Embedding a Continuous Improvement Approach in Maternity Services

A case study
‘I am so proud of my team and the impressive improvements we have achieved together, which we have co-designed with the women who use our service. Our collective enthusiasm and drive, combined with our team working and supportive culture have provided the foundations for our achievements.’

Cathy Atherton, Divisional Midwifery and Neonatal Nursing Director
Background

The Maternity team at Lancashire Teaching Hospitals NHS Foundation Trust have adopted and embedded a robust Continuous Improvement approach which has delivered improved outcomes for mothers and babies. The approach was led by the Divisional Midwifery and Neonatal Nursing Director; a Service Development Midwife role was introduced to ensure that improvement was given a priority focus within the team and to provide staff with the support to deliver the ambitious programme. The Continuous Improvement process is fully embedded within the team and staff across the board are able to articulate the vision using improvement language.

The importance of Leadership

The Divisional Midwifery and Neonatal Nursing Director had a clear vision for the service and was successful in securing resources to create the role of Service Development Midwife, fully appreciating that successful improvement requires dedicated resource. This led to a programme of transformation projects to assist the service and to develop both clinically and effectively. It took a while for the staff within the teams to understand this new role and its unique contribution; however this has now become a key part of the service, which has helped the team to design and deliver ambitious improvements in the service, contributing to a culture change and CI approach.

The Divisional Midwifery and Neonatal Nursing Director and the Clinical Director provided regular support to the Service Development Midwife. This was crucial to the successful establishment of the role and to ensure they received regular updates on the project progress. This meeting was used to highlight the project successes and barriers which required unblocking.

The direction setting from the Divisional Midwifery and Neonatal Nursing Director was imperative to embedding a culture of Continuous Improvement, giving time and space to the staff involved, empowering them to succeed. This was greatly assisted by creating the Maternity, Quality Improvement Team (MQUIT see graphic below) enabling key staff in existing supportive roles to work collaboratively, creating a stronger purposeful team and reduced each member working in isolation. Their core purpose was to support the wider maternity and neonatal team by proactively identifying and risk assessing safety and quality incidents. They worked together using their collective expertise to set aims, undertake tests of change and support with the reliable implementation of solutions to complex safety and quality issues. Throughout this process the MQUIT reported directly to the Divisional Midwifery and Neonatal Nursing Director who was able to support them and offer personal development.

“Supporting the supporters was crucial to our success”
Measurement for improvement

The team used a number of approaches to focus on priorities for improvement including consultation with staff, team observations, feedback from service users, national Picker surveys and metrics. The team joined Wave 1 of the Maternal and Neonatal Health Safety Collaborative (MATNEO) led by NHS Improvement. This programme aims are to:

**Improve the safety and outcomes of maternal and neonatal care by reducing unwarranted variation and provide a high quality healthcare experience for all women, babies and families across maternity and neonatal care settings in England.**

**Contribute to the national ambition, set out in Better Births of reducing the rates of maternal and neonatal deaths, stillbirths, and brain injuries that occur during or soon after birth by 20% by 2020.**

The MATNEO project provided an opportunity to improve services with support and training from improvement experts. Three projects were agreed and signed off at the Directorate meeting for year 1. For each project a Consultant team leader was identified and a MDT for each project was also put in place; progress was reported to the Divisional Midwifery and Neonatal Nursing Director and the Clinical Directors. There were many challenges during the first year and this learning influenced the development of Wave 2 of the national programme.

For the second year of the MATNEO project 5 key areas for improvement were identified by the central team and these have become the cornerstone of the local Maternity Safety Improvement Plan. A summary of key outcome measures for two projects which have delivered extensive improvements for mothers and their babies receiving care from the Maternity Department are outlined on the next page.
Call the Midwife Project

This project aimed to increase the percentage of women having pregnancy booking appointment before 9 weeks 6 days from <30% to > 50% by April 2018. The graphs below show that this gold standard measure is being consistently achieved.

**Improvement in the percentage of women having pregnancy booking assessment before 10 weeks gestation at Lancashire Teaching Hospitals Trust compared with all trusts across the North West Coast**

Time Matters Project

Based on feedback from women and their families, the team introduced an improvement project to reduce the average length of stay at the Preston antenatal follow-up clinics, from an average of 67 mins to an average of 50 mins. It also aimed to reduce the amount of women waiting for over an hour from an average of 57% to an average of 30%. The graph below shows a reduction in antenatal length of stay by 30 minutes. This was a complex service which had been problematic for a number of years, but the new improvement approach showed great results.
Improvement methods

The team used NHS Improvements’ breakthrough series collaborative as their primary improvement methodology. Driver diagrams were developed to identify theories about what changes the team felt would likely result in them achieving their aims. The current service was process mapped to identify inefficiencies and changes were tested in PDSA (Plan Do Study Act) cycles, and measured to see if they had an impact on the project aims before they were abandoned, adapted or adopted. The team used the LifeQI electronic project management system to track any of these changes/developments and communicate the projects progress.

Aim | Primary drivers | Secondary drivers | Change ideas
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Efficient clinic processes | Efficient patient journey through clinic | Efficient use of staff | Introduce telephone call back system so midwives can ring women back when out of clinic
Efficient use of staff | Change staff numbers per clinic | Appropriate patient numbers | If women DNA in booking clinic then that midwife to go and help in FAU clinic - FAU clinic becomes a priority over office work
Appropriate patient numbers | Effective use of staff skill set | Number of unplanned attendances in clinic | Increase use of office midwife to deal with ad hoc clinical issues rather than interrupt midwife allocated to FAU clinic
Clinic Footprint | Ensure adequate staff | Women attending at correct appointment time | Create pathway for seeing scan reviews (unplanned attendances) outside of clinic time
Number of rooms within clinic | Appropriate use of clinic template | Number of unplanned attendances in clinic | Review reasons for unplanned attendances - review appropriateness of these women attending follow up clinic

Challenges

Initially lack of understanding around the new role and what it would mean for the teams
Collecting data without an electronic record system.
Building Capability

The Maternal and Neonatal Health Safety collaborative (MatNeo) provided the opportunity for the Service Development Midwife; a Consultant Obstetrician and a Consultant Neonatologist to receive intensive quality improvement training and support from NHS Improvement and the North West Coast Innovation Agency. The team were required to run improvement projects aligned to national maternity and neonatal safety drivers; and they were supported by the Divisional Midwifery Director and Nursing Midwifery and AHP Director as executive sponsor and Maternity Safety Champions.

The Service Development Midwife leads all improvement projects using the NHSI model for improvement; this has enabled all staff involved in projects to gain an understanding of the methodology. The Service Development Midwife also provides support as required to staff leading their own projects or commencing improvement roles (e.g. Sepsis Midwife, PReCePT project lead Midwife, Public Health Midwife), this may be in the form of basic quality improvement training; an understanding of how to use the LifeQI project management system; signposting to other quality improvement courses e.g. AQuA or if required more intensive support will be provided throughout the lifecycle of their project.

The neonatal consultants attend the consultant stretch programme at Lancashire Teaching Hospitals to develop their personal expertise in Continuous Improvement, which then feeds back into the service. The Service Development Midwife continues to support development of staff throughout the service.

As part of the MatNeo programme, the Service Development Midwife is involved with the development of regional communities of practice in which staff from across the North West Coast get together to share learning from improvement projects. The team have exploited opportunities to attend regional collaborative events aligned to their local safety improvement priorities including reducing smoking in pregnancy; avoiding term admissions to neonatal unit and improving safety culture.

The team discovered that using multiple methods of communication to staff and team members was key to the success of their journey. They learnt to ensure that messages were communicated using every available channel, including project boards, email, staff facebook, posters in the staff room and on the back of toilet doors.

Short regular project meetings took place on the ward, which greatly improved progress, save time and improved attendance and communication. It also meant that ward staff had the opportunity to input.

Progress was continually measured and through the development of an accurate system of data collection, this was displayed in work areas. Ensuring the team were able to see the data, which demonstrated the progress that their efforts were achieving was vital to ensure continued engagement.
What went well?

Compassionate and collaborative leadership empowered the team and motivated staff

Having a dedicated improvement role within the team

Creating an understanding of CI methodology throughout the team by delivering training

Multiple communication methods to reach all staff

Regular meetings between the Service Development Midwife, Divisional Midwifery and Neonatal Nursing Director and the Clinical Director helped to address any barriers to project progress

Tapping into support from national experts by becoming involved in the MATNEO programme

Using the trust ‘THANK YOU’ system for contributions along the way and involvement in FAB Feedback Friday

Ensuring that the right people are involved from the beginning and are given the time and support to deliver

Top tips from the Service Development Midwife

1. Get governance framework of the role right
2. Have regular meetings with the senior leads
3. Highlight project successes and barriers – senior staff can help to unblock these
4. Provide regular updates for business meetings
5. Focus on specific projects, with well defined, evidence based benefits.
6. Define SMART aims
7. Enable all staff to be involved and to contribute their ideas.
8. Value all contributions
9. Keep a positive attitude and smile

Our approach

Improving safety in maternity and neonatal services is a significant and very welcomed area of focus nationally. Our maternity and neonatal teams have completely harnessed the safety agenda and the many and varied projects they are undertaking are a testament to that priority, which also very much support our continuous improvement journey at Lancashire Teaching Hospitals. I am extremely privileged to be the Executive sponsor for many of the improvement projects and I am very proud of what these teams are delivering and achieving.

Gail Naylor
Nursing, Midwifery and AHP Director
Lancashire Teaching Hospitals NHS Foundation Trust