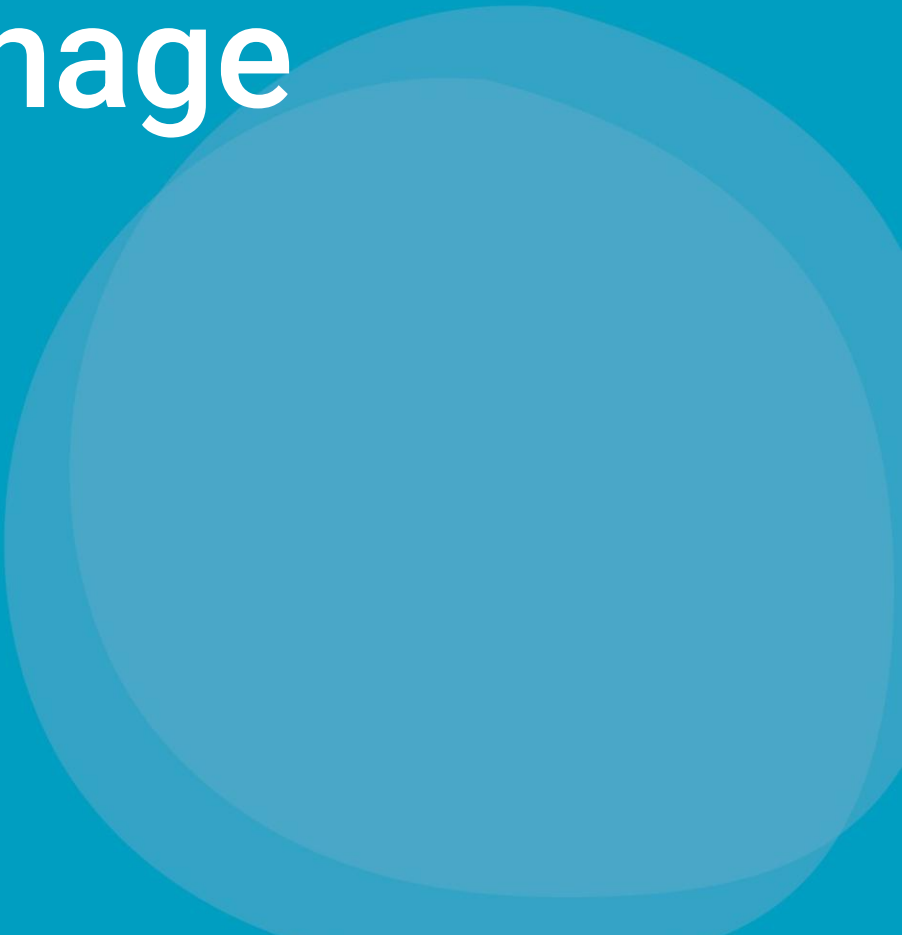


Anti-Racism QI Change Package: Postpartum Haemorrhage

The background features a solid teal color. In the bottom right corner, there are three overlapping circles of varying shades of blue and teal, creating a modern, abstract design.

Race and Health Observatory Learning and Action Network

The NHS Race & Health Observatory (RHO) has partnered with the Institute for Healthcare Improvement (IHI) and the Health Foundation (HF) to deliver a Learning and Action Network (LAN) which aims to tackle the gaps in maternal and neonatal morbidity, between women and babies from different ethnic backgrounds.

The LAN has used Quality Improvement (QI) to drive clinical transformation and enable system-wide change. NHS RHO, IHI and an Advisory Group made up of experts in maternal and neonatal health have joined together to improve the outcomes for maternal and neonatal health through participation in an action oriented, fast-paced Learning and Action Network.

The LAN is comprised of ten teams, from eight Integrated Care Systems (ICS), in four regions who are committed to reducing pregnancy complications and preventable morbidity and mortality for ethnic minority communities

Institute for Healthcare Improvement

For 30 years, the Institute for Healthcare Improvement (IHI) has used improvement science to advance and sustain better outcomes in health and health systems across the world. We bring awareness of safety and quality to millions, accelerate learning and the systematic improvement of care, develop solutions to previously intractable challenges, and mobilise health systems, communities, regions, and nations to reduce harm and deaths. We work in collaboration with the growing IHI community to spark bold, inventive ways to improve the health of individuals and populations. We generate optimism, harvest fresh ideas, and support anyone, anywhere who wants to profoundly change health and health care for the better. Learn more at [ihi.org](https://www.ihi.org).

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Key Terms and Definitions

To support understanding, this glossary highlights key terms used throughout this change package. It includes clinical, quality improvement, data and health inequalities terms that may be unfamiliar to some readers.

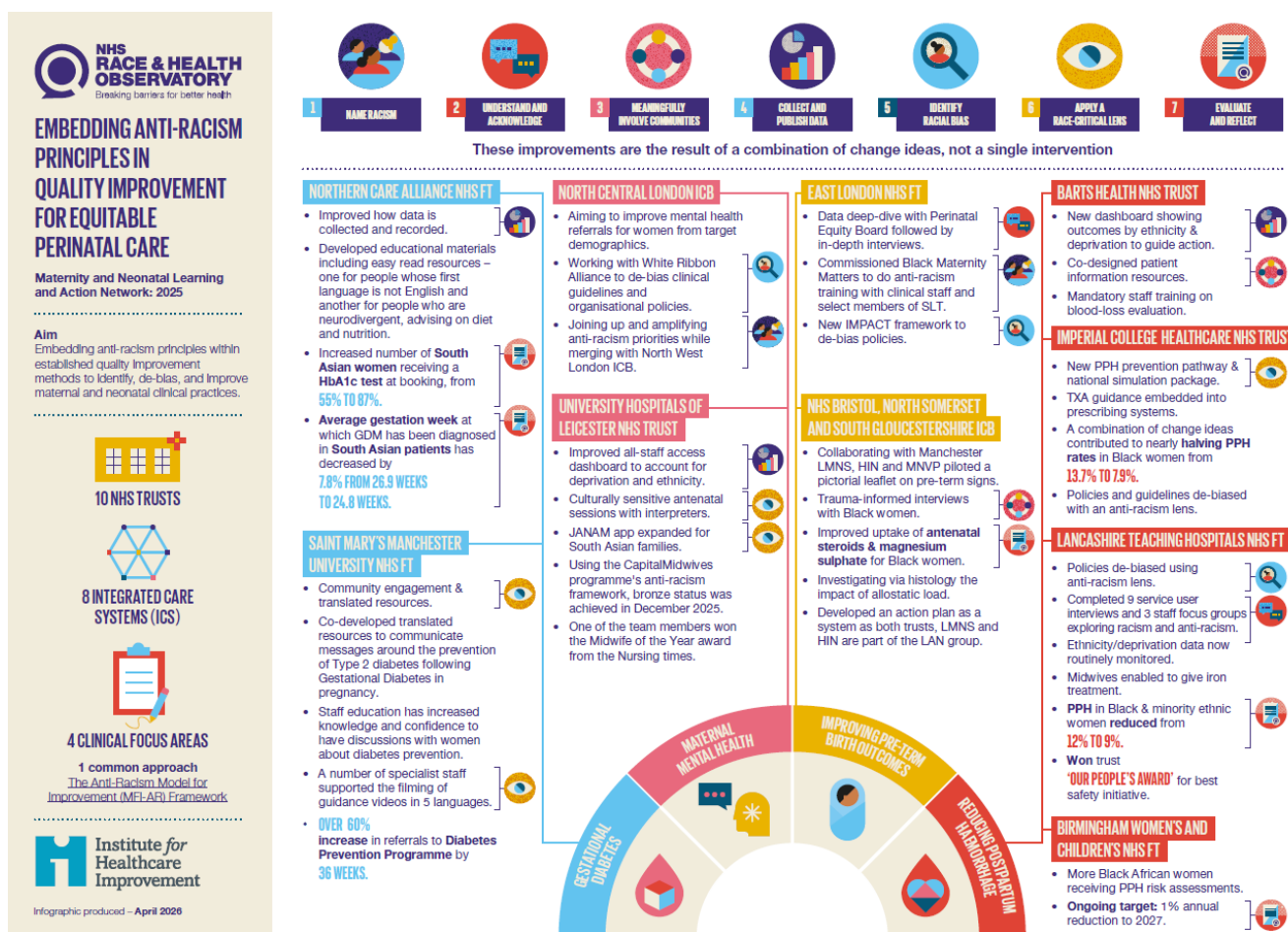
Term	Definition
Change Concept	A general notion or approach to change that has been found to be useful in developing specific ideas for quality improvement
Change Idea	Specific actions that can be tested to see if they lead to improvements in processes or outcomes
Disaggregated Data	Data broken down into smaller groups, such as race, ethnicity, language, or deprivation, to identify differences in outcomes and experiences
Ethnicity	A socially constructed category reflecting shared cultural markers, including language, religion, heritage, and identity, that people use to describe belonging. In practice, ethnicity captures lived cultural experience and can shape health behaviours, access, and interactions with services
Equality	The right of different groups of people to have a similar social position and receive the same treatment

Equity	The quality of being fair and just, especially in a way that takes account of and seeks to address existing inequalities
Institutional Racism	Policies, processes, and practices within organisations that, intentionally or unintentionally, create or maintain racial inequities
Internalised Racism	The acceptance or internalisation of negative racial stereotypes, beliefs, or messages by individuals from racially minoritised groups, which can influence self-worth, expectations, behaviours, and wellbeing
Interpersonal Racism	Racism that occurs between individuals, including discrimination, prejudice, stereotyping, bullying and harassment
Intrapartum Care	Care provided during labour and birth to support the health and wellbeing of the mother and baby, including monitoring, clinical management, and delivery care. This includes interventions to reduce the risk of postpartum haemorrhage and the early recognition and management of bleeding-related complications.
Race	A socially constructed system which categorises people based on perceived physical traits (e.g., skin colour), historically produced and maintained through power structures including colonialism. The term does not have a genetic basis and varies significantly, geographically and temporally. In UK health systems, race is best understood

	as a proxy for exposure to racism, rather than a biological determinant
Stratified Data	The organisation of data into distinct subgroups or layers (strata) based on shared characteristics to enhance analysis and reveal patterns
Structural Racism	The ways in which racism is embedded within social, economic, political, and cultural systems, resulting in unequal access to resources, opportunities, and health outcomes for different racial and ethnic groups

Learning Action Network: Impact and Achievements

This infographic provides an overview of the achievements of the RHO Maternal and Neonatal LAN. It illustrates how the ten LAN teams embedded the [RHO's 7 Anti-Racism Principles](#) within the [Model For Improvement](#) methodology to improve equity in perinatal care. The recommendations and resources contained within this Change Package draw on the learning generated through this work. Change Packages for the additional focus areas are available on the [RHO website](#).



Postpartum Haemorrhage Change Package

Introduction & How to Use this Guide

This Anti-Racism QI Change Package is aimed at supporting teams and institutions close the maternal and neonatal health outcomes equity gap caused by racism. It is based on the learnings of the RHO LAN, a 15-month initiative from January 2024 through March 2025 with the aim to:

Reduce clinically avoidable severe perinatal morbidity and mortality resulting from racism, while improving care experiences for women and people from Black, Asian, and minoritised ethnic communities.

The NHS RHO defines racism in health as the process by which members of a racial or ethnic group have unequal access to services and resources, differential experiences within the healthcare system, and diverging health outcomes when compared with the White majority group. As such, racism harms individuals and undermines the full potential of the whole of society.

As a guide for future teams, this change package contains five elements, framed around the Model for Improvement and centred on equity and anti-racism:

- I. **Aim:** What are we trying to accomplish?
- II. **Driver Diagram:** How will we reach our aim?
- III. **Change Concepts and Ideas:** What changes can we make to reach our aim?
- IV. **Prioritising Changes:** Where do we start?
- V. **Measurement Guidance:** How will we know if a change is an improvement?

For more information regarding the Model for Improvement: Anti-Racism Framework Guidance, please visit: <https://nhsrho.org/resources/mfi-ar-framework-guidance/>

What is an Anti-Racism QI Change Package?

An Anti-Racism QI Change Package is a change package that centres the RHO's 7 Anti-Racism Principles in action, combining these principles with the Model for Improvement's QI methodology to help a team and system reach its aim of closing the equity gap in health outcomes and experience.

This Anti-Racism QI Change Package is structured around the five key pillars that encompass the main "drivers" or levers for improvement:

- 1) Leadership at all levels committed to creating an anti-racist system
- 2) Integration of anti-racism approaches in improvement efforts
- 3) Reliable delivery of debiased clinical guidelines and protocols
- 4) Close the equity gap in experience of care of service users
- 5) Stratified data across race and ethnicity for improvement

This change package has been revised since the completion of the 15-month LAN, to include and highlight the change packages with the highest confidence for improvement towards the aim, as well as including considerations for spread and scale.

In this change package, we outline a set of change concepts and ideas aligned with the five key pillars above. We also encourage you to develop your own change ideas based on your unique system and the “causes of the causes” of inequitable maternal and neonatal health outcomes. By this, we mean the social determinants of health, factors such as housing, income, education, and employment, which, as highlighted in [Build Back Fairer](#), are themselves shaped by structural forces including racism. These upstream drivers create the conditions in which inequities arise, and many of them are in your team’s gift to affect.

Context and Aim

Evidence points to a widening gap in maternal mortality and morbidity between women from different ethnic backgrounds, with Black British mothers up to [four times more](#) likely than White mothers to die during pregnancy or within the first six weeks after childbirth.

While there have been numerous NHS initiatives focused on maternal health to date, there has been an opportunity to focus specifically on closing the widening ethnic inequality gap in mortality and morbidity in the NHS.

This LAN aimed to tackle the gap in ethnic inequality by using QI methodology to drive clinical transformation and enable system-wide change.

With representatives from eight ICS across four NHS regions, who are committed to reducing pregnancy complications and preventable morbidity and mortality for ethnic minority communities, the original aim of this 15-month LAN was to:

Reduce clinically avoidable severe maternal morbidity, perinatal mortality and neonatal morbidity while improving experience of care of pregnant women and people from Black, Asian and minority ethnic groups.

Centred on the RHO’s 7 Anti-Racism Principles, beginning with #1: Demonstrate leadership by naming racism, the aim of the LAN has been revised to name racism more explicitly:

Reduce clinically avoidable severe perinatal morbidity and mortality resulting from racism, while improving care experiences for women and people from Black, Asian, and minoritised ethnic communities.

Driver Diagram

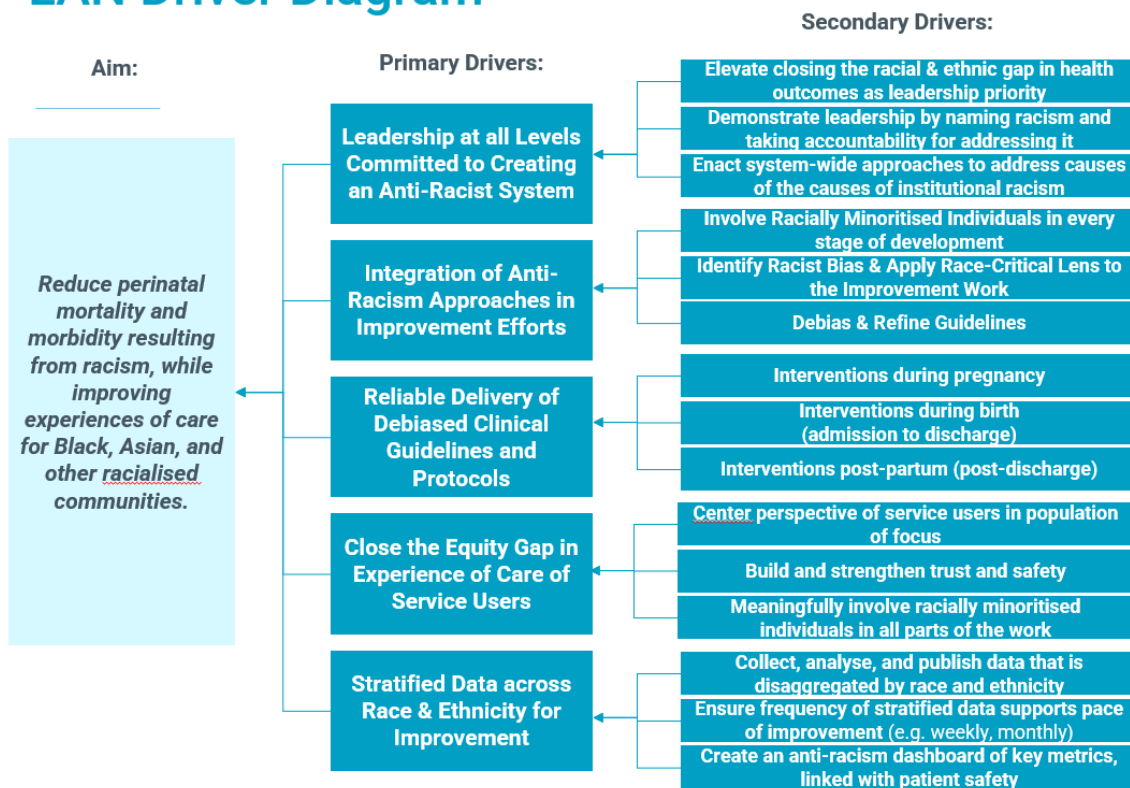
While the LAN’s original driver diagram focused on three pillars (Reliable delivery of clinical guidelines and protocols, 7 Anti-Racism Principles in action, and Experience of care), feedback from participants of the LAN pointed to the criticality of leadership at all levels committed to anti-racism work and creating an enabling environment for true change. Similarly, challenges around data and measurement highlighted the need to explicitly add stratified data as a primary

driver. Similar to the revised aim above, this final Driver Diagram also names racism more explicitly, taking action on the RHO's first Anti-Racism Principle of naming racism.

Centred on the RHO's 7 Anti-Racism Principles and putting these into action through QI methodology, the five primary drivers are now:

- 1) Leadership at all levels committed to creating an anti-racist system
- 2) Integration of anti-racism approaches in improvement efforts
- 3) Reliable delivery of debiased clinical guidelines and protocols
- 4) Close the equity gap in experience of care of service users
- 5) Stratified data across race and ethnicity for improvement

LAN Driver Diagram



Clinical Areas of Focus

As a LAN, the guiding principle was “inch wide, mile deep” to accelerate learning and improvement towards reducing ethnic and racial inequities of maternal and neonatal outcomes. In other words, what were the specific narrow clinical areas we could focus this initial phase on, with the intent of better understanding and acting on racism as a driver of inequitable maternal and neonatal health outcomes?

Based on evidence from the [MBRACE-UK](#) report, team applications, and looking across the continuum of prenatal, perinatal, and postnatal maternal and neonatal care, the following four clinical areas of focus were prioritised for this initial LAN:

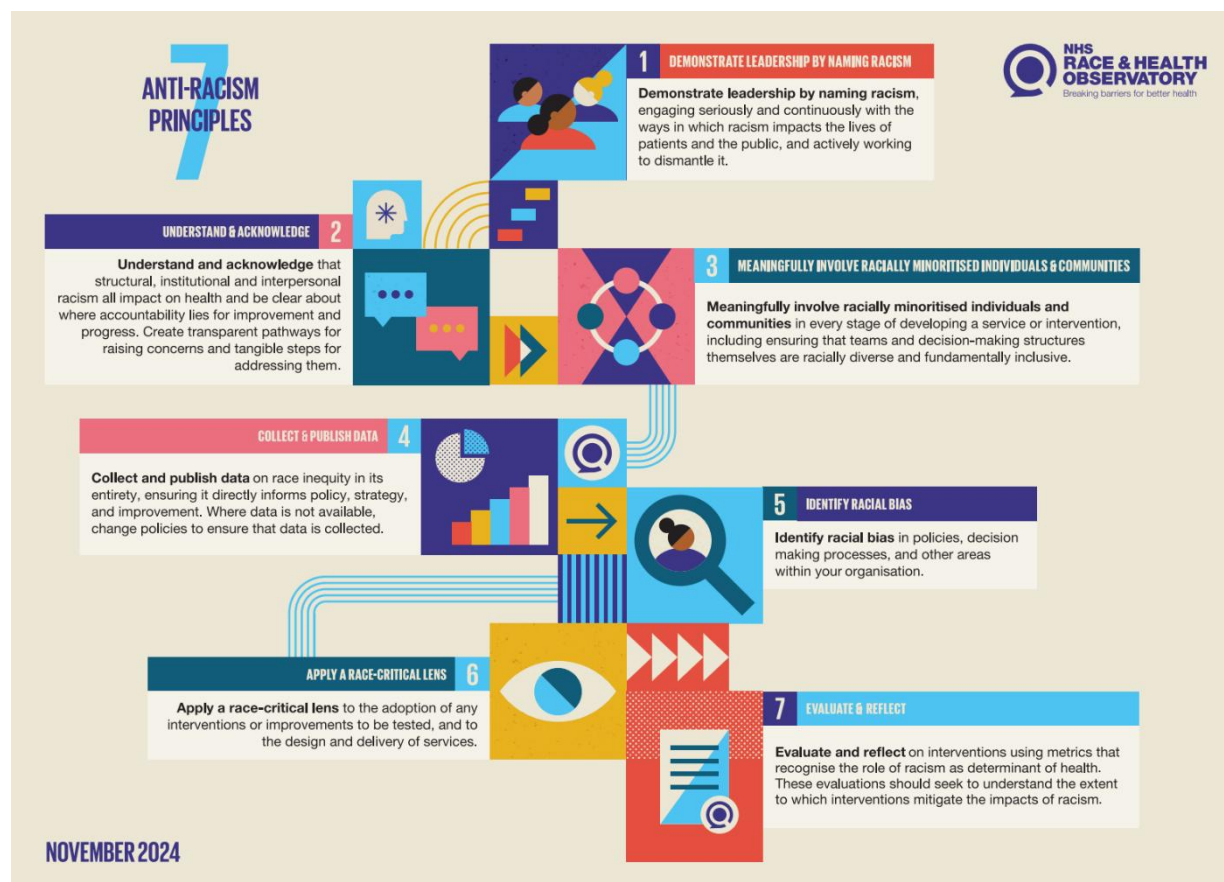
- (1) Gestational Diabetes
- (2) Postpartum Haemorrhage
- (3) Maternal Mental Health
- (4) Preterm Births

Each participating LAN team chose one initial clinical focus area to begin with.

RHO 7 Anti-Racism Principles

Embedded in this work and cutting across all clinical areas of focus above are the following 7 Anti-Racism Principles, developed by the Race and Health Observatory:

1. **Demonstrate leadership by naming racism**, engaging seriously and continuously with the ways in which racism impacts the lives of patients and the public, and actively working to dismantle it.
2. **Understand and acknowledge** that structural, institutional and interpersonal racism all impact on health and be clear about where accountability lies for improvement and progress. Create transparent pathways for raising concerns and tangible steps for addressing them.
3. **Meaningfully involve racially minoritised individuals and communities** in every stage of developing a service or intervention, including ensuring that teams and decision-making structures themselves are racially diverse and fundamentally inclusive.
4. **Collect and public data** on race inequity in its entirety, ensuring it directly informs policy, strategy, and improvement. Where data is not available, change policies to ensure that data is collected.
5. **Identify racial bias** in policies, decision making processes, and other areas within your organisation.
6. **Apply a race-critical lens** to the adoption of any interventions or improvements to be tested, and to the design and delivery of services.
7. **Evaluate and reflect** on interventions using metrics that recognise the role of racism as determinant of health. These evaluations should seek to understand the extent to which interventions mitigate the impacts of racism.



Anti-Racism Change Package for Postpartum Haemorrhage

1. Aim: What Are We Trying to Accomplish?

Setting a clear project aim is the foundation of any quality improvement project. To be effective, aims should be SMART: Specific, Measurable, Achievable, Relevant, and Time-bound. Towards the larger collaborative aim defined above, the narrower aim for postpartum haemorrhage across the spectrum of postpartum care is to:

Reduce racial inequities in postpartum haemorrhage and severe maternal morbidity by decreasing rates among women from racially and ethnically minoritised groups from [x] to [y] by [date].

The ultimate vision for this postpartum haemorrhage work is to:

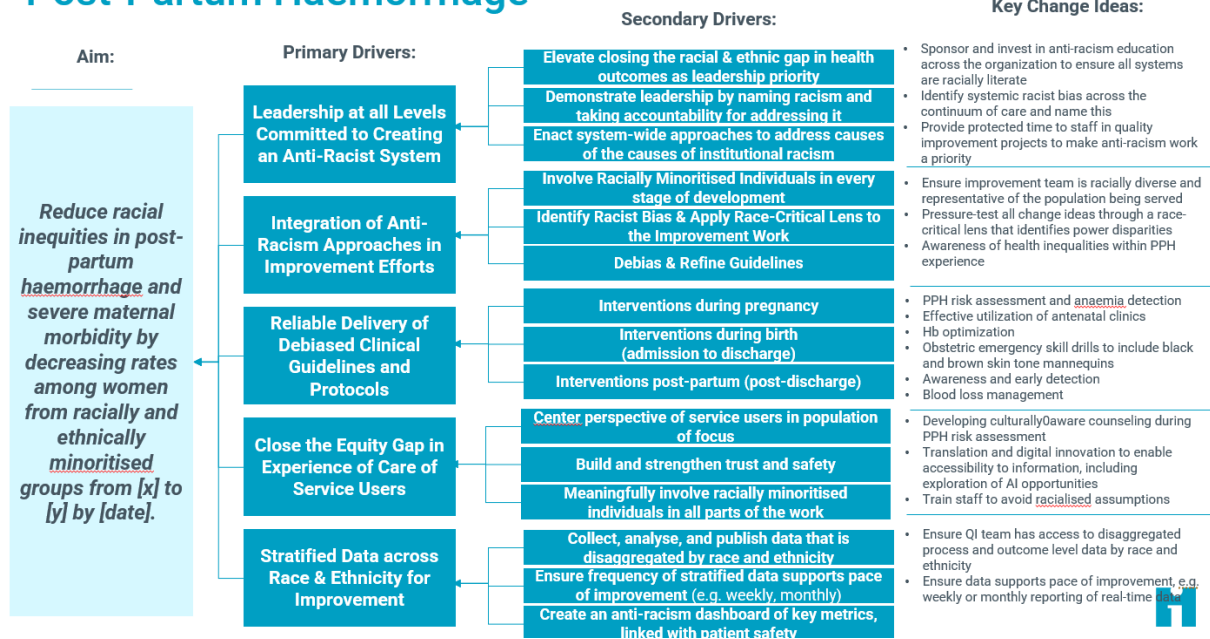
- (1) Close the racism-related gap in health outcomes in postpartum haemorrhage; and
- (2) Close the racism-related gap in experiences for mothers experiencing postpartum haemorrhage.

Note: Using the “inch wide, mile deep” approach, future teams will want to focus their work on a narrow area of improvement, depending on where local data points to as the highest potential area for improvement. For instance, LAN teams focused on reducing PPH had the following aims for the 15 month LAN:

- **Barts Health:** To reduce the number of PPH incidences for British Bengali Women at Barts Health by 20% by December 2024 and 50% by June 2025
- **Birmingham and Solihull:** To reduce the rate of PPH in Black African Women by 1% a year by 2027 by introducing a robust awareness package for staff and birthing people across Birmingham Women’s Hospital and University Hospitals Birmingham
- **Imperial:** To achieve parity in PPH rates in all ethnicities in 12 months
- **Lancashire:** To reduce PPH ($\geq 1000\text{mL}$) experienced by black & ethnic minority women & birthing people by 50% (from 12% to 6%) by March ’25

2. Driver Diagram: How Will We Reach Our Aim?

Post-Partum Haemorrhage



3. Change Concepts and Ideas

The tables below outline prioritised change concepts and example change ideas across the five primary drivers of:

- Leadership at all levels committed to creating an anti-racist system
- Integration of anti-racism approaches in improvement efforts
- Reliable delivery of debaised clinical guidelines and protocols
- Close the equity gap in experience of care of service users

E. Stratified data across race and ethnicity for improvement

A. Leadership at All Levels Committed to Creating an Anti-Racist System

Leadership commitment to anti-racism at all levels is the first primary driver because sustained improvement in this area is not possible without leadership commitment. In order for the rest of the drivers to lead towards improvement, the system must be primed and ready – for instance through anti-racism education to ensure racial literacy and ensuring that anti-racism work is integrated with the quality improvement work from the outset. Otherwise, there is a risk of harm when individuals and teams embark on equity QI work if the system is not ready for this type of work.

	Secondary Driver	Change Ideas
A1	Elevate closing the racial & ethnic gap in health outcomes as leadership priority	- Sponsor and invest in anti-racism education across the organisation to ensure all systems are racially literate - Make the gaps visible through a racial & ethnic health equity dashboard reviewed at board and executive meetings - Anti-racism conference for staff and community partners (Barts)
A2	Demonstrate leadership by naming racism and taking accountability for addressing it	- Application of anti-racism principles to focused quality improvement and in clinical practice - Identify systemic racist bias across the continuum of care and name this - Sponsor quality improvement work to address the systemic biases that prevent birthing women from receiving the care they need
A3	Enact system-wide approaches to address causes of institutional racism	- Conduct a systems analysis to locate elements of institutional racism that could be modified - Provide protected time to staff in quality improvement projects to make anti-racism work a priority - Co-produced “Three Pillars to Embed Anti-Racism”: patient stories (patients), clinical interface (staff), educational policies (systems) – (Imperial)

B. Integration of Anti-Racism Approaches in Improvement Efforts

Anti-racism approaches must be an integral part of quality improvement efforts and not seen as two separate components of the work. This begins at the start, with the involvement of racially minoritised individuals in the work. It is important that the improvement team itself is racially diverse, and that individuals on the team actively acknowledge one’s own racial, economic, and cultural biases and privilege. This should extend beyond representation alone and be embedded throughout the improvement process, from identifying the problems and designing change ideas to measuring impact, ensuring improvement efforts actively address rather than reinforce the existing inequities.

	Secondary Driver	Change Ideas
B1	Involve racially minoritised individuals in every stage of development	• Ensure improvement team is racially diverse and representative of the population being served • Actively acknowledge one's own racial, economic, cultural biases and privilege • Consider including women in population of focus as members of QI team • Co-partnership around shared aim • Involve people with lived experience in defining what success looks like (aim of the work), developing change ideas, and success measures • Increase awareness of initiatives for birthing women • Engaging community to explicitly talk about impacts of race and racism (Barts)
B2	Identify racist bias and apply race-critical lens to the improvement work	• Recognise factors in staff member's own performance that can affect birthing women's outcomes (ASPiH - Imperial) • Awareness of health inequalities within PPH experience (Lancashire) • Use Anti-Racism Model for Improvement (MFI-AR) to guide improvement efforts and QI initiatives • Incorporation of 7 Anti-Racism Principles to improvement methodologies in understanding population of focus and opportunities to identify and address equity gaps • Within improvement team, consider the ways in which racism impacts the lives of patients – both broadly and specifically within the clinical focus area of PPH • Acknowledge institutional racism • Pressure-test all change ideas through a race-critical lens that identifies and acknowledges power disparities • Ensure that discussions with women about this work are led by anti-racism experts with lived experience of racialisation and who are trauma-informed • Identify racist bias in decision-making process
B3	Debias and refine guidelines	• Revising guidelines to focus explicitly on utilising the 7 Anti-Racism Principles, e.g. Anaemia policy review and debiasing, emphasising ethnicity data (Barts) • Analyse and debias key guidelines and protocols for PPH centring on anti-racism and refine accordingly, specifically Anaemia guideline, PPH guideline, PPH prevention risk assessment, National Maternity Exemption Policy to include Ferrous Sulphate administration

		• Approach decolonising guidelines and policies using an MDT review panel, with training in anti-racism approaches • Staff training to increase awareness of risks and actions based on debiased PPH guidelines and protocols • Incorporation of anti-racism lens to colleague training and development • Digital innovations that support optimization of safety, quality and productivity such as Artificial Intelligence e.g. Pocektalk
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C. Reliable Delivery of Debiased Clinical Guidelines and Protocols

This primary driver focuses on the reliable delivery of debiased clinical guidelines and protocols, consistently applied across races and ethnicities.

Based on the above guidelines and frameworks, teams should look at and analyse their compliance data disaggregated by race and ethnicity to see where the greatest opportunity to close process-related gaps exists. Teams should then start in areas of care within their sphere of control where there is greatest for impact (e.g. what's in teams' gift to affect), being aware of any unconscious bias or assumptions based on race and ethnicity when going through each guideline or protocol.

Additionally, while certain elements of the above guidelines and frameworks have been highlighted below, it is suggested that improvement teams go over entire set of guidelines and frameworks around PPH above to determine which specific areas lead to highest variability of mothers at elevated risk of, or experiencing, PPH and focus change ideas on these specific areas. As guidelines have been summarised below for brevity, please refer to full guidelines above when choosing change ideas.

	Secondary Driver	Change Ideas
C1	Interventions during pregnancy	PPH risk assessment and Anaemia Detection • Assessment: Alter assessment of non-white birthing women to ensure signs of anaemia are detected (Association for Simulated Practice in Healthcare (ASPiH) – Imperial, Birmingham and Solihull) • PPH prevention risk assessment to offer opportunity for personalised care planning prior to labour (Lancashire) • Discuss alternative ways of recognising deterioration, e.g. utilising family members (ASPiH – Imperial) • PPH prevention risk assessment (Lancashire) Effective utilisation of antenatal clinics • Early-bird clinic and midwifery pre-booking group education session to support healthy pregnancy & birth and to enable

		early identification of requirement of iron treatment and ensure better optimisation of Hb throughout pregnancy (Lancashire) • Antenatal education – videos and leaflets (Lancashire) Hb optimisation • Staff awareness to ensure individualised supplementation of Hb (Birmingham and Solihull) • Introduce additional test to monitor Hb (Birmingham and Solihull) • Hb optimisation: review contracts with GP partners to enable community and primary care prescriptions to be provided (Barts) • Hb optimisation: prescribing next prescription by email to cons mailbox (Barts) Reliable delivery of clinical guidelines and protocols: • RCOG Green-top Guideline 52: Prevention and Management of PPH • NICE NG235 (Intrapartum Care) • Regional NHS Practice Guidance: Local PPH Management Guidelines • International Guidance: WHO's consolidated guidelines for the prevention, diagnosis, and treatment of PPH
C2	Interventions during birth (admission to discharge)	Awareness and Early Detection of Deterioration: • Awareness: Training and simulation of how ethnicity can affect recognition of deterioration in birthing women; recognition of needed action with darker skins; staff awareness on skin tone and deterioration in birthing women (ASPiH – Imperial, Birmingham and Solihull) • Early detection: Posters and training to support early detection of the deteriorating ill woman with darker skin (Imperial) • Doctor-led prevention plan (Imperial) Blood Loss Management: • Education and resources to improve clinical care delivery and real time accuracy of blood loss estimation (Lancashire) • Blood shortages: Guidance TXA use at knife to skin or fully dilated (Imperial) • Clear drapes for average estimated blood loss (Lancashire) Training and quality control / improvement: • Training: PPH simulation scenario teaching / masterclass (Imperial)

		• Obstetric emergency skill drills to include black and brown skin tone mannequins (Imperial) • Risk assessment and awareness package for staff (Birmingham and Solihull) • Ensure minimum standards for PPH management (Barts) • Reduce variation where risk assessments are currently documented (Barts) • Support maternity teams to follow up with staff when there is an opportunity to improve PPH management
C3	Interventions postpartum (beyond discharge)	Postpartum Bleeding & Early Recognition of Secondary PPH • Provide standardised education on expected postpartum bleeding vs signs requiring medical attention (NICE) • At postnatal contacts, proactively ask about vaginal bleeding rather than relying on women to raise concerns (NICE) • Ensure women know who to contact and how to access care if abnormal bleeding occurs after discharge (NICE) Postpartum Anaemia Detection & Management • At each postnatal contact, assess for signs and symptoms of anaemia (NICE) • Develop a standardised pathway for women with significant PPH/anaemia to ensure appropriate assessment, treatment and follow-up after discharge (NICE) Reliable Handover & Follow-up • Standardise transfer of information from maternity services to community/primary care following PPH, including birth complications and the ongoing care plan (NICE) • Ensure timely postnatal follow-up, including the first midwife contact after transfer from the place of birth (NICE)

Intrapartum care: management of postpartum haemorrhage

Call for help:

Make call if blood loss is 500 ml or more. Major obstetric haemorrhage call if blood loss is 1000 ml or more.

- Summon senior midwives, obstetrician and obstetric anaesthetist; alert haematologist
- Arrange transfer to obstetric-led care



Designated roles and tasks

Team leader

- Delegates tasks based on **ABCDE** approach
- Follows management as guided by PPH/MOH algorithm
- Regularly reviews overall status

Scribe

- Completes MOH scribe sheet/ proforma
- Prompts actions
- Records estimated blood loss and temperature every 15 mins

Runner

- Measures blood loss every 15 mins
- Sources drugs and equipment
- Reassures woman or person who has given birth and family regularly

Arm 1 - In (C)

- Assess circulation
- Set up 2 points of intravenous access (14 to 16 G)
- Warm intravenous fluid (for example, 2 litres balanced crystalloid such as Hartmann's)
- Blood/blood products
- Consider cell salvage

Drugs (D)

Give uterotonics taking into account what has already been given as part of active management. Do not give repeat doses of ergometrine or carbetocin.

- Oxytocin 5 units slow intravenous, or 10 units intramuscular
- Ergometrine 0.5 mg intramuscular
- Combined oxytocin and ergometrine (5 units/0.5 mg) intramuscular
- Tranexamic acid 1 g intravenous repeated if needed after at least 30 minutes
- Misoprostol 800 micrograms SL or PR
- Oxytocin infusion 40 units in 500 ml over 4 hours
- Carboprost 250 micrograms intramuscular (repeated at intervals of 15 mins or more, max 8 doses)
- Carbetocin 100 micrograms slow intravenous

Head (A and B)

- Lie person flat; consider raising legs
- Reassure
- Assess airway
- Assess breathing and respiratory rate
- Apply pulse oximetry
- Give oxygen 15 litres/min if needed, aim for O₂ saturation 94 to 98%
- Check temperature every 15 mins
- Consider warming devices

Arm 2 - Out (C)

- Assess circulation – continuous electrocardiogram, blood pressure and heart rate
- Set up 2 points of intravenous access (14 to 16 G)
- Take 20 ml venous blood for full blood count, clotting screen including fibrinogen group and cross-match 4 units
- Serial venous/arterial blood gas measurement every 15 to 30 mins
- Use point of care testing for haemoglobin, clotting and lactate
- Aim for haemoglobin >90 g/litre and correct coagulopathy as per major obstetric haemorrhage (MOH) algorithm

Uterus (E)

- Empty bladder
- Insert urinary catheter
- Check 4Ts: tone, tissue, trauma and thrombin
- Rub-up contraction
- Bimanual compression
- Check placenta: controlled cord traction if not yet delivered
- Check for genital tract trauma

If haemorrhage continues:

- Move to theatre
- Examine under anaesthetic
- Ensure uterus is empty and repair trauma
- Consider balloon tamponade before surgical options



NICE National Institute for
Health and Care Excellence

This is a summary of the recommendations on management of post-partum haemorrhage in the NICE guideline on intrapartum care.
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Figure 1. NICE Intrapartum Care: Management of Postpartum Haemorrhage

D. Close the Equity Gap in Experience of Care of Service Users

Deep discussions with women by trauma-informed staff during the LAN revealed powerful opportunities to close the equity gap in experience of care of birthing women. This begins by centring the perspective of women within the population of focus, building trust and safety, and meaningfully involving racially minoritised individuals in all parts of the work. This means creating safe and accessible opportunities for people to share their experiences, particularly for those whose voices have been historically overlooked or excluded.

	Secondary Driver	Change Ideas
D1	Centre perspective of service users in the population of focus	<u>Intentional co-design:</u> • Conduct three-part data review (quantitative, qualitative staff and patient) at the start of the QI project • Engage in meaningful dialogues with women, led by trained facilitators who racially and ethnically reflect the population of focus and shared lived experience • Co-produce outputs (e.g. education videos and multi-media) with women, in their local languages • Develop co-produced resources to support conversations about PPH <u>Culturally aware education & engagement:</u> • Antenatal education: videos and leaflets in languages (Lancashire; Birmingham and Solihull) • Developing culturally-aware counselling during PPH risk assessment (Birmingham and Solihull) • World Café Series for women at community centre to co-design patient information (Barts) • “Language on Wheels” co-developed with women (Barts) • Women being able to “build a leaflet” based on what resonates with them and what would be most accessible (Barts) <u>Translation and digital innovation:</u> • Translation and digital innovation to enable accessibility to information, including exploration of AI opportunities (Lancashire, Barts) • Utilising interpreters effectively, appreciating that English may not be a woman’s primary language • Access to services, focusing on interpretation including digital innovations such as Pocketalk devices • Communications with birthing women that are culturally appropriate <u>Dignity & Respectful Communication:</u>

		- Increasing staff understanding of the importance of PPH management with dignity (Barts) - Managing birthing women's awareness and expectations of PPH and PPH management
D2	Build and strengthen trust and safety	- Create safe and trusted, trauma-informed spaces for women to talk about their PPH experiences - Partner with trusted community organisations, faith leaders, and cultural healers – going to community spaces, not just having women come to clinical settings - Provide clear explanations of diagnoses and treatments in preferred languages - Build engagement, empowerment and trust by seeing birthing women as partners - Train staff to avoid racialised assumptions about PPH – instead seeing birthing women as partners - Close the feedback loop in QI – communicate what actions were taken as a result of qualitative interviews, three-part data review, etc.
D3	Meaningfully involve racially minoritised individuals in all parts of the work	- Involve people with lived experience in defining what success looks like (aim of the work), developing change ideas, and success measures - Expert-led, race trauma-informed qualitative exploration of the experiences of racialised women and families who experienced PPH

E. Stratified Data Across Race and Ethnicity for Improvement

The only way to determine whether improvement has occurred is through data—specifically, data stratified by race and ethnicity across both process and outcome measures. Teams in the LAN consistently identified data limitations as one of the most significant challenges in this work. For this reason, it is essential to assess what stratified data is available early in the improvement process and to partner with relevant stakeholders to ensure timely access to accurate, up-to-date data throughout the initiative.

	Secondary Driver	Change Ideas
E1	Collect, analyse, and publish data that is disaggregated by race and ethnicity	- Ensure QI team has access to disaggregated process and outcome level data by race and ethnicity, and able to analyse gaps in care between population of focus and white population - Disaggregate PPH data across race and ethnicity for run charts and/or time series data using Statistical Process Control Charts (all teams + Lancashire)

		- Create sustainable process or system of reporting and analysing data to look for improvement (e.g. trends and shifts) based on the QI work - Three-part data review to understand perspectives of women and staff
E2	Ensure frequency of stratified data supports pace of improvement (e.g. weekly, monthly)	Ensure data supports pace of improvement, e.g. weekly or monthly reporting of real-time data (vs. historical data from 1+ years previous)
E3	Create an anti-racism dashboard of key metrics, linked with patient safety	- Clinical dashboard development that gives all maternity staff the ability to review KPIs disaggregated by ethnicity, deprivation, spoken language (Barts) - Explicitly link anti-racism with patient safety and support through data - Track and communicate racialised patient safety indicators, e.g. reports of discrimination, dismissal of pain, delayed diagnosis, etc. - Create QI and leadership dashboards of key measures

Summary of key tests across teams for PPH

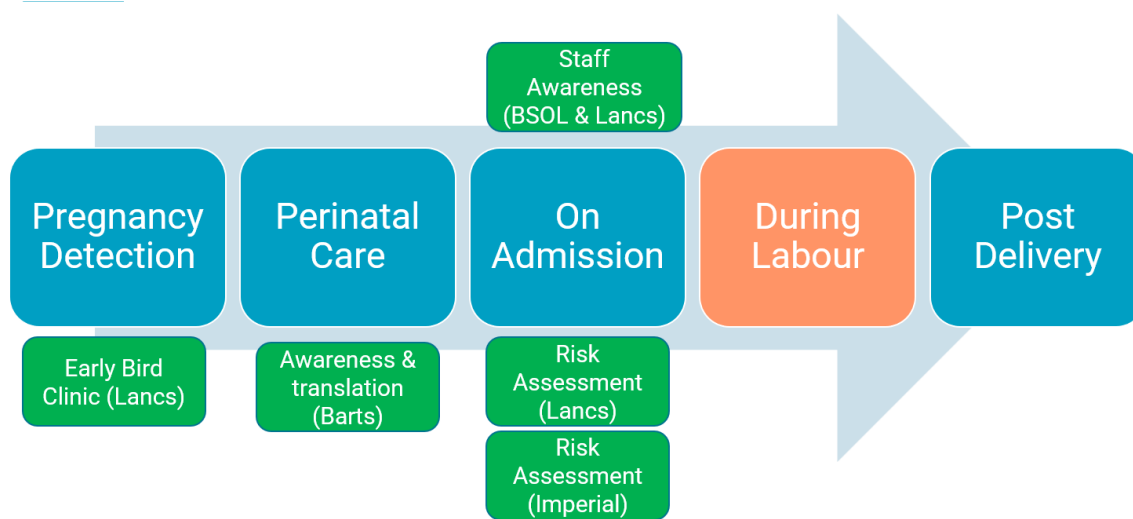


Figure 1. NICE Intrapartum Care: Management of Postpartum Haemorrhage

4. Prioritising Changes: Where do we Start?

Prioritising changes goes back to your aim: what are you trying to accomplish? Working backwards from there, each team will choose and prioritise change ideas for testing and improvement. Questions to consider to prioritise changes are:

- What is in our scope of control to impact within the length of this project/programme of work. What is in our team's gift to affect?
- What changes are our disaggregated data pointing us to? (when data is disaggregated by race and ethnicity)
- What matters most to the birthing women we are serving in the Black, Asian, and minority ethnic group populations?
- Where is the greatest potential for impact towards our aim?
- Where are there already will and champions in our organisation?

Teams in the LAN were not expected to test all listed change ideas during the programme. Consider this a menu of options from which you may choose what to tackle first based on the 7 Anti-Racism Principles that embed this work and the questions raised above.

Other QI tools may be utilised along with your current state assessment to help you decide where to start:

1. [Pareto chart](#): A type of bar chart in which the various factors that contribute to an overall effect are arranged in order according to the magnitude of their effect. This ordering helps identify the "vital few" — the factors that warrant the most attention, regarding which are the highest contributors of greenhouse gas emissions in your clinical setting.
2. [Priority matrix](#): A tool that can better help you to understand important relationships between two groupings (e.g., steps in a process and departments that conduct that step) and make decisions on where to focus.
3. [Impact-effort matrix](#): A tool that helps identify which ideas seem easiest to achieve (least effort) with the most effects (highest impact). The ideas identified via this tool would be a great place to start.

Measurement Guidance

How Will We Know if a Change Is an Improvement?

Measurement is a critical part of knowing if we have made a difference, what the impact of the changes are, if we have met our aim, and future action to take. When selecting measures, it is vital to include the people whose lives will be impacted by the improvement to have a voice in deciding what measures are important from their perspective. While aims often centre around a quantitative aim or target, it's important to also measure your improvement work using quantitative and qualitative data.

Measurement for improvement should not be confused with measurement for research. This difference is outlined in the table below.

	Measurement for Research	Measurement for Learning and Improvement
PURPOSE	To discover new knowledge	To bring new knowledge into daily practice
TESTS	One large “blind” test	Many sequential, observable tests centred on learning
BIASES	Control for as many biases as possible	Design data collection to stabilise bias
DATA	Gather as much data as possible, “just in case”	“Just enough” data gathered through small sequential samples

As this work focuses on tackling the gap in ethnic inequality for maternal and neonatal outcomes, two core principles are critical in teams’ quality improvement efforts:

1. **Collecting and analysing process and outcome data that is disaggregated by race and ethnicity** in order to see where the greatest opportunities lie in tackling the gap in ethnic inequality across the four clinical focus areas and focus improvement efforts
2. **Use of qualitative data to understand experience of birthing women and family centred on equity and anti-racism**

Disaggregating data (stratification) to show potential systemic inequities is a critical strategy for ensuring that improvement efforts close rather than maintain or widen equity gaps (e.g., race, ethnicity, language, etc).

Selecting Outcome Measures

Linking back to the numeric goal within the aim statement, the outcome measure indicates how the system is working, specifically the impact on the birthing women. Typically, there is one outcome measure for an improvement initiative, and at times, there may be a need for two.

Outcome measures should be directly tied to the team’s aim around haemorrhage and centre on the outcomes of women and babies.

Examples of outcome measures for haemorrhage include the following: (Note: each outcome measure should be disaggregated and analysed by race and ethnicity)

- % of recently delivered women who experienced an obstetric haemorrhage (disaggregated by race and ethnicity)
- Severe maternal morbidity among women who experienced an obstetric haemorrhage (disaggregated by race and ethnicity)

Specifically for this LAN, participating teams focused on decreasing PPH focused on the following outcome measures:

Barts Health:

- Number of PPH >500ml in British Bengali Women

Birmingham and Solihull:

- % women from Black African ethnicity with PPH >1500ml

Imperial:

- No of Births with Estimated Blood Loss over 1 Litre

Lancashire:

- Proportion of birthing people who have PPH ≥ 1000 mL within black & ethnic minorities
 - Numerator: Number of people who experience PPH (≥ 1000 ml) Monday-Sunday each week from black & ethnic minority groups
 - Denominator: Total number of birthing people who experience PPH (≥ 1000 ml) Monday-Sunday

Qualitative Measures of Woman's Experience of Care Centred on Equity

Additionally, qualitative measures of birthing women's experiences are critical to this work and should be guided by the team's aim. When gathering this information, it is important to take a trauma-informed-informed approach, recognising that discussions about care experiences, particularly where racism may have played a role, can be emotionally charged and potentially re-traumatising. Teams should ensure that these conversations are conducted safely, sensitively, and with appropriate support available for both birthing women and staff. Some examples of questions to ask women that experienced haemorrhage in the population of focus around their experience of care centred on equity include the following: (note: customise, refine, and prioritise based on your particular aim for haemorrhage; choose 1-2 qualitative outcome measures and 2-3 qualitative process measures, see below):

- To what extent do you feel that your care/treatment was affected by your race or ethnicity?
- To what extent were you given a detailed and compassionate explanation postpartum haemorrhage, including causes, interventions, and post-incident plan?
- To what extent did you feel included in the post-incident plan?
- To what extent do you feel confident with the information given and feel safe to ask follow-up questions about your care?
- To what degree were you treated with respect and compassion?
- To what extent do you trust your care team? To what extent do you feel your care team trusts you?
- Was information given to you in your preferred language and/or a language you understand? What have been your experiences around communication, language, interpretation, and translation?
- Were you offered an interpreter if necessary?
- To what extent was communication respectful and effective? How can it be improved even more around respect and effectiveness?
- What was the race or ethnicity of your main carer and how do you think this has (or has not) impacted your care?

- To what extent do you feel you were listened to and your concerns were heard, respected, and acted on?
- To what extent were your concerns taken seriously?
- Were you asked for feedback around your experience to inform future experience?

This is a sampling of qualitative interview questions used by one team focused on reducing PPH rates in racialised women when interviewing staff and women:

Staff:

- Are you aware of any medical conditions for women of black ethnicities in relation to higher PPH?
- What further information do you feel you need to know about when caring for women of black ethnicity with PPH?
- What do you look out for when caring for women of black ethnicity? Do you know of any risk factors for PPH unique to women of black ethnicities?

Women:

- Were you informed of the PPH?
- Did you know any risk factors?
- Did you know about PPH prior to experiencing PPH?
- Was there a discussion with a healthcare professional about the PPH? How did you feel?

Selecting Process Measures

Process measures assess whether the parts/steps in the system are performing as planned to achieve the aim. They measure whether you are on track in your efforts to improve the system around haemorrhage. Select your process measures based on which part of the process or system your data suggests needs improvement to achieve your aim, as well as what's in your gift to influence within the larger system. Ensure you are collecting process level data that includes race and ethnicity, and disaggregate by race and ethnicity when analysing your process level data.

Example process measures for haemorrhage:

- Haemorrhage risk assessment: Percentage of all birth admissions that had haemorrhage risk assessment completed with risk level assigned, at least once between admission and birth (disaggregated by race and ethnicity)
- Quantified blood loss: Percentage of all birth admissions that had measurement of blood loss from birth through the recovery period (disaggregated by race and ethnicity)
- Support for women after obstetric haemorrhage: percentage who received verbal briefing on their obstetric haemorrhage by care team prior to discharge (disaggregated by race and ethnicity)
- Impact of haemorrhage on newborn, e.g. morbidity

These were the process measures chosen by participants of the LAN focused on decreasing PPH:

Barts Health:

- Training compliance MDT approach (No. of staff trained/Overall clinical staff)

Birmingham and Solihull:

- % Risk assessment carried out antenatally, beginning of labour and during 2nd stage, iron supplement and estimated blood loss (white British, black African)

Imperial:

- Number of Blood Transfusions

Lancashire:

- Average estimated blood loss in ml in black & ethnic minority birthing people
- Birthing people with Hb check <100g/dL at 3rd trimester within black & ethnic minority groups
- % of women with PPH Risk Assessment completed at booking
- % of women with PPH Risk Assessment completed upon admission
- % of women with PPH Risk Assessment completed at during labour or immediately after birth

Note: Process data should be collected on a weekly basis and plotted over time using a run chart, annotated to note the various change ideas and Plan-Do-Study-Act (PDSA) cycles being tested. Start with the data available to you and build your measurement approach over time. Focus on collecting data that are useful for learning and improvement, rather than aiming for perfection. Remember, that measurement is a tool to support improvement, not an end in itself.

Selecting Balance Measures

Balance measures help you identify whether changes made to improve one part of the system are causing unintended consequences elsewhere. Select measures that will help you monitor for unexpected effects of the change you are testing.

These were the balance measures chosen by participants of the LAN focused on decreasing PPH:

Barts Health:

- Number of HDU admissions (No. women noted as Bangladeshi experiencing moderate harm; no. Women experiencing moderate harm)
- Women understanding importance of anaemia prevention and management (Self reporting confidence in understanding of anaemia and management options)

Birmingham and Solihull:

- Number of partially or missed risk assessments

Imperial:

- Number of HDU admissions

Lancashire:

- Average length of postnatal stay for birthing people from black & ethnic minorities
- % of women giving birth with PPH $\geq 1000\text{mL}$

Suggested Family of Measures for Postpartum Haemorrhage

Outcome Measures	Process Measures	Balance Measures
% of women who experienced an obstetric haemorrhage (disaggregated by race and ethnicity) • Numerator: # experienced obstetric haemorrhage • Denominator: # all deliveries % of women who experienced severe maternal morbidity (disaggregated by race and ethnicity) • Numerator: # experienced severe maternal morbidity • Denominator: # experienced an obstetric haemorrhage	• Haemorrhage risk assessment: % of all birth admissions that had haemorrhage risk assessment completed with risk level assigned, at least once between admission and birth (disaggregated by race and ethnicity) • Quantified blood loss: % of all birth admissions that had measurement of blood loss from birth through recovery period (disaggregated by race and ethnicity) • Communication & respect: % of race/ethnicity population of focus for women who report that clinicians explained warning signs of PPH in a respectful way	<i>Note: Facility-specific based on highest potential risks. Examples include:</i> • % of staff reporting increased workload, moral distress, or fatigue • Decline in compliance with other safety protocols • Change in PPH rates across racial/ethnic groups (particularly other non-targeted groups) • % of records with ethnicity/race documented (to ensure data validity for equity tracking) • % of women receiving unnecessary uterotonics, transfusions or surgeries

Getting Started with Measures: Practical Guidance

Look at your data disaggregated by race and ethnicity to identify where the greatest points of opportunity are for improvement. Use these findings to develop your aim and select corresponding outcome measures; process and balancing measures to assess whether your changes are leading to improvement without adversely affecting other parts of the system.

We understand that not all measures may currently be available to analyse by race and ethnicity. As a first step, assess your current state by identifying which outcome and process

measures are already being collected and whether the data can be disaggregated and analysed by race and ethnicity.

Start with the women currently in your unit. Review their patient records, confirm with the women whether race and ethnicity is correct. If race and ethnicity is not currently documented, ask women to self-identify their race and ethnicity and record this information. Continue this approach with all new women so that moving forward, completeness of patient records include race and ethnicity data, and enable relevant outcome and process measures to be disaggregated by race and ethnicity.

Use PDSA cycles to test your approach collecting qualitative data. Determine where in the process this will happen and test the process using a small scale PDSA (e.g. 1-3 women to begin with). Using the learning from those initial PDSA cycles, refine the qualitative questions and test these questions with a larger number of women. Continue to refine the questions and process until team has a high degree of belief that these are the “right” questions to ask in the right way at the right time for your population of focus, making sure it captures the women’s information related to equity, race, and ethnicity and improve the process and system in a meaningful way.

Considerations for Spread and Scale

Based on learnings from the LAN, change ideas to consider when spreading to another unit or system; or scaling regionally and nationally include the following suggestions from LAN teams:

Scale Regionally:

A. Clinical Guidelines and Protocols

- Anaemia guideline
- PPH guideline (currently a Regional Guideline)
- PPH prevention risk assessment
- National Maternity Exemption Policy to include Ferrous Sulphate administration
- Digital innovations that support optimisation of safety, quality and productivity such as Artificial Intelligence e.g. Pocektalk

B. 7 Anti-Racism Principles in Action

- Anti-Racism Principles that align with region

C. Experience of Care

- Co-design of anaemia patient information based on what local women and populations want to see - including culturally congruent dietary advice, images and support advice

Scale Nationally:

A. Clinical Guidelines and Protocols

- National Anaemia guideline would be preferable
- National PPH Guideline would be preferable

- PPH Risk Assessment would be preferable
- Optimisation - Maternity Exemption for Ferrous Sulphate
- Digital innovations that support optimisation of safety, quality and productivity such as Artificial Intelligence e.g. Pocketalk
- Accuracy of blood loss measurement and utilisation of clear drapes
- Blood loss estimation videos as teaching aids, including advice on signs of deterioration in black and brown skinned women

B. 7 Anti-Racism Principles in Action

- PPH Risk Assessment
- Access to services, focusing on interpretation including digital innovations such as Pocketalk devices
- Approach to decolonise guidelines and policies using MDT review panel with training in anti-racism approach
- Incorporation into Improvement Methodologies as standard practice in understanding population group of focus and opportunities to identify and address equity gaps
- Data aggregated by ethnicity as standard
- Incorporating anti-racism lens to colleague training and development as standard
- Communications with women that are culturally appropriate

C. Experience of Care

- Obstetric emergency skill drills to include black and brown skin tone mannequins
- 3-part data reviews to understand opportunities to address equity gaps
- Utilisation of digital innovations to support the embedding 7 Anti-Racism Principles into training and development as standard
- Co-design of patient information leaflets to support anaemia management and adherence to iron supplementation plans
- Culturally sensitive communication strategies

Conclusion

This change package provides a framework to support teams in improving PPH. The change ideas should be tested, adapted and refined to meet the needs of people using services, staff and the local context.

Teams are encouraged to use quality improvement methods to test changes, measure impact and learn what works. Meaningful involvement of people using services, families, carers and staff should remain central throughout.

Improvement is an ongoing process. Teams should regularly review data, share learning and embed successful changes into routine practice to support sustainable, person-centred care.

Acknowledgements

We would like to thank and commend the teams below for their hard work, commitment, and valuable contributions throughout the Learning Action Network:

- Barts Health / North East London ICS
- Birmingham and Solihull Local Maternity and Neonatal System / Birmingham and Solihull ICS
- Bristol, North Somerset & South Gloucestershire ICS
- East London NHS Foundation Trust/ North-East London ICS
- Imperial College Healthcare NHS Trust and King's Health Partners/ North-West London ICS
- Lancashire Teaching Hospitals NHS Foundation Trust / Lancashire and South Cumbria ICS
- North Central London ICS
- Northern Care Alliance NHS Foundation Trust/ Greater Manchester ICS
- St Mary's Hospital (Manchester University NHS Foundation Trust) / Greater Manchester ICS
- University Hospitals of Leicester NHS Trust / Leicester, Leicestershire and Rutland ICS