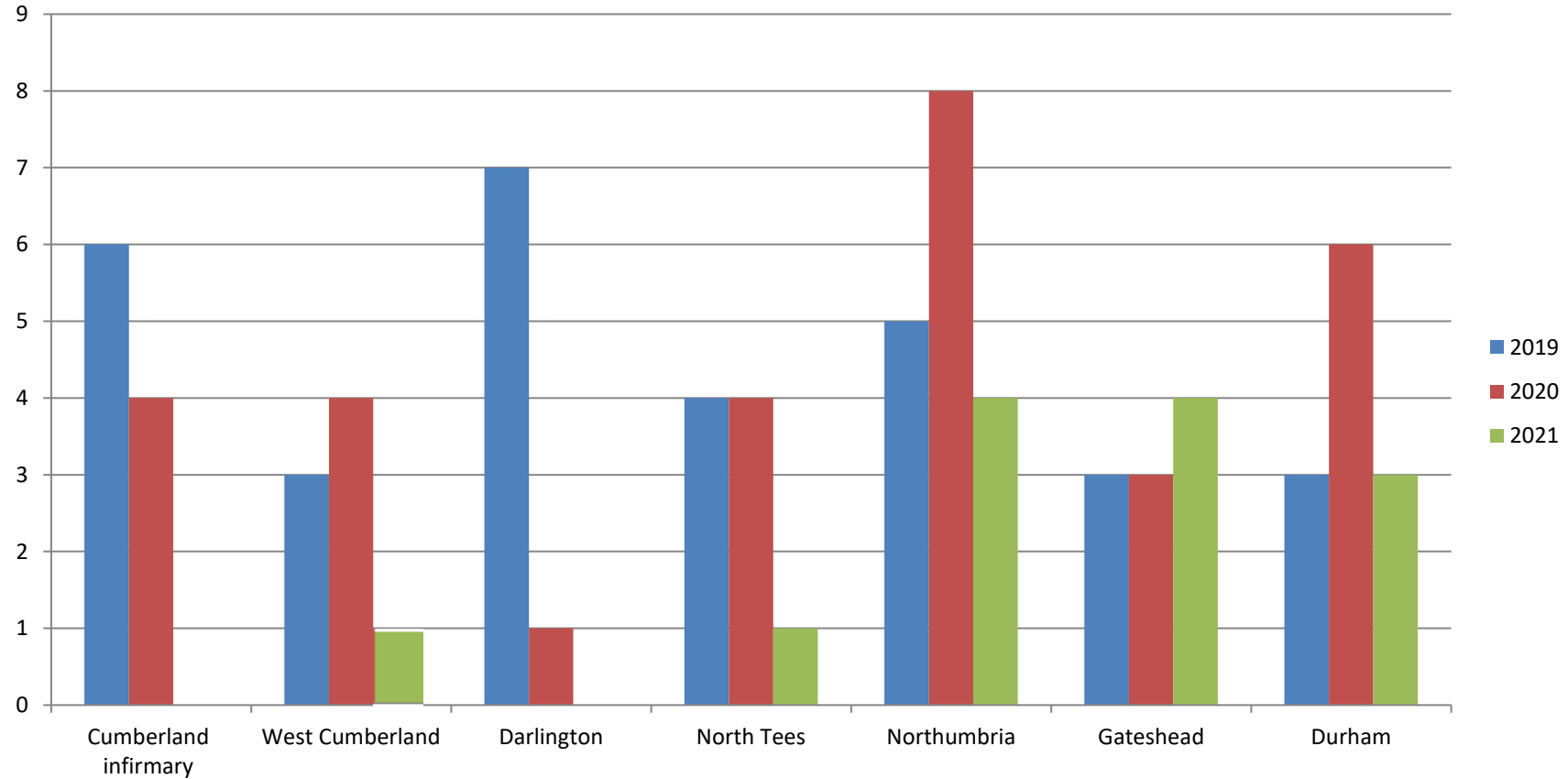
*2 cases October 2021, 7 cases November 2021 – awaiting audits

Total Audited Ex-utero Transfers

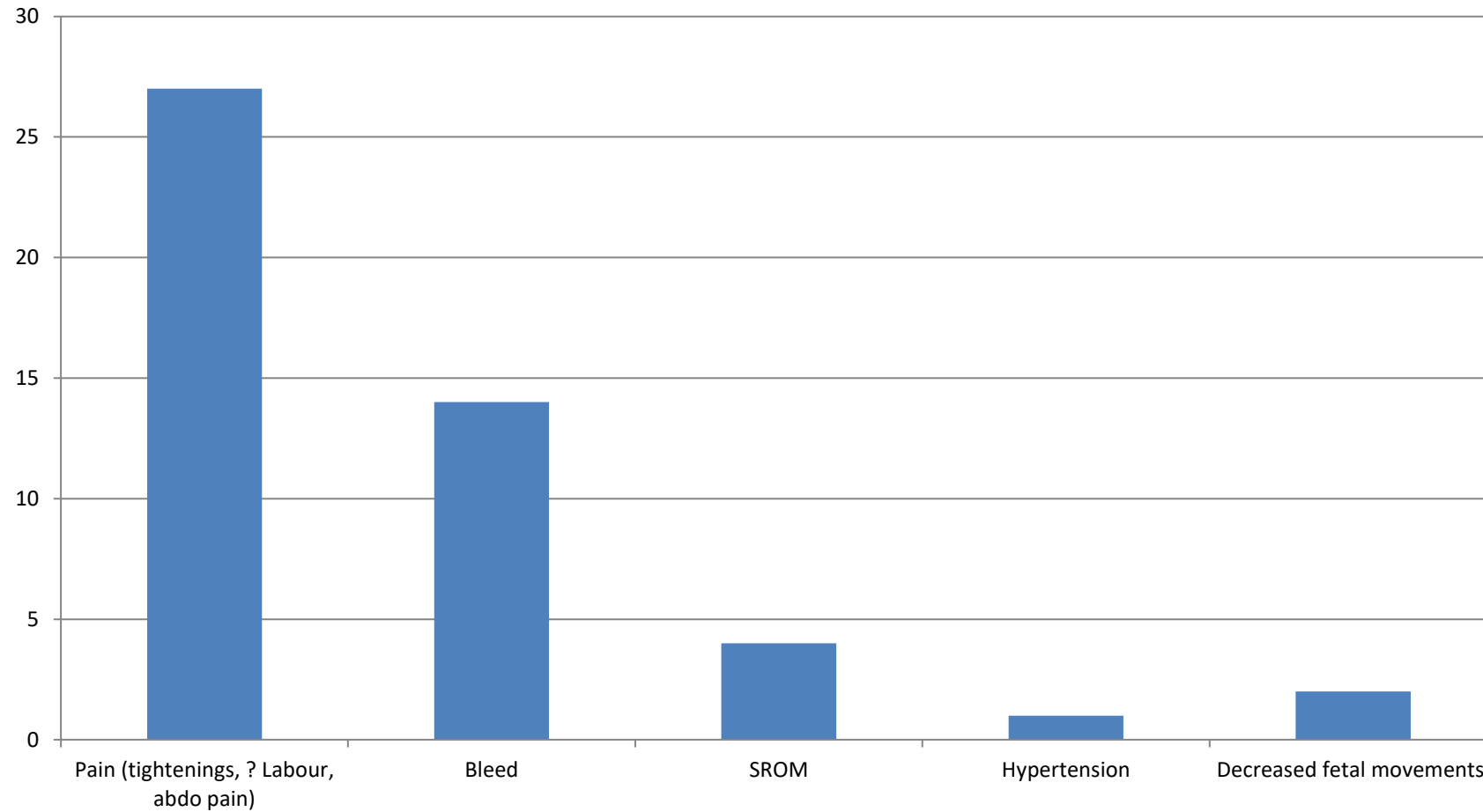
Note – data for 2021 is incomplete
(Total until end November = 21 cases)



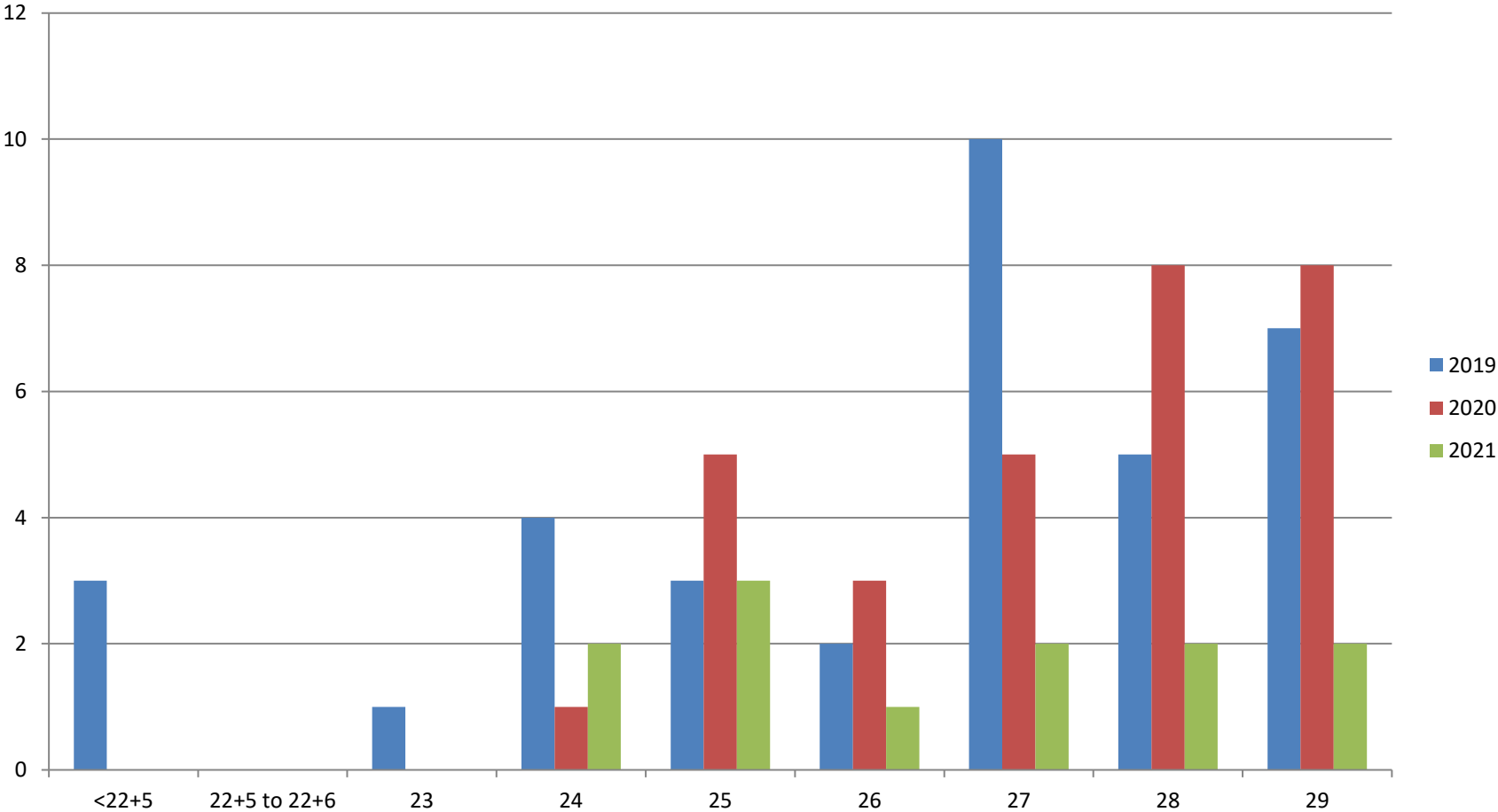
Deliveries by Reporting Unit



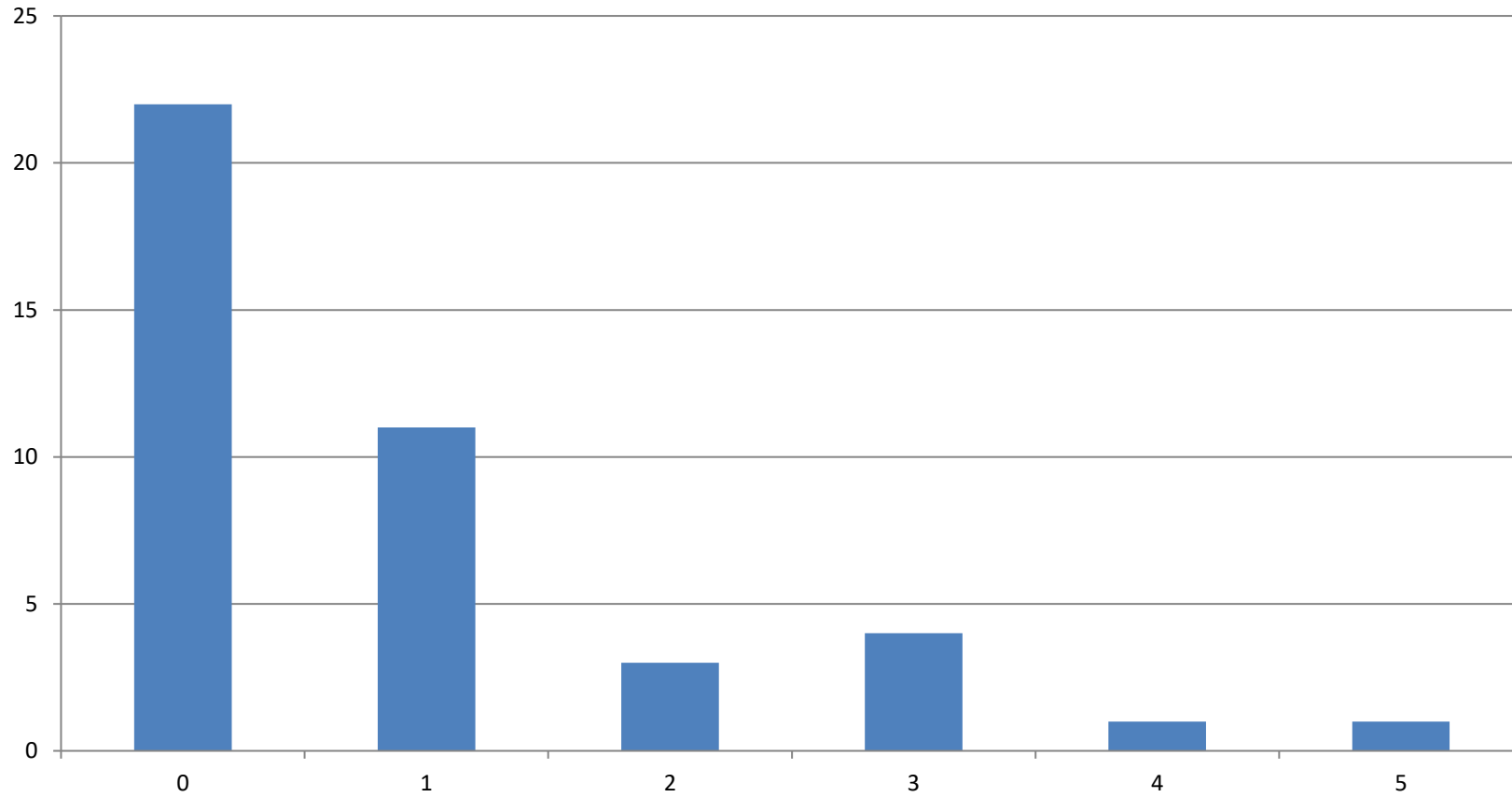
Reason(s) for Admission/Attendance



Gestation at Admission



Parity

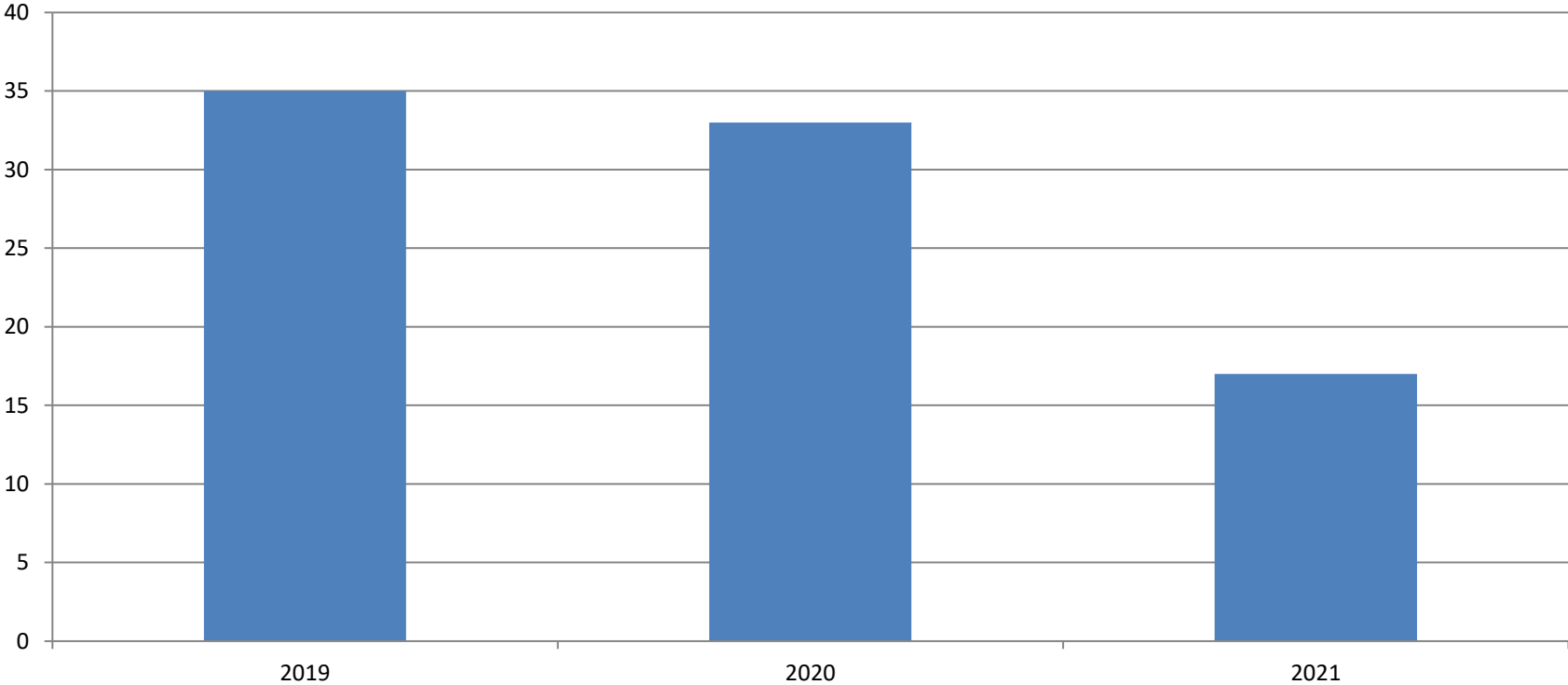


55% primips
3 had previous LSCS

Other Clinical Risk Factors

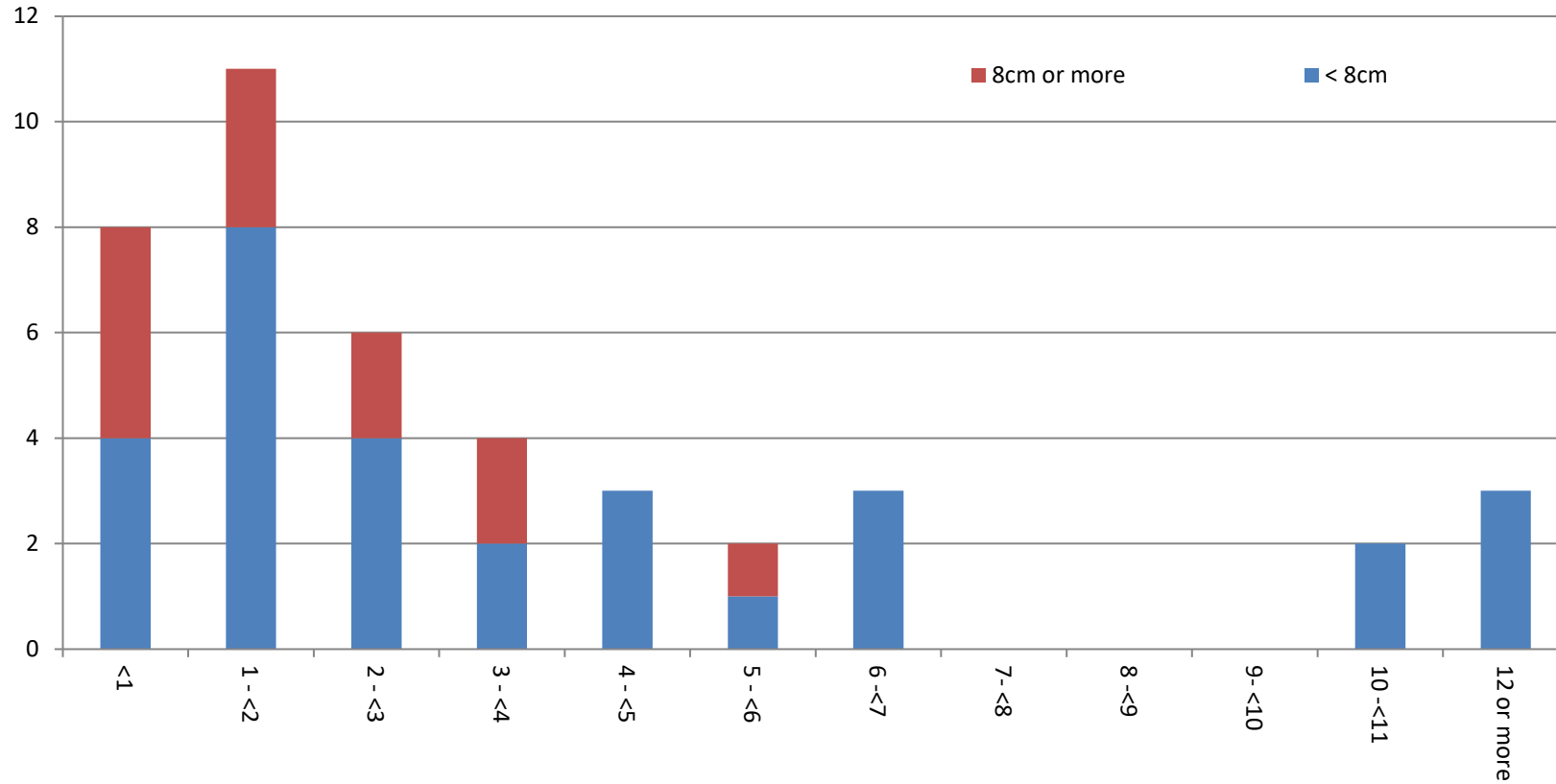
- 5 twins
- 1 diabetic
- 1 hypertensive
- 6 diagnosed with SRM prior to admission
- 1 known SGA
- 1 known cervical shortening
- 1 bicornuate uterus
- 3 previous preterm del/late miscarriage
- 1 previous admissions with APH
- 4 previous LSCS
- 1 late booker
- 1 unbooked

Percentage with at Least one Previous Admission



Data incomplete so far for 2021 so may not reflect true picture, but this does suggest a drop from the last two years

Admission to Delivery Interval



When Admission to Delivery >4hrs Avoidable?

- 10 woman admitted for more than 4hrs prior to delivery
- 9 in 2020
- All but one decisions taken at consultant level
 - not to transfer

Summary	Opportunity to transfer :No	Opportunity to transfer: Possibly
Pre-eclampsia	Too unstable to transfer	
Twins tightening		P0, 3cm
Labour	8cm on admission	
Labour		P3, 4cm - ? Reassess prior to transfer
APH	Ambulance contacted then further bleed	
Active bleeding	Not suitable for transfer	
APH		Diff to determine from information but maybe
Decreased fetal movements		If concern enough to admit then consider transfer?
Small APH		Admitted for observation, then APH worsened and abnormal CTG - If concern enough to admit then consider transfer?
Contracting		3cm P2 - ? Reassess prior to transfer. Not documented who made decision

Discussion Points:

- Multips in early labour 4cm or less ? Plan to transfer but consider reassessment prior to leaving in ambulance, take into consideration distance to transfer
- Twins early labour ? Plan to transfer but consider reassessment prior to leaving in ambulance, take into consideration distance to transfer
- Concern enough to admit, should consideration be given to transfer – but how many unnecessary transfers would this produce?

Cot Bureau

- Cot bureau contacted 3 times but transfer then did not occur
- No delay in identifying cots
- No delay in ambulance arrival

Contacted	Confirmed Cot	Ambulance Arrival	Reason not Transferred
1.18	1.18	1.25	Started to leave, urge to push, back to room, proceed to SVD
9.15	9.30	Not contacted	Further significant bleed and decision for Em LSCS
0.20	0.25	0.45	Cord prolapse and rapid SVD on ambulance arrival

Senior Staff Involvement

- **Consultant present or involved in decision making in 78.6% of cases**
 - In three cases the proforma did not include details of grades of staff making decision
 - In two cases labour was not diagnosed until delivery was imminent
 - In one case the woman was delivering on admission to A&E
 - In three cases labour was obviously advanced (9cm or more)

Conclusion

- Excellent involvement of senior decision makers
- No issues with delay in ambulance or finding cots
- Numbers that could have possibly been transferred but weren't is small and the decision making is often complex.



PReCePT
(prevention of cerebral palsy in preterm
labour)

MatNeoSIP update

December 2021



Safety action 6: Can you demonstrate compliance with all five elements of the Saving Babies' Lives care bundle Version 2?

Element 5:

- Percentage of singleton live births (less than 34+0 weeks) receiving a full course of antenatal corticosteroids, within seven days of birth.
- Percentage of singleton live births occurring more than seven days after completion
- **Percentage of singleton live births (less than 30+0 weeks) receiving magnesium sulphate within 24 hours prior birth.**
- Percentage of women who give birth in an appropriate care setting for gestation (in accordance with local ODN guidance).



Saving Babies' Lives Version Two

- *A care bundle for reducing perinatal mortality*

Preparation: optimising care of women and babies at high risk of imminent preterm birth.

- 5.9 Optimise place of birth – women at imminent risk of preterm birth should be offered transfer to a unit with appropriate and available neonatal cot facilities when safe to do so and as agreed by the relevant neonatal Operational Delivery Network (ODN).
- 5.10 Antenatal corticosteroids to be offered to women between 24+0 and 33+6 weeks, optimally at 48 hours before a planned birth. A steroid-to-birth interval of greater than seven days should be avoided if possible.
- **5.11 Magnesium sulphate to be offered to women between 24+0 and 29+6 weeks of pregnancy, and considered for women between 30+0 and 33+6 weeks of pregnancy, who are in established labour or are having a planned preterm birth within 24 hours.**
- 5.12 Ensure the neonatal team are involved when a preterm birth is anticipated, so that they have time to discuss options with parents prior to birth and to be present at the delivery.
- 5.13 For women between 23 and 24 weeks of gestation, a multidisciplinary discussion should be held before birth between the neonatologist, obstetrician and the parents about the decision to resuscitate the baby. If resuscitation is agreed to be attempted, women should be offered magnesium sulphate and steroids timed according to the above recommended intervals to birth.



- The aim:
 - 85%* eligible mothers (<30 weeks) receive MgSO₄ for neuroprotection (*PRECEPT target)
- Individual Trusts need to achieve compliance with 80%** of their own eligible births (**MIS target)
 - I can provide you with your own breakdowns from these audits if you require this

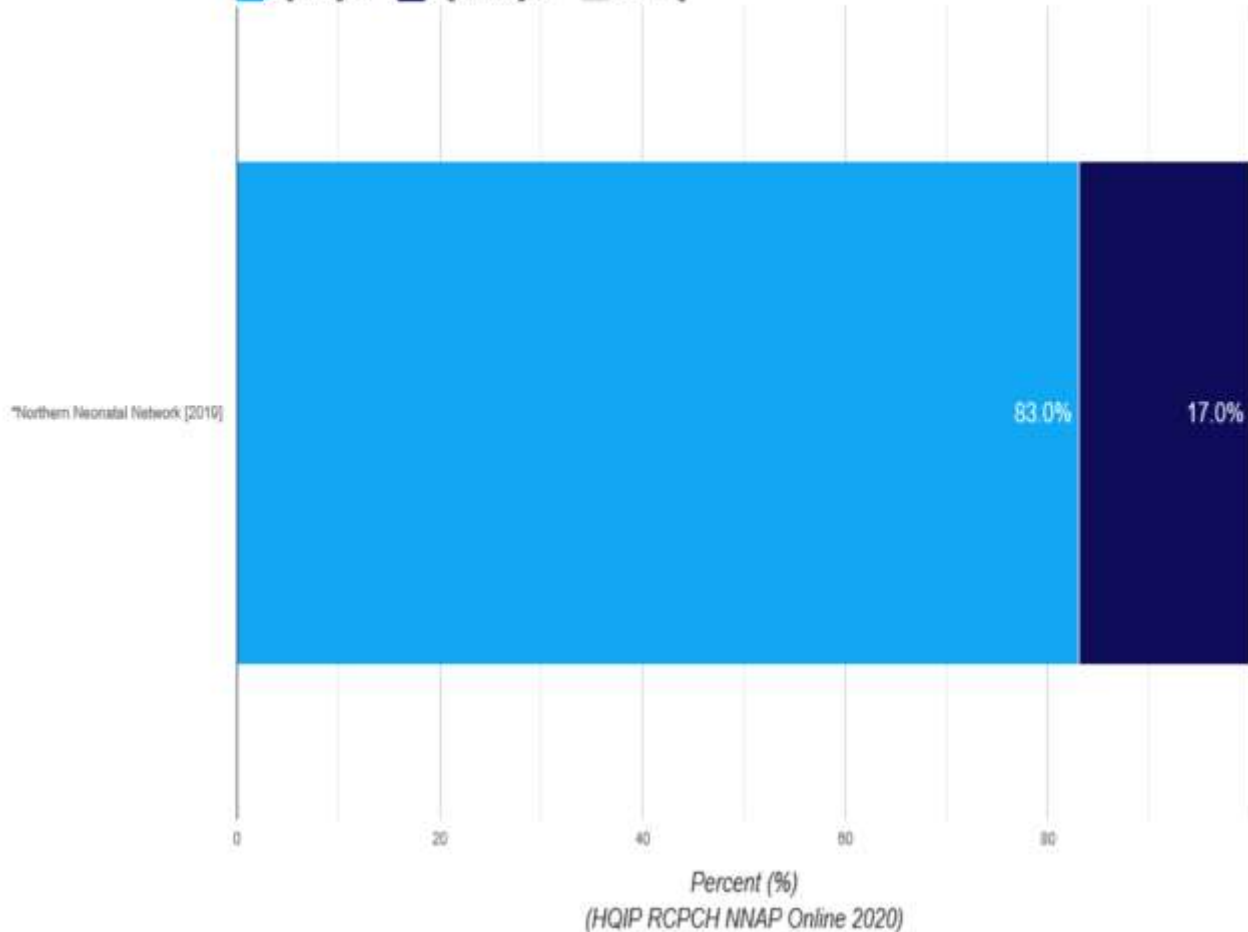
Exceptions Q1 & Q2 2021/22

Month	Eligible mothers	Not given	Compliance	Incorrect data	Reasonable exceptions	Opportunities for improvement
Apr-21	19	6	68%	2	1 rapid labour (22min admission-delivery) 4 class 1	1 patient admitted to ward, given steroids, Cx suture in place with abdo pain, not reviewed when pain increased
May-21	15	3	80%	0	1 rapid labour (5 min) 1 class 1 1 on medical ward – fully when reviewed	
June-21	15	1	93%	0	1 class 1	
July-21	14	0	100%	2		
Aug-21	16	4	75%	2	1 BBA 1 placenta previa bleeding	1 audit awaited
Sept-21	14	4	71%	2	1 declined 1 cord prolapse 1 rapid labour (16 min)	1 audit awaited
Q1 & Q2	93	18	82%	8		

How did we do? Magnesium sulphate

Proportion of mothers who received magnesium sulphate in the 24 hours prior to delivery among those who delivered their babies (admitted to a NNAP participating unit) at less than 30 weeks of gestational age (2019)

Magnesium given Magnesium not given Data missing



Is a mother who delivers a baby below 30 weeks gestational age given magnesium sulphate in the 24 hours prior to delivery?

National result:



NNAP developmental standard: 85% of eligible mothers should receive antenatal magnesium sulphate.

Magnesium (BAPM toolkit)

- Given within 24h before birth at <32w reduces the risk of cerebral palsy and death without risk to mother or fetus
- Similar effects across a range of gestations including extreme preterm infants
- Optimum level is at least 4h after loading dose
- Benefit remains if given <4h where birth is imminent



& finally.....

- 2020/21 Q1 – 49 eligible mothers = 80%
- 2020/21 Q2 – 44 eligible 82%
- 2020/21 Q3 so far..... 32 eligible 72%

Maternity and
Neonatal

Questions

 @NatPatSIP / @MatNeoSIP

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Comfort Break

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Maternity and
Neonatal

Maternal Breast Milk

Ailie Hodgson, Care Coordinator, Northern Neonatal Network
Sue Thompson, Care Coordinator, Northern Neonatal Network

 @NatPatSIP / @MatNeoSIP

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Mother's Milk as Medicine



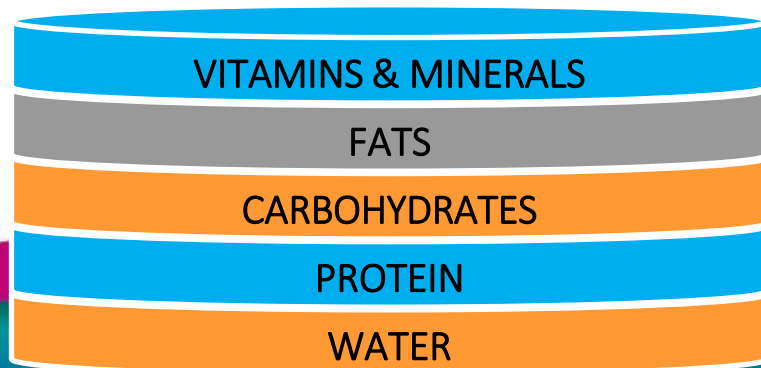
Northern Neonatal Network Care Coordinators
December 2021

Breast Milk as Medicine

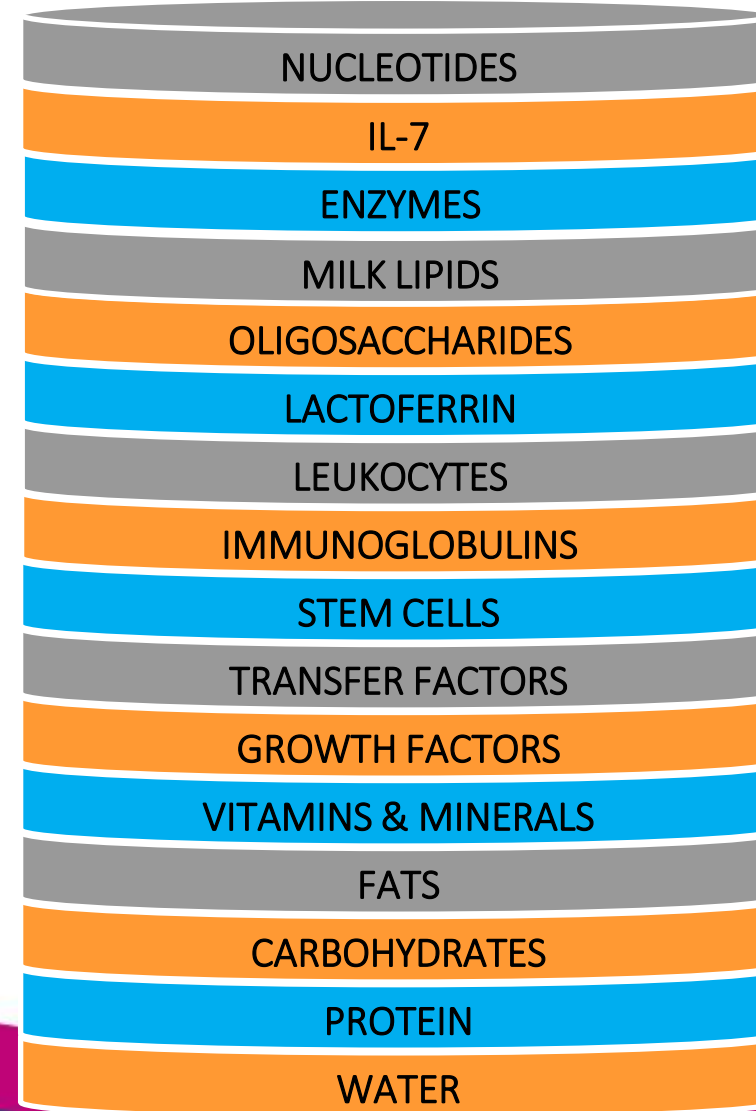
- Breast milk offers continued protection against multiple infections even after breastfeeding has ceased
- Lower rates of infant otitis media, gastroenteritis and respiratory infections. Longer-term, breastfeeding is associated with enhanced cognitive development, and reduced risk of cardiovascular disease and type 2 diabetes.
- There is also evidence that breastfeeding is associated with a 20%-30% reduction in childhood obesity.
- **NEC** Necrotising enterocolitis, an inflammatory condition of the gut leading to intestinal injury, occurs in up to 10% of very preterm infants with mortality rates up to 40%, making it the leading cause of death after the first 2 weeks of age
- Preterm infants are a vulnerable group at high risk of growth failure, immuno-compromise, neurodevelopmental delay and in the most premature, an increased risk of necrotising enterocolitis (NEC) and death. The risk of these complications increases with decreasing gestational age, with very preterm infants (less than 32 weeks of gestation) being most at risk.

Constituents

Formula



Human milk



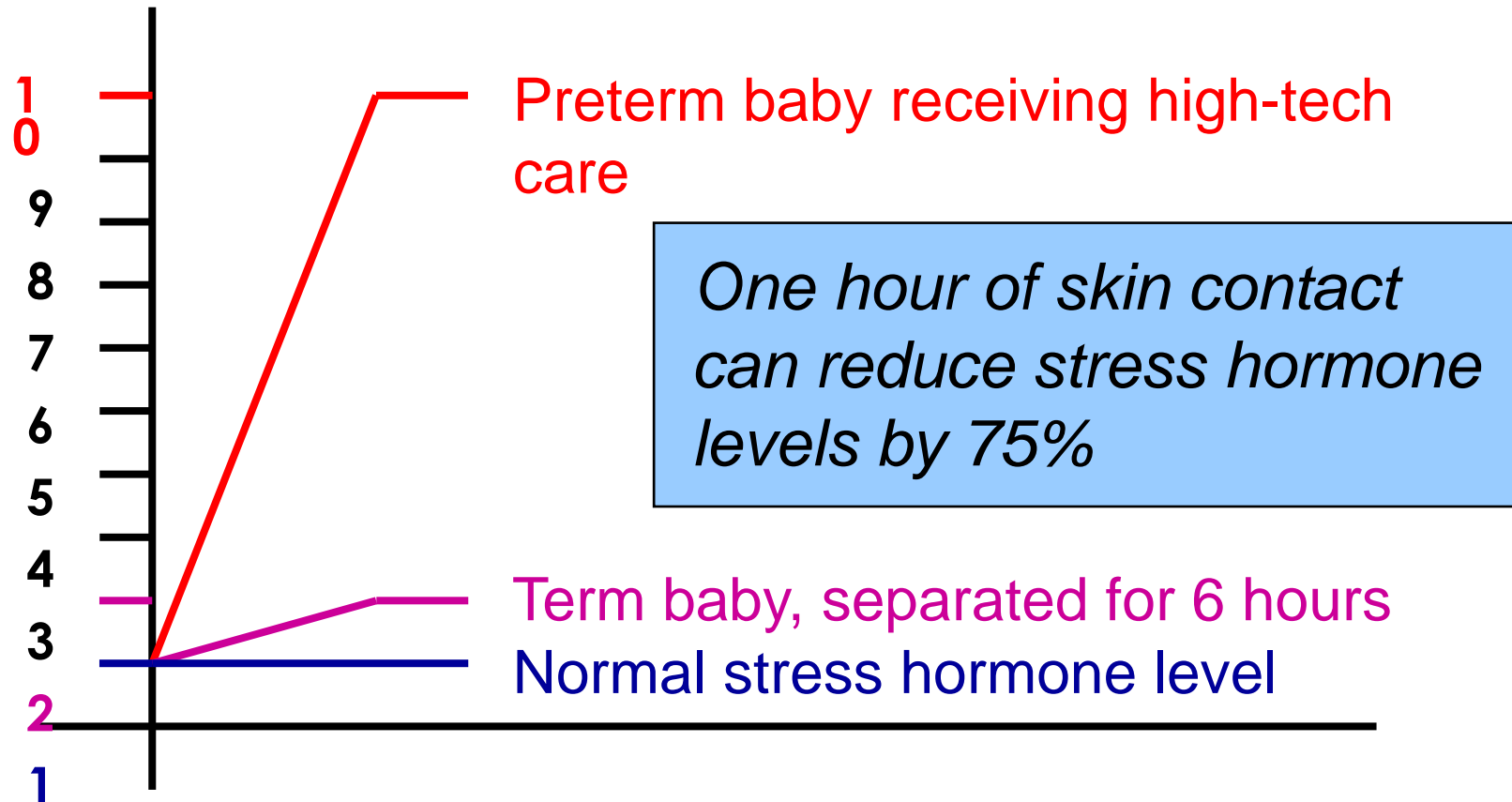
Breakouts

- What do you see as the main barriers to neonatal babies receiving breastmilk?
- What can we do as HCP to navigate these barriers?

Neonatal Challenges

- Separation ...Empty arms, parental loss of control, increased risk of depression, negative attachment behaviours, poorer neurological outcomes for the baby.
- Grief/Trauma/anxiety..... Trauma informed care, staff education and resources
- Environment..... Facilities to stay, food, support network/isolation
- Immature breast development
- Baby not able to feed.....dispel the myth that babies go home quicker if you bottle feed them
- Mother's anxiety over baby's condition.... Medicalisation of feeding
- Mother may be unwell.....much more prevalent during Covid-19. Ethical considerations if unknown feeding choice prior to loss of capacity due to mechanical ventilation. Is breastmilk a food or medicine?


Separation and Stress



An Educated Workforce

We do the best we can with the information we have at the time. When we know better, we do better.”

(Oprah Winfrey, talking without bitterness about her grandparents' child-rearing decisions)

- UNICEF BFI
 - BFI accreditation Network approach
 - Collaboration with parents/parents experiences
 - Educated workforce
- 

What can we do as HCP?

Ensure consistent/factual information is given to parents to make an informed choice

Early Harvesting

Mouth care /Buccal colostrum

Education

Support

Reduce separation delivery room cuddles FiCare

Parents as partners

Donor milk where appropriate Species-specific

Primes the preterm gut

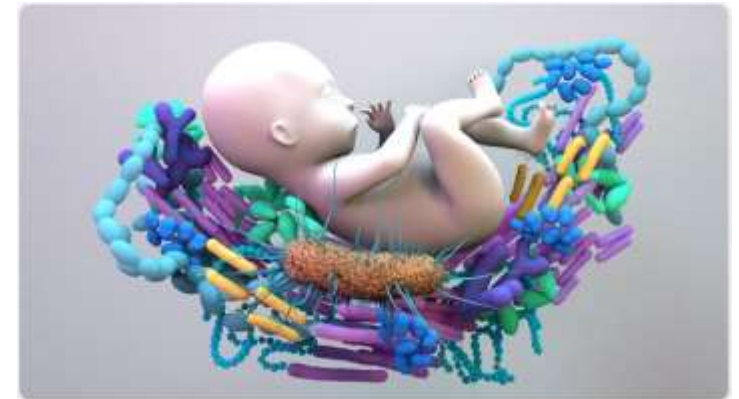
Earlier tolerance of enteral feeds

Anti-infective properties

Reduces risk of NEC

It not just the milk that counts

- Bonding
- Brain development
- Skin to skin- affects hormones & behavioural levels
- Oxytocin-promotes love and protective feelings
- Mutual responsiveness
- Microbiome



Nurturing Environment

- Welcoming (all family members)
- Comfortable-chair/bed next to incubator
- Sensory informed
- Respectful and supportive
- FICare focussed
- Rooming in/Privacy
- Separation affects bond and natural initiating of feeding



“Staff or peer support, encouragement & shared experiences made mothers feel hope and security in their bodies capacities & served as powerful motivators to initiate & sustain breast milk expression”

(Flacking et al. *International Breastfeeding Journal*. 2021)

Closeness & Attunement

- Need to feel comfort, relaxed and reassured
- Trust in their capacity as a mother to provide and heal
- Transfer of goodness
- Promote positive shared experience
- Mutual interaction
- Symbiosis
- Responsive to each other



Routines

- Routine based feeding routines not ideal for pre term babies or mothers
- Need parents present so they don't miss windows of wakefulness
- Respond to babies cues
- Prolonged skin to skin
- Babies cues are so important when supporting early feeding skills
- Highlights parents being able to recognise their babies pre feeding signals & state of sleep-wakefulness
- Parent's "in awe" of their babies competence and are able to respond
- Separation affects responsiveness



A Mother's Thoughts...

“It was crucial for me having an understanding of how important breastmilk was for my girl’s development. I hope other mums get that information too.

It meant I could do something when the Drs and machines were doing most to keep them alive. I could still nourish them when my body couldn’t carry them to term. I knew it was for my girl’s best interests but also eased this guilt. My body was able to get something right, which mitigates some of that guilt. This really helped.

It was something I could do for them that was natural and normal amidst all the medicine, wires and machines.”

(Emily, Mother of twin girls born at 29 weeks)



Questions

 @NatPatSIP / @MatNeoSIP

www.improvement.nhs.uk

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**Maternity and
Perinatal Mental Health
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North East and North Cumbria



Northern Neonatal Network

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**North East and North Cumbria
Local Maternity System**

Comfort Break

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Local Maternity System**

Equity and Equality

Nicola Jackson
Local Maternity System Programme Lead
Local Maternity Systems for West, North and East Cumbria

 @NatPatSIP / @MatNeoSIP

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North East and North Cumbria
Local Maternity System

North East North Cumbria Local Maternity System



North East and North Cumbria
Local Maternity System

Equity & Equality





- North East North Cumbria LMS
- Equity & Equality: Guidance for Local Maternity Systems (published September 2021)
- The Questions We Are Aiming To Answer
- Our Aim
- North East North Cumbria Equity Analysis
- Next Steps: North East North Cumbria Equity & Equality Action Plan





- On 1 April 2021, NHS England and NHS Improvement announced a formal merger of the three Local Maternity Systems in the North East and North Cumbria
- To create one combined LMS aligned to the North East and North Cumbria Integrated Care System
- In practice, we have always worked very closely together, taking a partnership approach to achieve maternity transformation, so we welcome this decision to further strengthen our resilience, collaboration and learning
- The NENC LMS is the largest LMS in the country. We deliver approximately 32,000 births per year.



Equity & Equality: Guidance for Local Maternity Systems



North East and North Cumbria
Local Maternity System

In September 2021, the [Equity & Equality: Guidance for Local Maternity Systems](#) was published. It aims to address the findings of the MBBRACE-UK reports about mothers and babies from the groups most at risk of poor health outcomes. The guidance brings together the work underway and planned, including interventions in the NHS Long Term plan such as targeted and enhanced continuity of carer and smoking cessation.

Each Local Maternity System has to coproduce an Equity Action Plan which includes:

Phase 1:

Equity Analysis – develop a population analysis, community asset mapping, produce a baseline of staff ethnicity and coproduction plan by 30 November 2021

Phase 2:

Equity Action Plan – submit a coproduced plan by 28 February 2022. This plan should:

- Be agreed by the NENC LMS Board and the ICB Board
- Cover five years from 1 April 2022, up to and including 2026/2027
- Be published by the February deadline



The Questions We Are Aiming To Answer



North East and North Cumbria
Local Maternity System

What do we know about our local population?

Who are the mothers and babies who have suffered the poorest outcomes in the last few years?

Where are they from?

Who are they?

What age are they?

What do we know about them and their behaviours/lifestyles?

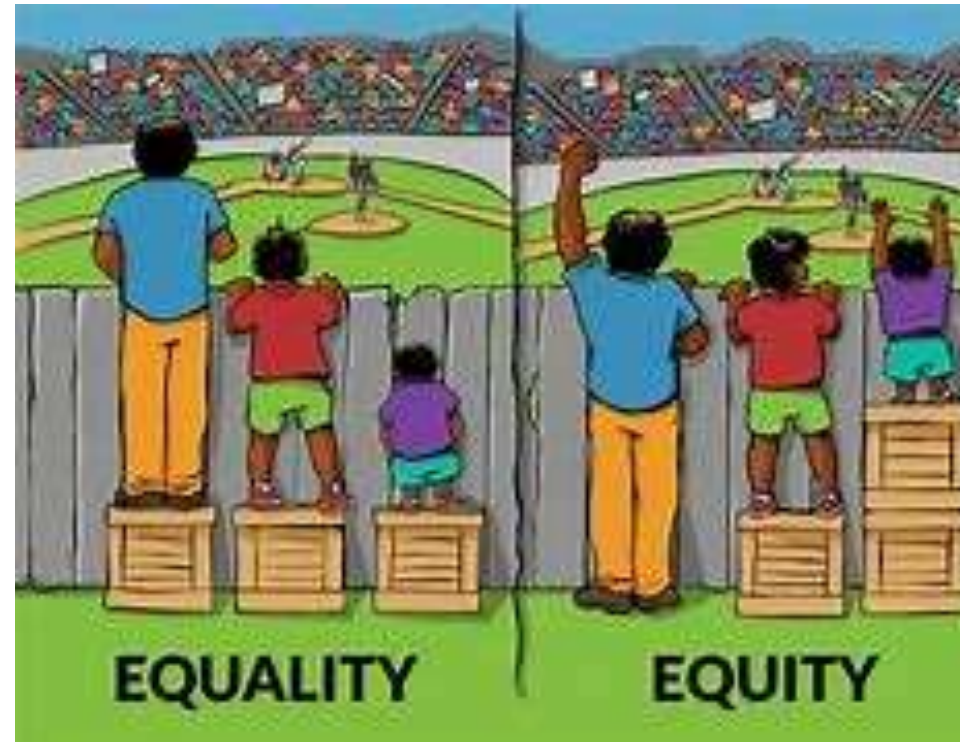
Are there patterns/particular groups that need particular attention?

And then we have to answer the *so what* question?





Health **Equity**: Everyone has a fair and just opportunity to be healthy. In maternity this means that we should plan that *“all mothers and babies in the North East and North Cumbria will achieve health outcomes that are as good as the groups with the best health outcomes”*





The first draft of the NENC LMS Equity Analysis was submitted to the regional maternity team on the 30 November 2021. It covers four main areas:

- Intervention 1: Understand the local population's maternal and perinatal health needs (including the social determinants of health)
- Intervention 2: Map the community assets which help address the social determinants of health
- Intervention 3: Conduct a baseline assessment of the experience of maternity and neonatal staff by ethnicity using NHS Workforce Race Equality Standard (WRES) indicators 1 to 8.
- Intervention 4: Set out a plan to co-produce interventions to improve equity for mothers, babies and race equality for staff



Some of the findings:



- The population of **NENC has significant health inequalities when compared to the England average**. Whilst in some areas improvements have been made over time, **inequalities persist for many of the indicators considered in this analysis and are largely driven by the experience of deprivation**. Addressing these inequalities will require sustained responses that are proportionate to need in addition to a population health management approach.
- **12 of the 16 localities within the NENC report greater levels of deprivation than the national average, with high numbers of deprived LSOA's in Middlesbrough and Hartlepool**. There are five times more females residing within the most deprived areas, compared to the least deprived area. The rate of still birth within the most deprived areas nationally was twice as high as the rate in the least deprived areas. Income deprivation affecting children is higher than the national average, affecting 620 of the 1870 NENC LSOAs; Middlesbrough was significantly higher, with a rate almost double that of the national average.



Some of the findings:



- 8% of the NENC maternity population between 2018/19 and 2020/21 came from a Black, Asian, Minority Ethnic group, compared to 6% in the NENC general population.
- Although NENC has a smaller Black, Asian, Minority Ethnic population than the national average, there are some densely populated communities which overlap with the most deprived areas, highlighting potentially greater vulnerability (as highlighted within the MBBRACE-UK report). This is most apparent in areas of Middlesbrough and central Newcastle.
- Overall, 35% of pregnant Black, Asian, Minority Ethnic women in the NENC were reported as living within the most deprived areas compared with 21% for the white population and this is likely to describe a cohort of women and babies who are at greater risk





Intervention 3 - Conduct a baseline assessment of the experience of maternity and neonatal staff by ethnicity using NHS Workforce Race Equality Standard (WRES) indicators 1 to 8

The NHS People Plan notes that **“there is strong evidence that where an NHS workforce is representative of the community that it serves, patient care and the overall patient experience is more personalised and improved”**.

To enable the NENC LMS to complete the intervention 3 part of the Equity Analysis each Provider Trust was asked to conduct a base line assessment of the experience of midwives and neonatal nurses by ethnicity using the NHS Workforce Race Equality Standard (WRES) 1 to 8.

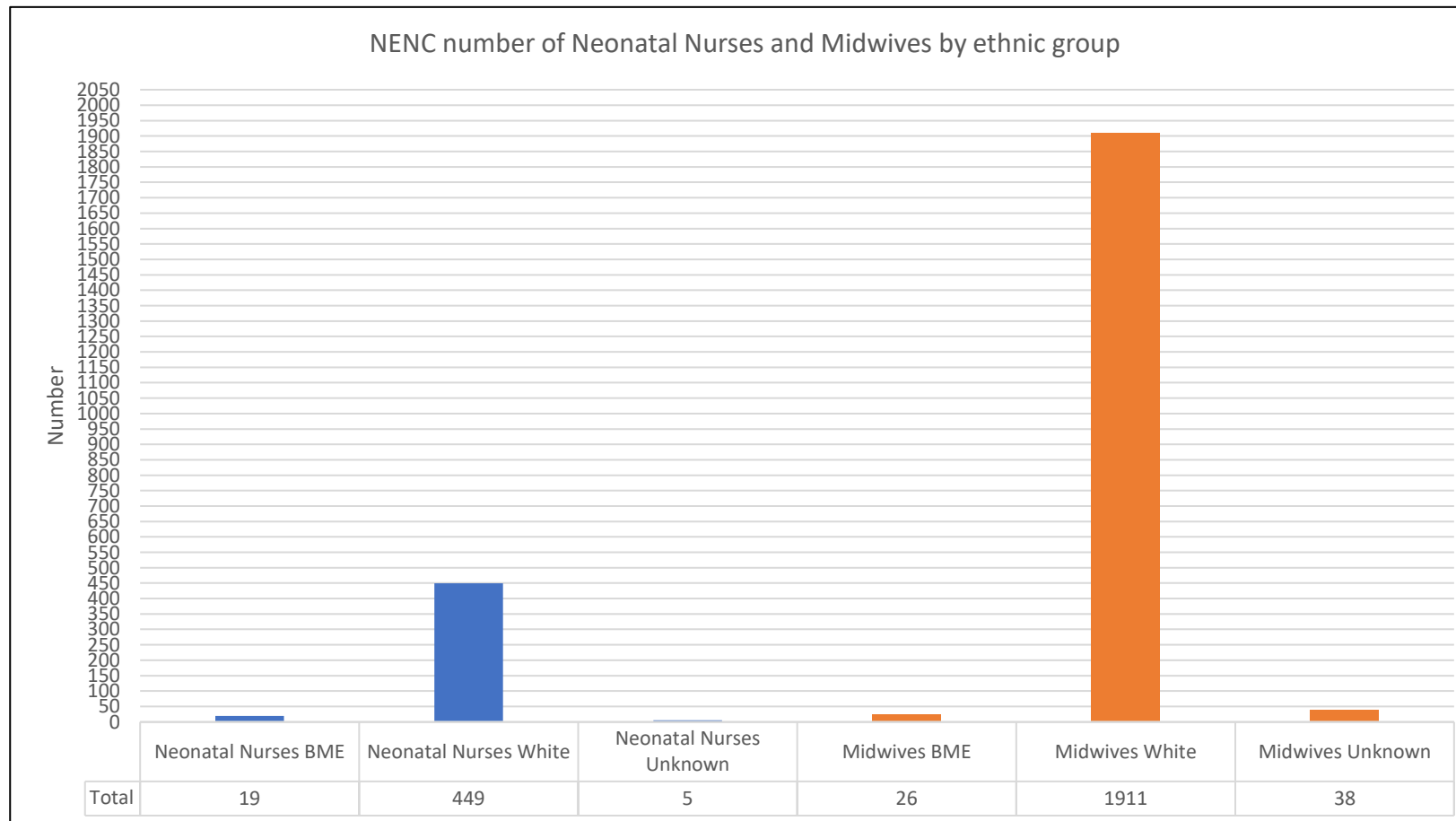


Indicator 1 – Regional Overview

NENC number of Neonatal Nurses & Midwives by ethnic group



North East and North Cumbria
Local Maternity System



Next Steps: NENC Equity & Equality Action Plan



North East and North Cumbria
Local Maternity System

The NENC Equity & Equality Action Plan will include the following:

- Vision, values and aims that align to NENC ICS plans to tackle health inequalities
- A clear description of the NENC LMS population and health outcomes, with a focus on those from Black, Asian and Mixed ethnic groups and those living in the most deprived areas. The LMS will use local data to identify health inequalities experienced by those with other protected characteristics and for inclusion groups
- Strong evidence of co-production from the outset and how parents and staff will be involved in implementation
- All relevant interventions in priorities 1 to 4
- Interventions which are most likely to reduce health inequalities (considering both the size of the population affected and extent of the health inequalities). The plan will include core and may include additional interventions given the characteristics of the population and the operating context
- Actions, milestones and metrics (reflecting the indicators in priorities 1, 3 and 4), with responsible owners, timescales and monitoring arrangements
- A clear mechanism for ensuring continuous clinical quality improvement
- Roles and responsibilities: including of the NENC ICS and provider executive board- level leads for health inequalities, NENC LMS senior responsible owner, board-level safety champions, MVP(s), etc.
- Interdependencies with other NENC ICS workstreams, for example, estates, workforce
- Resourcing, including how the funding for this purpose will be applied
- A high-level stakeholder communication plan



For further information, please email: england.northernlms@nhs.net

Health Inequalities

Liz Lingard
Transformation Lead (North East & Yorkshire)
NHS England and NHS Improvement

 @NatPatSIP / @MatNeoSIP

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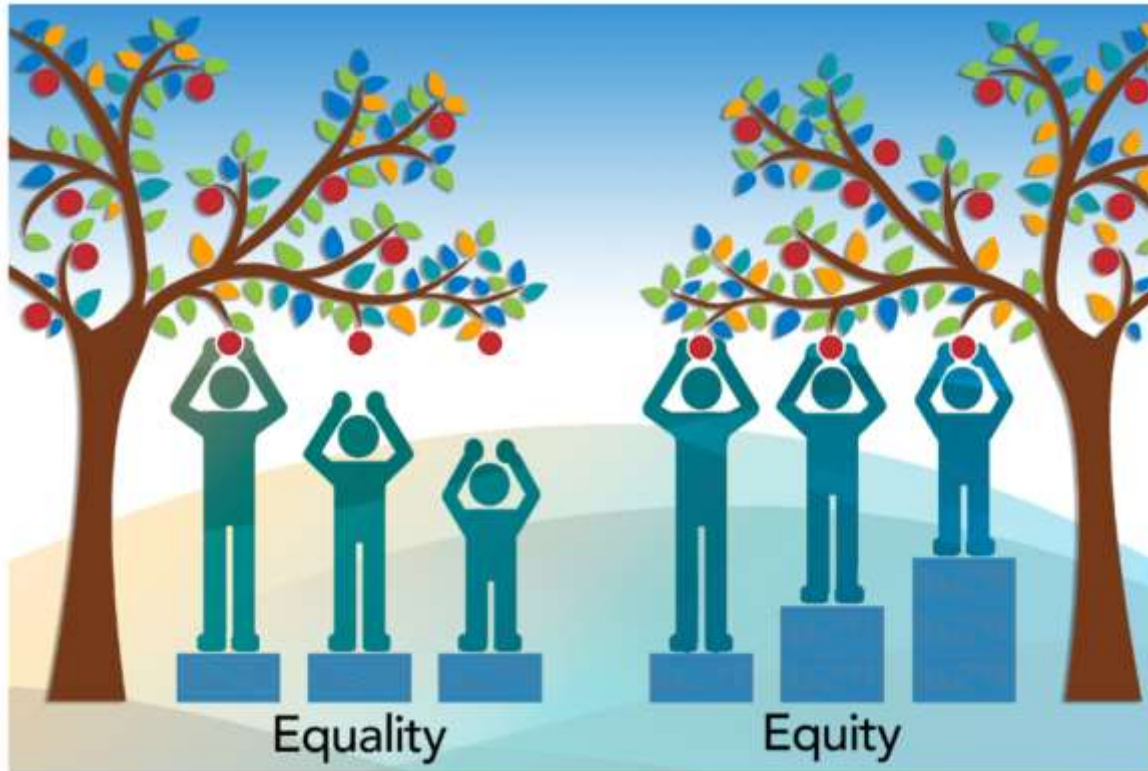


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North East and North Cumbria
Local Maternity System



Tackling Health Inequalities: Understanding the scale of the challenge and what we can do across the pathway of care

Liz Lingard, 13 December 2021



Inequality

Unequal access to opportunities



Equality?

Evenly distributed tools and assistance



Equity

Custom tools that identify and address inequality

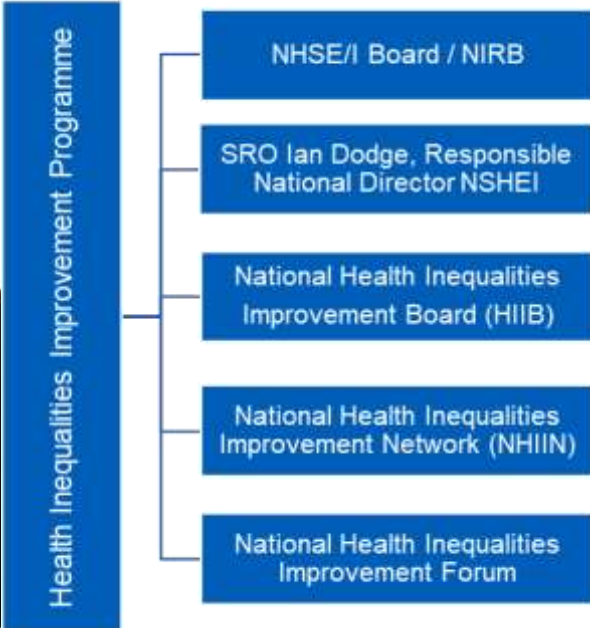


Justice

Fixing the system to offer equal access to both tools and opportunities



National context



Priority 1: Restore NHS services inclusively – with a focus on ethnicity and deprivation

Priority 2: Mitigate against digital exclusion

Priority 3: Ensure datasets are complete and timely - continuing to improve the collection and recording of ethnicity data in all health settings

Priority 4: Accelerate preventative programmes that proactively engage those at greatest risk of poor health outcomes including a culturally competent approach to COVID & flu vaccination delivery, Continuity of Carer in maternity for targeted groups, a focus on LTCs and health checks for people with a LD and/or SMI

Priority 5: Strength leadership and accountability - including system Health Inequality SRO

Triple Aim



Role of the NHS at 3 levels

Commissioner & Provider of Healthcare	Integrated Care System Partner	Anchor institution role & contributor to wider determinants of health
---------------------------------------	--------------------------------	---

Domains and lenses					
Ethnicity	Deprivation	Inclusion Health	Disabilities (LD, SMI)	Life Course Conditions	Wider Determinants

Key Priorities and Core20PLUS5 Initiative



- **Core 20** – Most deprived 20% of our population
- **PLUS** – Other population groups as identified by local population health data e.g. ethnic minority communities (or in case of NEY the additional 10% most deprived)
- **5** – Targeting five key clinical areas of health inequalities:
 - 1) Early Cancer diagnosis (screening & early referral),
 - 2) Hypertension case finding,
 - 3) Chronic Respiratory disease (COVID, Flu & Pneumococcal vaccination uptake),
 - 4) Annual health checks for people with Serious Mental Illness,
 - 5) Continuity of maternity carer plans
- **Improvements in the care of children and young people.**

1. **Restore NHS services inclusively**
2. **Mitigate against digital exclusion**
3. **Ensure datasets are complete and timely**
4. **Accelerate preventative programmes that engage those at greatest risk of poor health outcomes**
 - 1) Understand your population and co-produce interventions
 - 2) Action on maternal mortality, morbidity and experience
 - 3) Action on perinatal mortality and morbidity
 - 4) Support for maternity and neonatal staff
 - 5) Enablers
5. **Strengthen leadership and accountability**

Considerations: Life Course Approach



Greater focus on children and young people achieving the best start in life and supporting families and communities

Considerations: Care Pathway Approach

Address Health Inequalities across Care Pathways from prevention to highly specialised and end of life care

Prevention – primary, secondary and tertiary initiatives

Health Promotion and Health Improvement – embedded across the whole pathway of care

Early detection of health conditions – including use of Imaging and Diagnostics as well as Screening Programmes

Supported self management – requires capability, opportunity and motivation

Healthcare services in primary, community and secondary care settings

Who is most at risk of facing Health Inequalities



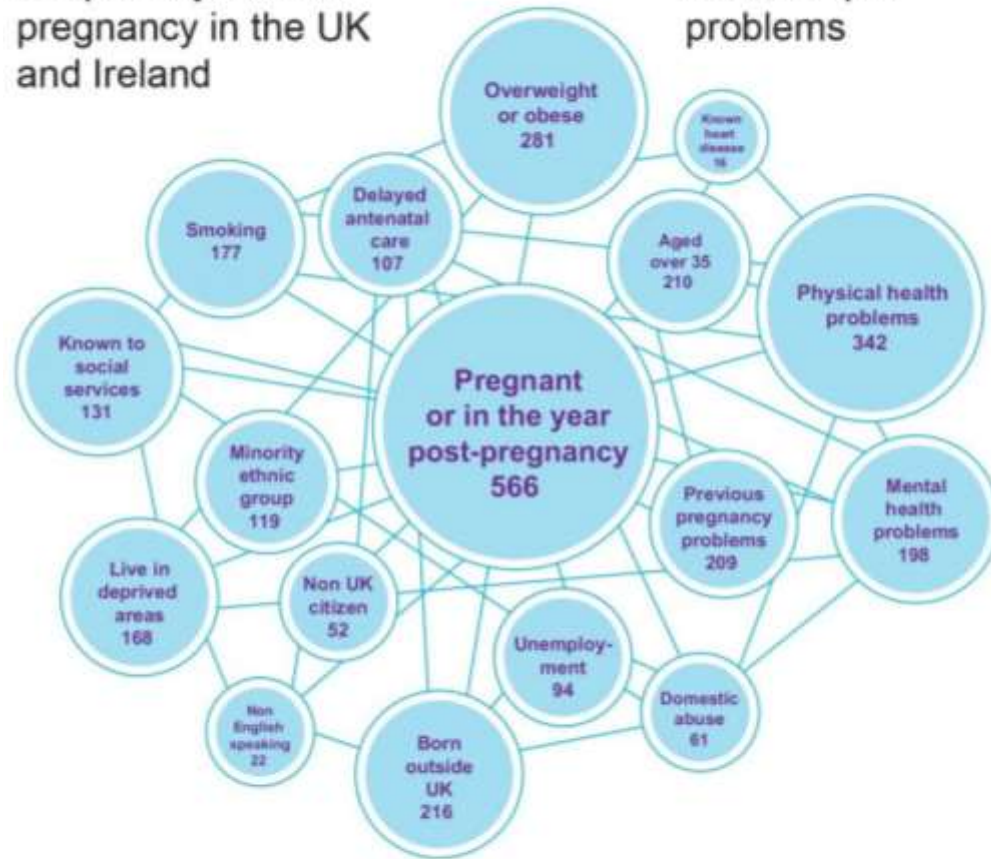
Protected characteristics	Socio-economic status/Geography	Others who face health inequalities:
<ul style="list-style-type: none"> • Age • Sex • Gender reassignment • Disability: includes physical impairments; learning disability; sensory impairment; mental health conditions; long-term medical conditions. • Marriage and civil partnership • Pregnancy and maternity: women before and after childbirth; breastfeeding. • Race and ethnicity • Religion and belief • Sexual orientation 	<p>People who are living in:</p> <ul style="list-style-type: none"> • Deprived areas • Remote, rural and coastal locations. • Overcrowded conditions • Poor quality housing • Prisons • Homeless people or those who experience homelessness <p>People with limited income due to:</p> <ul style="list-style-type: none"> • Unemployment / Inability to work • Employed on low incomes <p>People with poor literacy or health literacy</p>	<p>Individuals who known to be/have:</p> <ul style="list-style-type: none"> • clinically extremely vulnerable • long term health conditions • approaching the end of life • addictions / substance misuse problems • living with/recovering from mental health problems including dementia • serious mental illness • learning disability and/or autism • sensory impairment (e.g. vision/hearing) <ul style="list-style-type: none"> • Looked after/accommodated children & young people. • Carers: paid/unpaid including family members. <ul style="list-style-type: none"> • Those involved in the criminal justice system: offenders in prison/on probation, ex-offenders. • People being released early from prison <ul style="list-style-type: none"> • Gypsy, Roma and Traveller populations • Sex workers • Vulnerable migrants • Modern slavery victims <ul style="list-style-type: none"> • Critical Workers

Intersectionality of risk factors

A constellation of biases

566 women died during or up to a year after pregnancy in the UK and Ireland

510 women (90%) had multiple problems



Systemic Biases due to pregnancy, health and other issues prevent women with complex and multiple problems receiving the care they need

Key messages from the report 2020



In 2016-18, **217 women died** during or up to six weeks after pregnancy, from causes associated with their pregnancy, among 2,235,159 women giving birth in the UK.
9.7 women per 100,000 died during pregnancy or up to six weeks after childbirth or the end of pregnancy.

We need to talk about SUDEP

Act on:



Night-time seizures



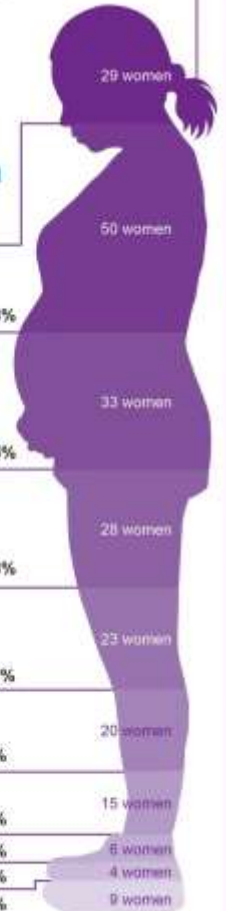
Uncontrolled seizures



Ineffective treatment

Epilepsy and stroke 13%

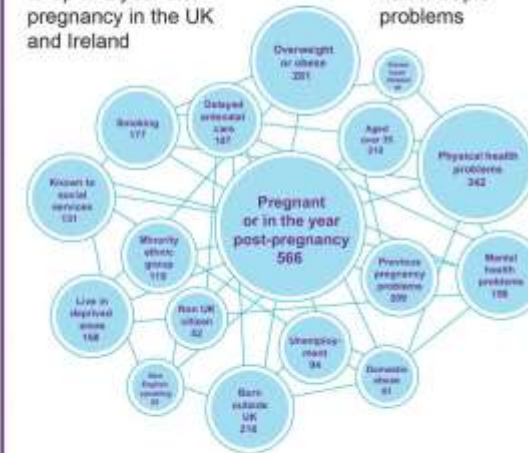
to prevent Sudden Unexpected Death in Epilepsy



A constellation of biases

566 women died during or up to a year after pregnancy in the UK and Ireland

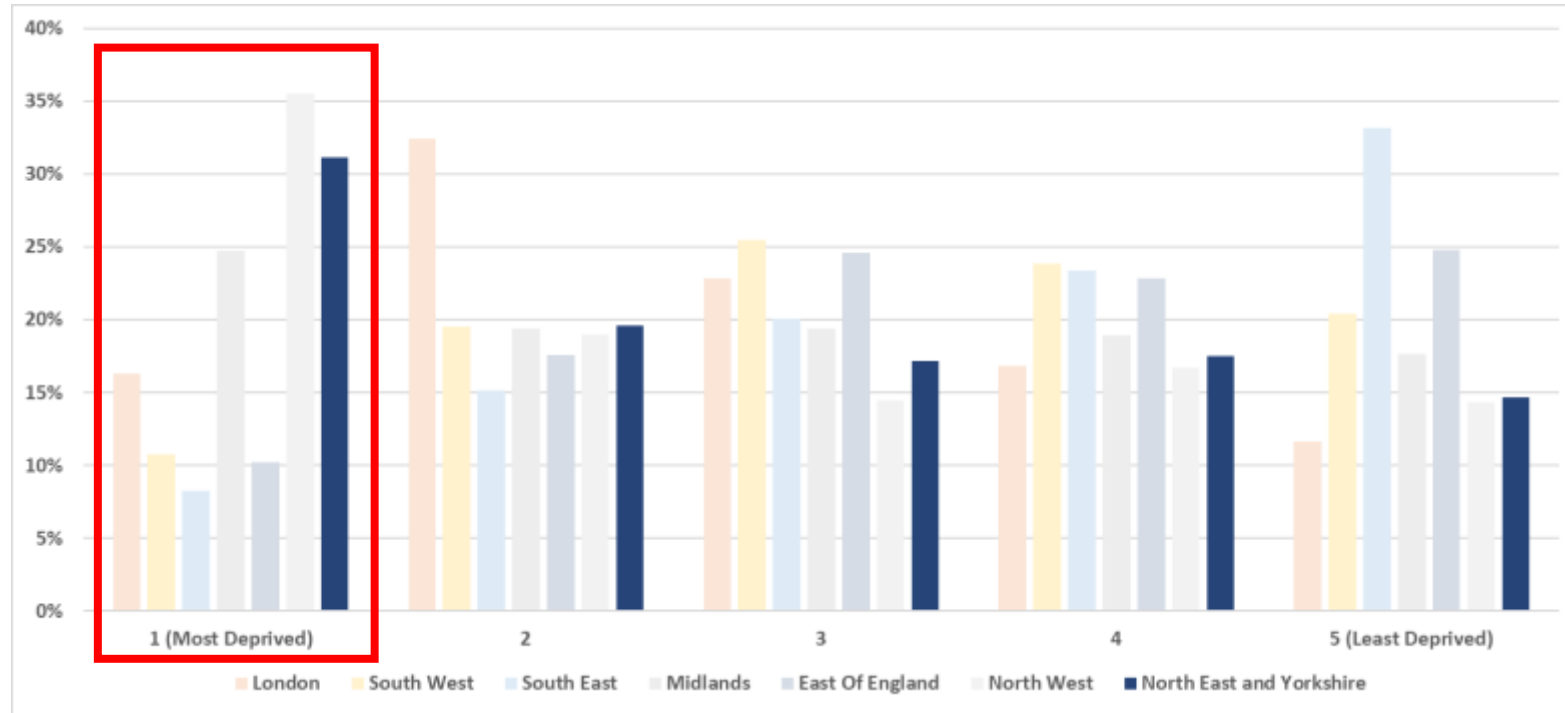
510 women (90%) had multiple problems



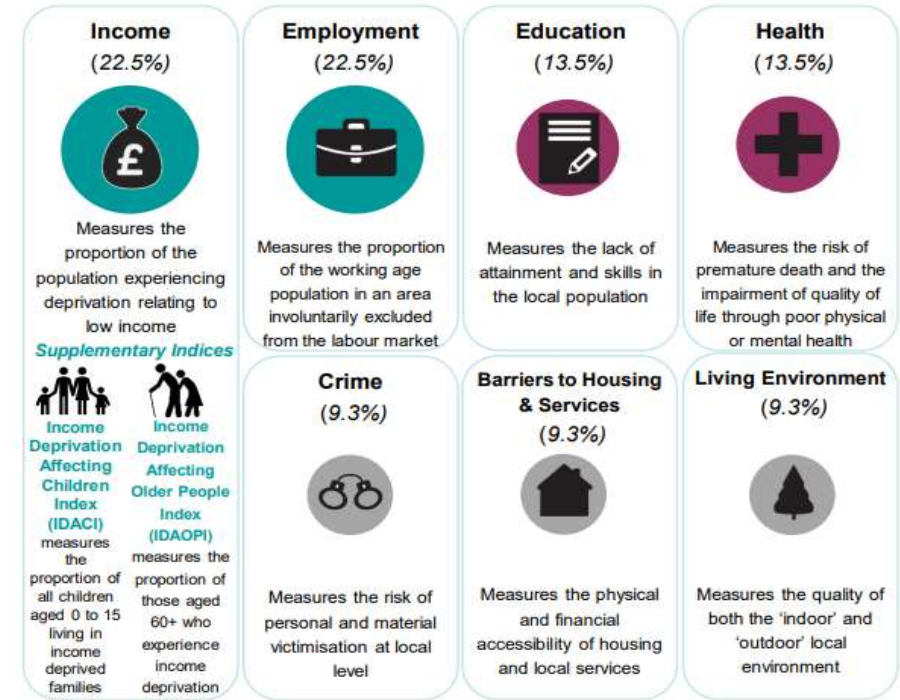
Systemic Biases due to pregnancy, health and other issues prevent women with complex and multiple problems receiving the care they need

Deprivation across the North East and Yorkshire Region

Percentage of the population in IMD Quintiles: NHS Regions



7 Domains of Deprivation

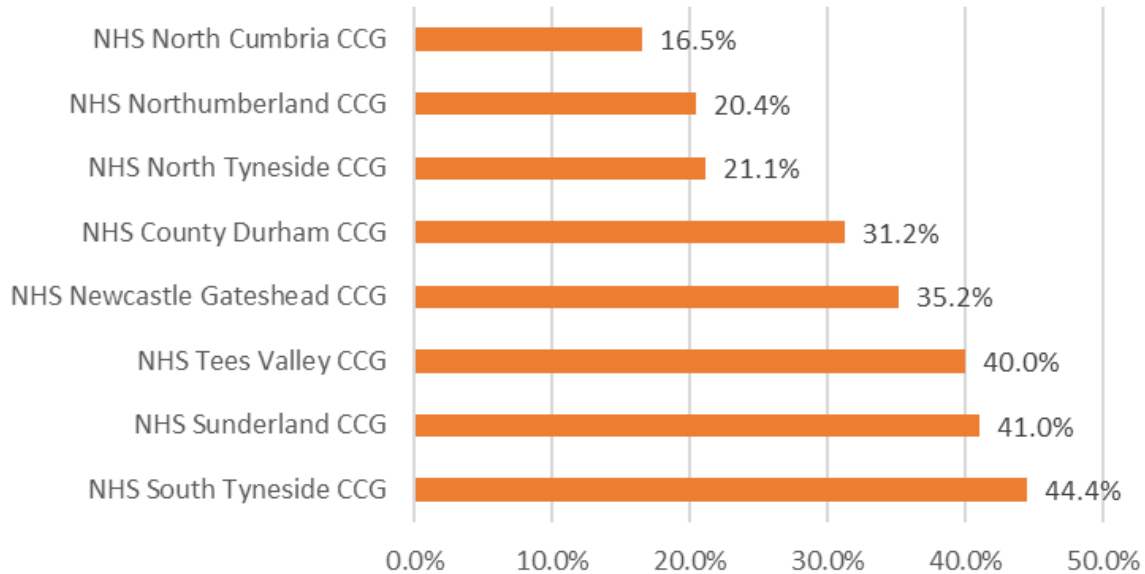


- English Indices of Multiple Deprivation (IMD) ranks each small area in England from the most to the least deprived. It takes into account wider determinants of health such as income, employment, education, crime housing and the living environment.
- Nationally, if we rank these small areas from most to least deprived and then put them equally into 5 groups this would mean there were 1 in 5 people (20%) living in each IMD quintiles. However, each region of England has different proportions of people in each quintile and the chart above highlights that **in NEY, about 3 in 10 people (31%) live in the most deprived areas.**
- There is wide variation within NENC ICS ranging from **16.5% in North Cumbria** living in the most deprived quintile to **44.4% of South Tyneside**; even within North Cumbria and less deprived areas there will be variation with small pockets of very deprived and often rural or coastal communities.

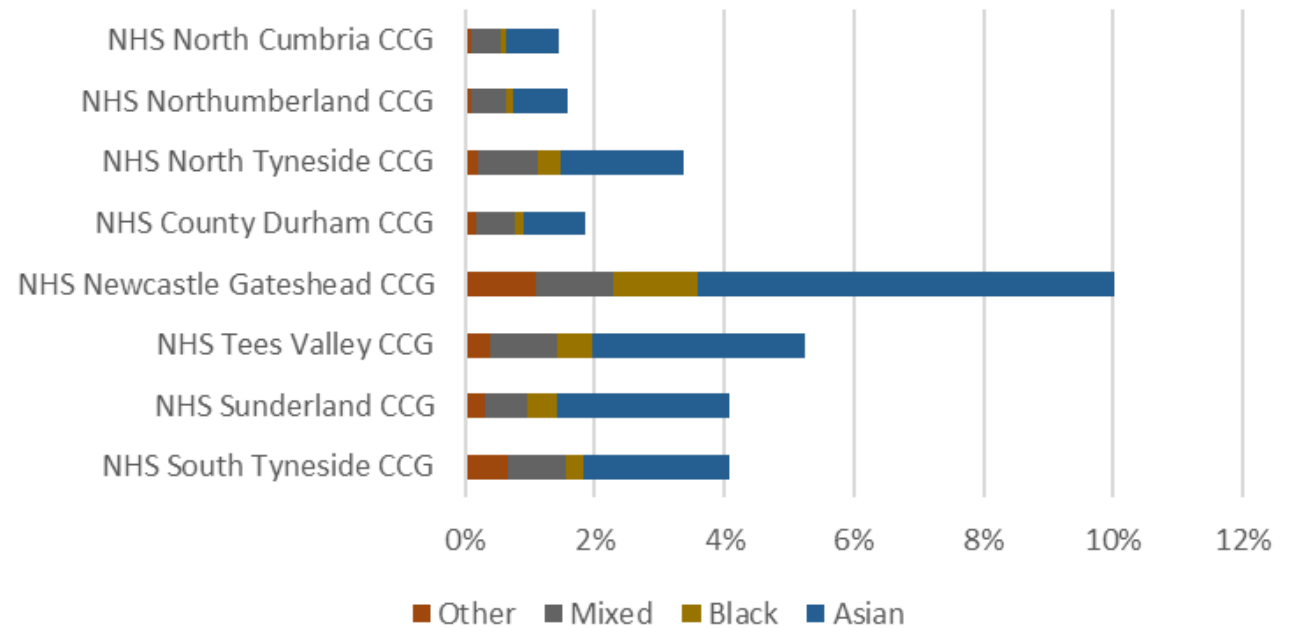
NEY Demographic variation across CCGs



IMD Quintile 1 (Most Deprived)



Ethnic Minority Groups

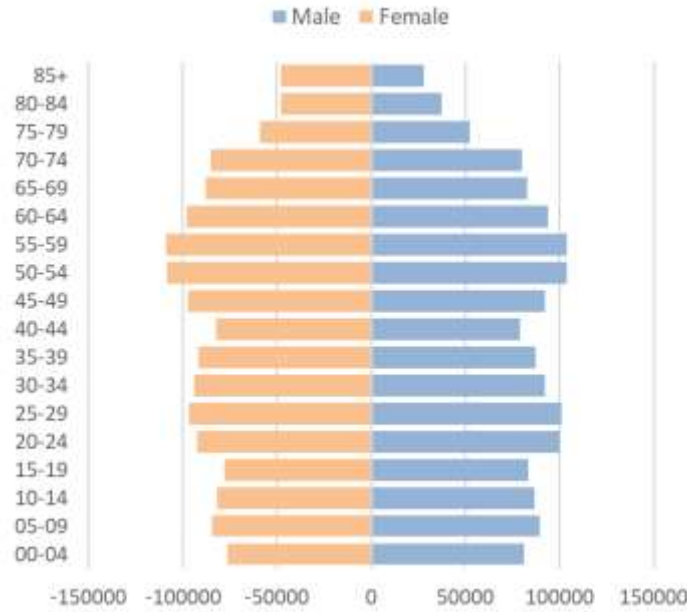


ICS Demographics

The population in Cumbria & North East ICS is higher in the most deprived quintiles than in the least. 55% of the population in this system is in Quintiles 1 and 2, and 29% of the population is in the least deprived quintiles (15% in quintile 4 and 14% in quintile 5).

The less deprived quintiles tend to have a higher proportion of residents aged over 40 than the most deprived quintiles, as illustrated below.

Total Population

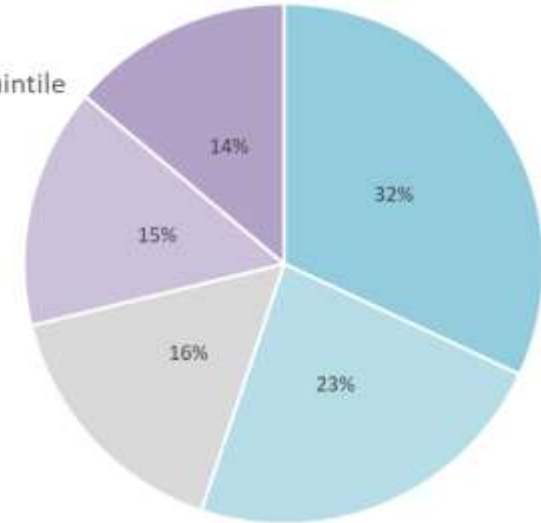


Quintile 1 -> Most Deprived
Quintile 5 -> Least Deprived



Population per Quintile

- Quintile 1
- Quintile 2
- Quintile 3
- Quintile 4
- Quintile 5



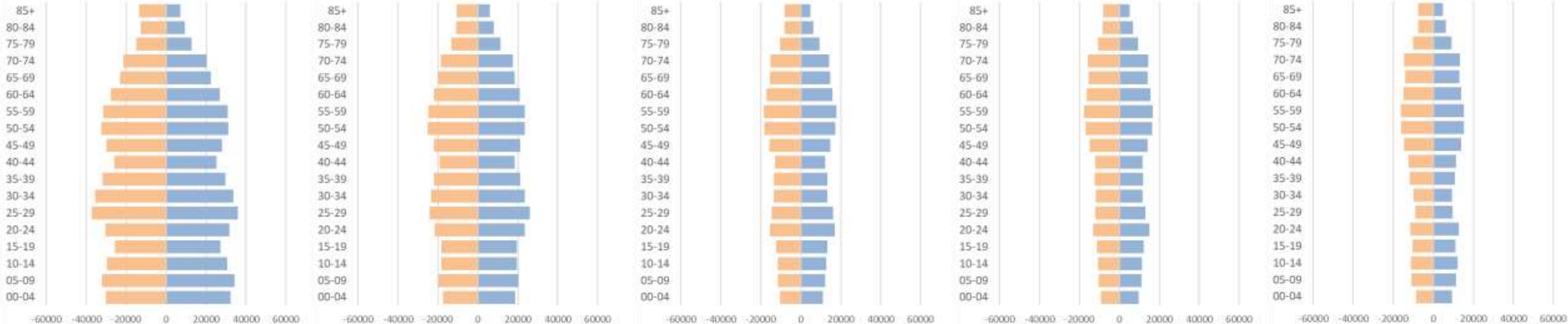
IMD Quintile 1

IMD Quintile 2

IMD Quintile 3

IMD Quintile 4

IMD Quintile 5



Ethnic minority communities



Bangladeshi people were at most risk, with around **twice the risk of death** than white British people



Chinese, Indian, Pakistani, other Asian, Caribbean and other Black had between **10% and 50% higher risk of death** when compared to white British people



Death rates in London were **more than 3x higher** than in the region with the lowest rates, the South West



Deaths were almost **3x higher** in black, mixed and other females and **2.4x higher** in Asian females compared with **1.6x** in white females



Nursing assistants, security guards and cab drivers had a **bigger increase in deaths** than other occupations



Pakistani, Indian and black African men are respectively 90%, 150% and 310% **more likely to work in healthcare** than white British men



The health of people from ethnic minority groups in England



kingsfund.org.uk/publications

Access to primary care health services is generally equitable for ethnic minority groups, but this is less consistently so across other health services. However, people from ethnic minority groups are more likely to report being in poorer health and to report poorer experiences of using health services than their white counterparts.

Covid-19 has shone a light on inequalities and highlighted the urgent need to strengthen action to prevent and manage ill health in ethnic minority communities. A cross-government strategy for reducing health inequalities, and the wider socio-economic and structural inequalities that drive them, should be an urgent priority.

Health Literacy & Digital Literacy Challenges



Prevalence and geographical patterns: map shows percentage of adults aged 16-65 years for whom health information is too complex by region.

Health information includes text (literacy) and numeracy components of health materials.

National average	61%
North East	64%
North West	62%
Yorkshire & Humber	60%

Rowlands et al (2015)

Borough-level geodata
commissioned by HEE from
University Southampton:
<http://healthliteracy.geodata.uk/>



- 9 million people in the UK cannot use the internet without help
- 52% Workforce lack essential digital skills
- 20% UK workforce believe that their digital skills are not good enough
- 23% working adults have not had digital skills support from their employer

Source: Lloyds Bank, UK Consumer Digital Index, 2020

Source: Lloyds Bank & Be The Business, Transformation with Tech, 2020

Source: Lloyds Bank, UK Business Digital Index, 2019

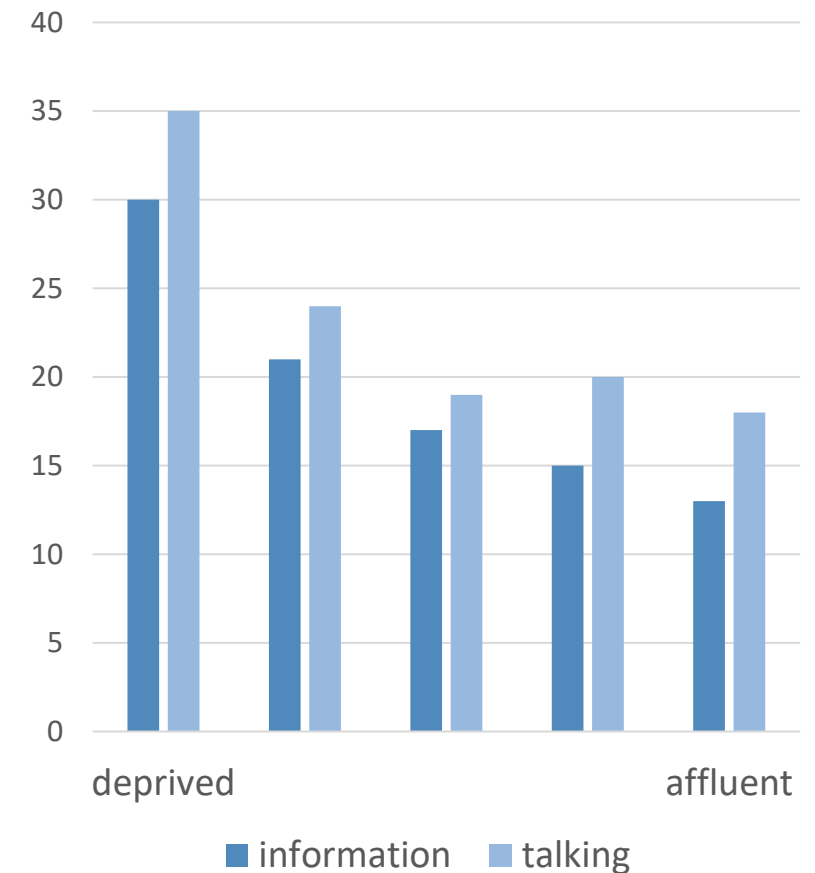
Survey of British Population (2018)

Understanding information and ability to engage in communicating with healthcare providers

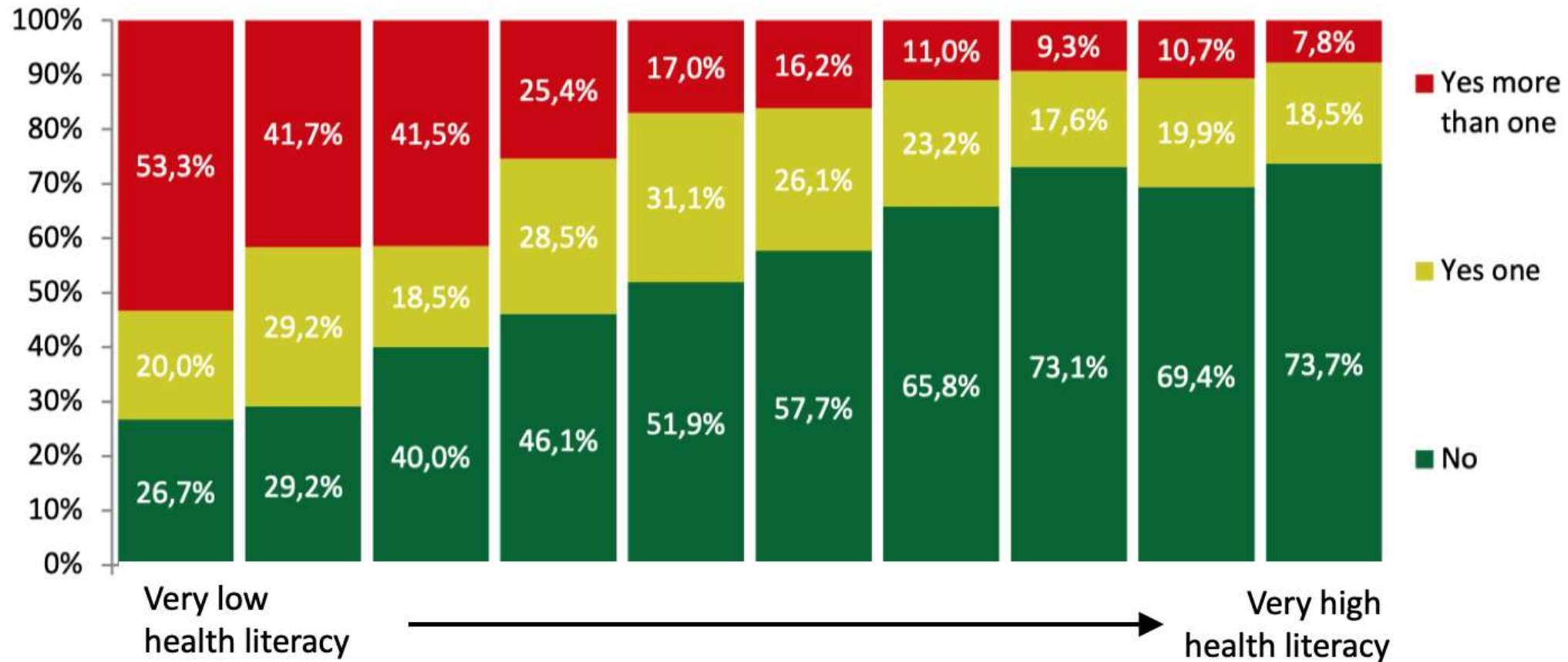
Lower health literacy is linked to:

- Most socially deprived
 - No educational qualifications
 - Black Asian and Minority Ethnic communities
 - Had a limiting health condition or disability
- 1 in 5 said 'some difficulty understanding written information' ○○○○●
 - 1 in 4 said 'some difficulty discussing health concerns with doctors or nurses' ○○○●

(Simpson 2020)



Health Literacy and Long Term Conditions



European health literacy survey 2012

What we need to always consider:



- **Understand all groups accessing services most at risk of health inequalities** - people with protected characteristics, those living in deprivation and/or remote rural areas and inclusion health groups.
- **Population health management approach** to view data by these groups to understand variation in access, experience and outcomes to identify priority areas for action and monitor progress
- **Co-production of healthcare services** so that evidence based interventions are delivered in acceptable, accessible and affordable ways (patient preferences, health literacy levels, digital inclusion, culturally competent services, reasonable adjustments for LD&A, consider geography, transport & cost of travel)
- Need for **proportionate universal approaches tailored to the needs of the population** i.e. weighted funding, heightened/targeted service provision.
- **Public comms to achieve awareness** – co-produced with patients and communities and in accessible formats based on literacy levels as well as being culturally appropriate
- **Link with key people in NHS regional and local teams, Public Health in OHID and Local Authorities and wider partners across the Region/ICs** when you need support to fully understand these issues

What we can do as individuals and teams to reduce Health Inequalities?

Challenging ourselves to create an optimal system culture which seeks to reduce health inequalities by really listening to those with lived experience to find solutions.

Speak out about our own experiences of Health Inequalities and the impact this has had on us as an individual, our family and friends and the wider community to help co-produce solutions.

Take time to ask key questions before we embark on any decision, initiative or approach to make sure we are not inadvertently widening health inequalities and always continually seeking to find ways to reduce them.

Get involved and make a pledge to **Listen, Learn and Level up our region**

- ✓ Pledge to do something today that will help make a difference
- ✓ Shout out if you are doing great work, we want to share it
- ✓ Contact us if you want help, we want to support you
- ✓ Email us at england.neyhealthinequalities@nhs.net



Questions

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Maternity and
Perinatal Mental Health
Clinical Networks
North East and North Cumbria



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North East and North Cumbria
Local Maternity System

Closing Remarks

Tony Roberts

Deputy Director (Clinical Effectiveness) – South Tees Hospitals NHS FT

Deputy Director - North East Quality Observatory Service (NEQOS)

Patient Safety Lead – AHSN NENC



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