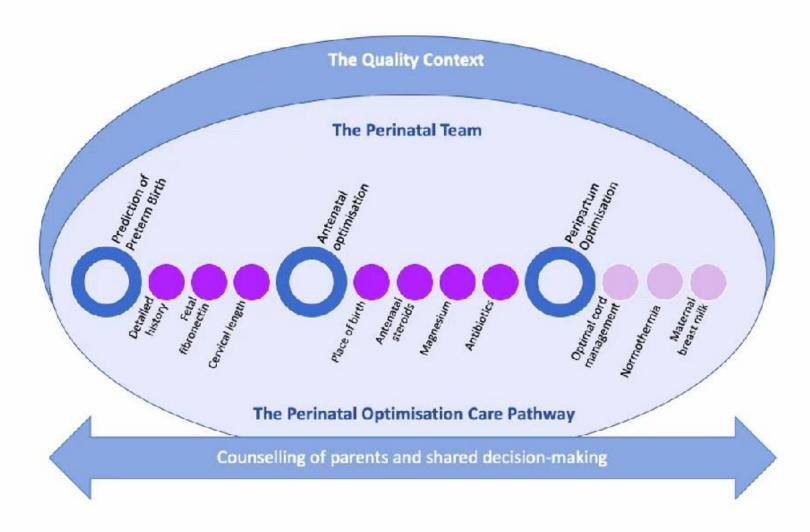
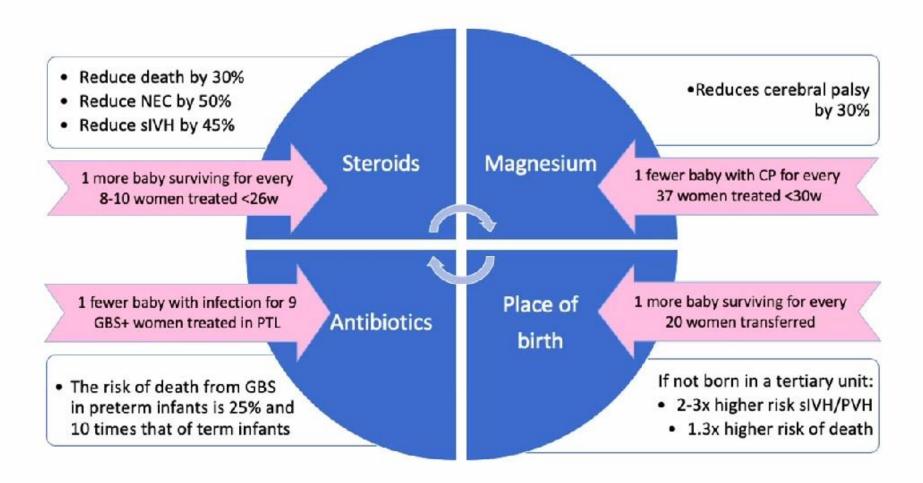
The Perinatal Optimisation Care Pathway

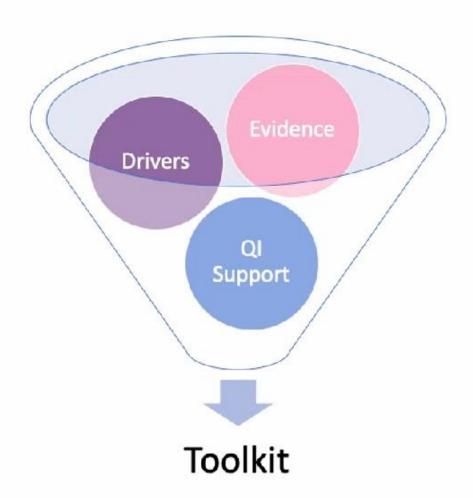


Rationale for Antenatal Optimisation



Drivers for preterm Antenatal Optimisation within the UK





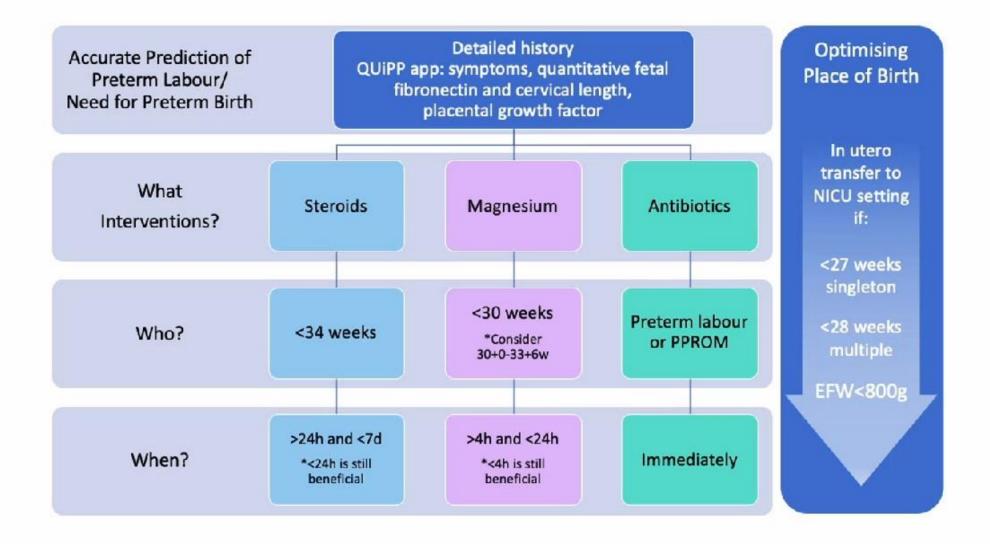
Purpose of the toolkitthe why, what and the how

The toolkit provides

- The evidence base for effective interventions
- Subject-specific QI support to implement the evidence
 - Provides the evidence for different QI strategies
 - Helps units in analysing their own processes and context
 - Helps units in monitoring and interpreting results of QI activity
 - Signposts to resources

www.bapm.org/quality

Aims



Improving Awareness

Women

Education about PTB at every antenatal visit:

- Describe why it is important to prevent or identify preterm labour (PTL) early to receive beneficial interventions
- Describe risk factors for PTB and how they can be modified and or monitored
- Potential for NNU admission after PTB.

Primary Care

GP- Education program including:

- Signs/symptoms of PTL
- Booking referral for high-risk women by 12w

GP & Community Midwives- training to identify risk factors for PTB and enable support where factors are modifiable eg smoking

Secondary Care

- PTB prevention clinics or clinician(s) with specific experience in PTB to enable optimal surveillance and management of high risk women from early in pregnancy
- Cross-service staff awareness of time critical nature of decision-making and benefit of interventions
- Pathways to allow ease of access for women in suspected PTL including information on how to access the maternity triage system
- Appropriate advice for immediate attendance for women describing signs/symptoms of PTL.
- Triage systems that support rapid identification of women at risk of PTB triaged by clinical need rather than attendance time

Improving Accuracy of Prediction

Medically-indicated preterm birth

- Detailed history
- Agreed threshold for PTB in complex conditions affecting mother or fetus
- Fetal surveillance eg abnormal Dopplers, growth
- Maternal surveillance eg PIGF or sFlt 1/PIGF ratio where preeclampsia is suspected

Suspected preterm labour

Tools to assist risk assessment (PReCePT PTL Proforma*):

- Detailed history of signs and symptoms
- Quantitative fetal fibronecting
- Cervical length
- QUiPP app¹⁴

Threatened preterm labour

If signs or symptoms indicate abnormal or premature uterine activity AND one or more of the following:

- QUIPP App symptomatic risk score of ≥ 5% PTB within one week*
- gfFN level indicative of PTL
- Ruptured membranes (IGFB1/PAMG)
- Cervical dilatation but < 4cm.
- Cervical length < 15mm

Actual preterm labour

Communication and

Improving Delivery of Antenatal Optimisation Interventions (S.T.A.M.P.E.D.)**

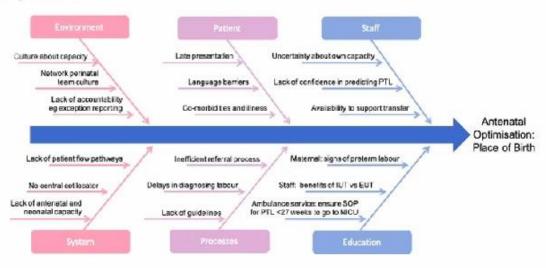
- S. Steroids: if <34w. Give so that course is completed around 24h before birth and not more than 7 days before birth. Benefit remains if given <24h, if birth is imminent.</p>
- T. Transfer: evaluate need for transfer (<27w singletons, <28w multiples, <800g). Start process now.
- A. Antibiotics: if labour is established, start GBS prophylaxis with optimal timing at least 4h before birth.
 If premature rupture of membranes, follow local guidance.
- M. Magnesium: if <30w and consider up to 34w. Give a loading dose of intravenous magnesium sulphate then a maintenance infusion. Pause for transfer if necessary and restart after. Optimal timing to start at least 4h before and continuing up until birth but benefit may remain if given <4h, if birth imminent.</p>
- Parents: establish parental understanding and discuss risks and benefits of PTB and potential interventions. This should include the neonatal team, describe likely neonatal journey and offer tour.
- E. Evaluate for Tocolysis: consider only if it allows in utero transfer.
- Delivery Plan: to include early discussion with neonatal team, intrapartum monitoring, mode of birth, optimal cord management and whether active or palliative management for baby at birth.

The Improvement Journey

	Approach	Methods and Tools	Outcome
1. Define the problem	Identify the problem and how large it is	Forcefield analysis Fishbone diagram Case review Process mapping Pareto chart Learn from experts Driver diagram	Define the problem, diagnose why the problem occurs and what improvement would look like
2. Develop a shared purpose	Form a team of enthusiasts	Engaging a team Engaging stakeholders Optimise context	Establish a shared objective and a culture for change
3. Plan and implement changes	Formulate, prioritise and test solutions	Project Charter QI Methodology	Complete a formalised plan of proposed improvements
4. Test and measure improvement	Test, review and re- test improvements	PDSA Measurement Run chart Statistical Process Control Chart Days between Chart	Determine whether improvement has resulted in change
5. Implement, embed and sustain	Implement widely and ensure sustainability	Education Communication Motivation	Shared learning and embedding changes into practice

Phase One: Define the Problem

- Understand local data, both now and in recent past
- Consider data in context of national standards/benchmarking
- Use the following tools to understand data:
 - · Forcefield analysis
 - Fishbone diagram
 - Case review
 - Process mapping
 - Pareto chart
- Develop an improvement plan using a driver diagram
- Learn what works by talking to high performing units
- Listen to parents



Phase Two: Develop a Shared Purpose

1. Engage your team

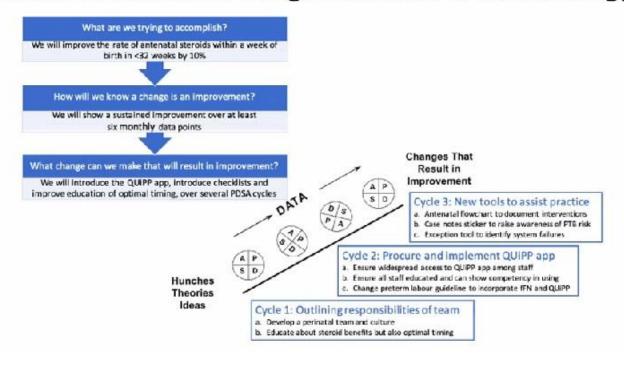
- Obstetric, Midwifery and Neonatal project leads
- Parent representation
- Multidisciplinary representation including
 - Obstetricians
 - Labour Ward and Theatre representatives
 - Midwives
 - Neonatologists/paediatricians
 - Neonatal nurses
- People with QI expertise +/- a data analyst

2. Engage your stakeholders



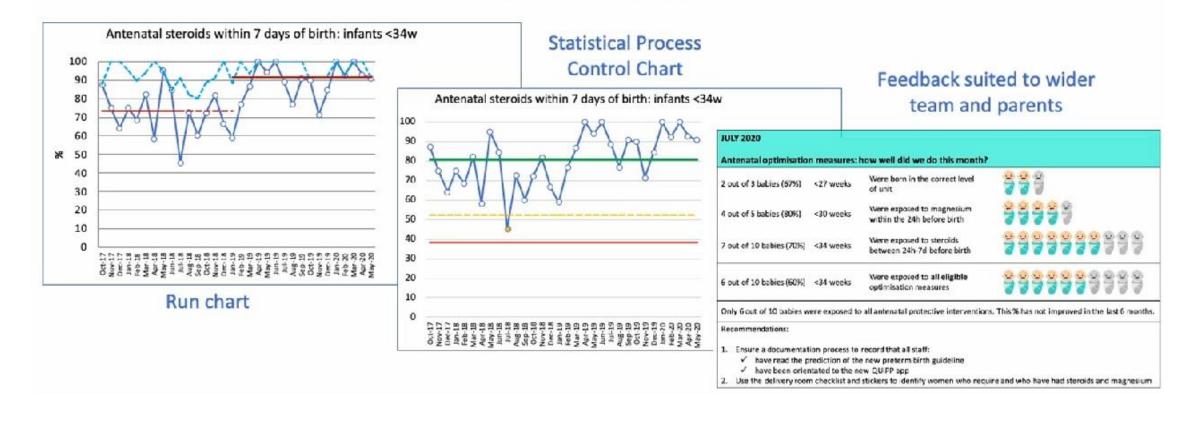
Phase Three: Plan and Implement Changes

- Construct a Project Charter: Detail your proposed improvement, including the resources required and the potential benefits to patients
- Formulate, prioritise and test solutions using established QI methodology



Phase Four: Test and Measure Improvement

- 1. Collect the best data for your needs: outcome, process and balancing measures
- 2. Use well-described methods to analyse and display your data



Phase Five: Implement, Embed and Sustain



Spread:

Dissemination: formal eg presentations
Diffusion: informal eg word of mouth



Exception reporting:

Case review for noncompliant cases



Barriers and loss of motivation:

Understand and find solutions

- Re-examine your change idea
- · Use impactful parent stories
- Use lessons from high performers
- Re-market your message
- Use incentivisation to engage



https://www.bapm.org/pages/194-antenatal-optimisation-toolkit



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