Ipswich Hospital NHS Trust

Unit profile

The Ipswich Hospital NHS Trust in the east of England serves a large geographical area. A significant proportion of women who use the maternity services live in rural areas. The home birth rate has been higher than the national average for some years.

Context

- Ipswich had always prided itself on supporting women who choose to deliver at home or in a midwife-led care unit. Before a clinical incident in 2007, the home birth rate was 7 per cent. In 2009/10 the home birth rate had fallen to 4.5 per cent.
- Following discussions with community midwives, it became apparent that their confidence in offering women choice of place of birth was diminishing. They felt the obstetric emergency training on offer did not address the issues they faced in clinical practice. They identified that they needed training specific to working in the community rather than the 'skills and drills' approach, which was more relevant to the hospital setting.

Project

The overall objective for the project was to establish an obstetric emergency training programme that provided community midwives with the necessary skills to deal with an obstetric emergency in the community and the subsequent transfer of the mother and her baby into the hospital maternity unit.

The expectation was that by supporting the midwives to acquire the clinical skills they had identified as necessary, they would feel more confident to offer women choice when discussing place of birth. In addition, teamworking between the community, hospital and the ambulance trust would also benefit from a more confident and skilled workforce.

Project objectives were to:

- **improve teamworking**
- **implement training for safety**
- **provide guidance on safe practice**
- **review and standardise equipment carried by community midwives.**

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Process of change

Improving teamworking

Senior midwives working in either the community or the hospital setting attended an awayday. This encouraged greater understanding of each other's roles to improve teamworking. The participants planned to spend time working alongside each other to enhance understanding and cohesive teamworking. Further awaydays have been scheduled at regular intervals.

Staff who took part in both the awayday and the Safer Births programme have reported these have been key in making them feel more valued members of the wider team.

The time devoted both to developing the leadership skills of the senior midwives and the awayday highlighted the positive impact of this investment in clinical service leaders.

Implementing training for safety

A community training programme has been delivered within a community setting since February 2011. This training covers emergency scenarios; communication using Situation, Background, Assessment, Recommendation (SBAR); the use of appropriate equipment; and record-keeping. A large proportion of the community midwives have completed this training and will attend yearly, in addition to other mandatory training. It is hoped that the hospital labour ward co-ordinators and possibly paramedics will take part in the future.

Initial evaluation showed that community midwives found this training beneficial and relevant, and considered it would improve their practice. Informal feedback has been very positive and the midwives feel more valued as the issues they face in the community have been recognised.

Providing guidance on safe practice

Emergency guidelines were updated to reflect the specific issues community midwives may face and record-keeping tools were adapted for community use.

Introduction of SBAR throughout the hospital and community service has ensured effective and relevant communication. A classification tool for emergency transfers has been designed and implemented to help communication for transfer.

Reviewing and standardising equipment carried by community midwives

The aim was for each community midwife to carry the same equipment and have a special box for dealing with emergencies such as postpartum haemorrhage (PPH). All community midwives now have a standardised equipment list, a list of what needs to be included in an 'emergency box', and how they should be laid out and organised.

Systems and processes are now in place for rolling out these changes across the community workforce. The initial apprehension felt by the community midwives has been addressed through ongoing consultation.

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Project impact

The positive impact of being involved with The King's Fund Safer Births programme was underestimated when the maternity team joined the programme. Staff have reported feeling more valued as a result of taking part in team workshops and events organised by the Safer Births programme. Local news coverage of the service has been more positive and has improved the service's public image.

The hospital is optimistic there will be a steady and sustained increase in the number of home births.

Key lessons

Cost-effectiveness

In the current financial climate part of the reason for the success of this project was that significant financial investment was not needed, as all the resources were already accessible. The maternity team needed to invest time and reassess their goals and objectives.

Protected time

Although there was a commitment from the trust to release time for the project, in reality it was difficult to achieve this. On reflection, this may have been more achievable if the work had taken place off site to reduce interruptions and the distractions of other work pressures.

Focus

Much of the success of the project was attributable to the fact that the maternity team remained focused and had clear objectives. However, this was a significant challenge as outside parties felt that other issues could also be included in the project as it progressed. The team had to resist the 'pulls' in other directions that were not within the remit of their project.

Creating a vision

With any change project, the initial step is to create a 'vision'. For the maternity team this was a fundamental element of getting staff involved in the project. Having a clear vision enabled the maternity team in the hospital to work with the community midwives to achieve the training programme they wanted and owned. The vision led to the project proposal, which was well received and helped to drive the change in training and practice forward.

Action plan

The maternity team emphasised the value of having a structured and clear plan with a realistic timeline and outcome measures from the outset, in order to achieve a vision. A detailed action plan helped to delegate tasks to the maternity team and identify people responsible for different parts of the project. Part way through the project it became apparent that they should have increased data collection at the outset, especially around morale and attitudes, in order to provide evidence of the project outcomes. Identifying and collecting measures of improvement are also important.

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Mid Cheshire Hospitals NHS Foundation Trust

Unit profile

Mid Cheshire Hospitals NHS Foundation Trust manages Leighton Hospital, Crewe; the Victoria Infirmary, Northwich; and Elmhurst Intermediate Care Centre, Winsford. The Trust was established as an NHS trust in April 1991 and became a foundation trust in April 2008. It provides a comprehensive range of acute, maternity and child health services and intermediate care to a population of almost 300,000 living in Alsager, Crewe, Congleton, Knutsford, Nantwich, Northwich, Sandbach and Winsford.

Context

- The project took place against a background of organisational change that had seen four heads of the maternity department in four years. Staff turnover was low, practices institutionalised, and senior midwifery staff were disempowered. The governance structure needed major redevelopment.
- A buddy system was introduced following investigations into two major clinical incidents where poor interpretation of cardiotocographs (CTGs) was a factor. The aim was to reduce the level of variation seen when interpreting CTGs and reduce misinterpretation. Its application was inconsistent, with the first audit showing that buddying was carried out correctly only 66 per cent of the time. The maternity team aimed to review the process and identify ways to further embed this system.

Project

The original aims of the project were to decrease CTG abnormalities, decrease postpartum haemorrhage (PPH) rates, decrease rates of low cord gases and improve the use of the maternity information system.

In the early stages of the Safer Births programme, the maternity team struggled to gain 'traction' and enthusiasm from colleagues. They recognised that in a crisis they performed much better as a team because of a clear sense of focus, which didn't exist on a day-to-day basis. Following the early programme meetings, they realised a key issue for any organisation was coherence both vertically and horizontally, which indicated a need for further development within the team. In addition, it was apparent that their difficulties in engaging with staff were symptomatic of dysfunctional teams rather than a lack of guidance and policies to inform practice. As a result, the maternity team revised their original objectives to include the improvement of governance arrangements.

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Project objectives were to:

- **improve teamworking**
- **improve communication both vertically and horizontally**
- **develop more effective governance arrangements to facilitate multidisciplinary team ownership of changes in practice.**

Process of change

Improving teamworking

In addressing the incidence of PPH, the maternity team found that demonstrating the scale of the problem was more effective than simply issuing new guidance and pro formas. In fact, the team was informed that staff had been unaware that two-thirds of PPHs occurred in normal deliveries without risk factors. The key issue unifying midwifery staff, health care assistants and doctors was one of early recognition and anticipation of PPH. One health care assistant suggested (and championed) a simple remedy, which involved weighing swabs at all deliveries rather than those in which PPH was suspected. This intervention started the following day.

The second intervention agreed by the team during an awayday was the completion of delivery summaries in the delivery room, at the woman's bedside. This was felt to be necessary as having a midwife present in the room following delivery could lead to a problem being recognised earlier. However, this represented a major culture change as midwifery staff had to use the computers in the delivery suite rooms rather than in the staff office as was their usual practice. The change in practice was implemented through close negotiation and discussion with the midwives and senior management.

The trust also ran Manchester Patient Safety Framework (MaPSaF) workshops in which staff could voice their opinions and suggestions. Two key suggestions related to staffing levels and establishing a functional triage area on the labour ward were taken forward by the management team as a direct result. In addition, the workshops were considered beneficial in achieving the safety goals and the team saw an improvement in their safety culture.

The maternity team ensured a collaborative approach was taken to address issues such as reducing PPH, implementing the National Patient Safety Agency (NPSA) intrapartum scorecard and birth rate acuity tool, reviewing a buddy system for CTG interpretation and introducing the Situation, Background, Assessment, Recommendation (SBAR) tool.

Improving communication

The use of SBAR was re-launched within the period of the Safer Births programme. This involved reorganising the information recorded on the labour ward whiteboard to make handovers/rounds more efficient and effective. To support the implementation, the maternity project team developed a series of scenarios to outline how the midwifery co-ordinators could best use the system.

The SBAR initiative is now being cascaded down through the different levels of staff. The maternity team found the support and input from their colleagues from Stockport maternity unit's Safer Births programme to be particularly instrumental in this.

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In terms of staff-to-staff communication on non-patient-related issues, several alternatives were used throughout the project to ensure staff were promptly informed about changes in practice. At one MaPSaF workshop staff highlighted key obstacles to effective communication such as lack of time to read work-related emails or information about practice changes and lack of access to large volumes of guidance for new staff (all guidance is in electronic format). All of these issues have since either been resolved or are under review.

Developing a more effective infrastructure and multidisciplinary team ownership of changes in practice

A new governance structure was introduced and provided a framework for making decisions and effectively disseminating information.

The maternity team had introduced the Birthrate Plus tool supported by a new escalation policy. This provides dynamic objective measures of levels of staffing, risk and activity which allow early intervention on challenges to safety and quality such as acute increases in activity or unexpected decreases in staffing levels. Staffing levels had persistently been the most frequent non-clinical incident. Using the acuity tool for objective measurement of staffing levels against activity demonstrated that in most cases sufficient staff were present. It is now also used to provide the backdrop of labour ward activity as a context to major clinical incidents. It requires input every two hours and the team felt that it was a tribute to the midwives when audits demonstrated more than 95 per cent completion over three months. It is now established as routine practice.

During one of the local staff workshops organised as part of the Safer Births programme the midwifery co-ordinators for the labour ward agreed to take ownership of the buddy system for CTG interpretation. They developed a consistent approach, establishing it as part of the culture of the unit. This was a significant step considered to be key in improving the care provided.

Project impact

The maternity team collected the following data as part of the project evaluation. It provides a snapshot of results but is not statistically significant.

	2009/10	2010/11
Moderate incidents	55	46
Unplanned maternal admissions to ICU	6	1
Intrapartum risk assessment completed	74%	95%
Staff recruitment – vacancies	22.2% (Jan 09)	2%
Staff retention – leavers	22	3
Sickness absence	4.7%	3.8%
Mandatory training attendance	90%	95%

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Key lessons

Strong leaders to champion change

Identifying strong leaders to champion change was considered paramount to the success of the improvement project. Key traits considered important in both leaders and staff involved in leading the project were:

- efficiency
- supportive manner
- ability to maintain momentum
- a fresh pair of eyes/perspective
- ability to crystallise focus
- consistency.

Networking

Networking with the other Safer Births programme maternity teams away from clinical work and away from larger groups was considered invaluable by the maternity team in focusing and progressing with their project plans. They felt it provided an opportunity to exchange and discuss ideas, issues and implementation strategies. The opportunity to have a closed discussion and gain the insight and experience of others was extremely invaluable.

Organisational culture

'You don't reduce caesarean section rates with policies and guidelines, you do it by changing the people' (Professor James Walker, The King's Fund Safer Births programme meeting, October 2009). The maternity team felt this statement resonated with their experience. They found it was important to create an environment where ideas can be advanced rather than simply pushing solutions. The coincidental appointment of a new head of midwifery and divisional general manager were pivotal in this.

Staff engagement

The MaPSaF days provided staff with a voice and the means to take changes forward, and allowed the safety culture of the unit to advance and mature. Engaging all staff at every level was very important. Feedback from staff during the project has been very positive. Staff felt that these events gave them an opportunity to voice their concerns and suggestions. The health care assistant who suggested weighing swabs from all deliveries had worked in the unit for more than 10 years. She had been invited to the PPH consultancy day led by one of the project facilitators, and became inspired to take action following this. She then led the innovation tenaciously.

Maintaining momentum is the biggest issue for success; the team felt there had been a sea change within the unit over the past year as they moved into a more consistent coherent form of governance around improving safety for mothers and babies.

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North Middlesex University Hospital NHS Trust

Unit profile

The North Middlesex University Hospital NHS Trust is a diverse district hospital in Enfield, which serves the population of Haringey. Haringey is the fourth most deprived borough in London. More than 190 languages are spoken in the population, 58 per cent of whom are from minority ethnic communities.

The clinical midwifery services at the hospital are led by the head of midwifery and the clinical director. The obstetric and anaesthetic team currently provide consultant cover to the labour ward 40 hours a week. There is a maternity day unit to support antenatal care for higher risk women. Women with complications during pregnancy are seen on the labour ward. The midwifery ratio is 1:35 and midwives are visibly present in children's centres locally. A clinical practice facilitator post was funded through NHS London in March 2009.

Risk reporting is established, the Maternity Dashboard is used and regular audits are undertaken – generally focused around Clinical Negligence Scheme for Trusts (CNST) requirements. Maternity achieved CNST level 3 in January 2008.

Context

During the project the maternity team had a number of key events and changes, some expected and others not, which influenced progress towards the final outcomes of the project. These included:

- working towards maternity CNST assessment in January 2011
- increased activity due to proposed reorganisation of maternity services
- maternity unit restructuring affecting staff morale as some band 7 and 8 registered midwives had to reapply for their jobs
- the introduction of new maternity notes
- the appointment of a new head of midwifery in 2010
- trust reorganisation leading to the creation of clinical business units
- the introduction of cost improvement projects (CIPs) impacting on the staffing establishment
- major office moves, only months before the CNST assessment, as older hospital buildings were to be demolished.

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Project

The overarching aim of the project was to reduce intrapartum term stillbirth and early neonatal death, through the improved recognition, appropriate referral and management of high-risk women/babies and improvement in staff communication.

Project objectives were to:

- **improve understanding of cardiotocographs (CTGs)**
- **ensure the use of syntocinon was in line with best national practice and implemented by all maternity staff**
- **increase the opportunities for multidisciplinary training and communication with particular focus on effective and prompt communication on the labour ward**
- **improve recognition and appropriate referral of high-risk women.**

Process of change

Improving understanding of CTG

The team audited the use of fetal heart rate monitoring guidelines and incorporated them into the maternity record audit tool. This enabled them to identify current practice and areas for further development and focus. In addition, they reviewed and revised the guidelines, ensuring they were based on evidence to support practice.

CTG training was introduced in all emergency skills and drills days and maternity skills workshops. The weekly update sessions continued but with renewed focus on training during labour ward rounds.

As part of the Safer Births programme, the team had free access to an online CTG package (courtesy of OKB Ltd) for a limited number of staff.

Use of syntocinon

Obstetric consultants agreed the standard regimen to be used specifically for the second stage of labour, and a copy of the syntocinon regimen was put in every delivery suite room.

The team did audits of practice, for example, compliance with guidelines for augmentation of labour and the policy for intrapartum record-keeping and general care in labour.

Multidisciplinary training

Staff increased the number of skills and drills sessions to increase opportunities for multidisciplinary training. The training included opportunities for staff to reflect on teamworking and outcomes.

A consultant obstetrician, consultant anaesthetist and two midwives attended PRactical Obstetrics Multi-Professional Training (PROMPT) training to facilitate live drills.

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Communication on the labour ward

A questionnaire on labour ward communication identified areas that staff felt it was important to improve. The team also audited handover information, including the attendance of different staff groups.

A bespoke multidisciplinary session on process mapping around labour ward rounds was provided by The King's Fund. The maternity team identified a need to review communication on the labour ward, in particular around shift change, ward rounds and relating to risk.

The team introduced Situation, Background, Assessment, Recommendation (SBAR) underpinned by training, and modified communication guidelines. These looked specifically at the use of SBAR during handover of care. Both the tool and guidelines were available on the hospital intranet. The department's operational guidelines were revised and ratified to reflect new structures within maternity and the new communication process. A bleepholder management role was introduced in 2011 to further improve effective communication.

Record-keeping

To improve record-keeping, the project team introduced the use of, and training on, the Perinatal Institute notes for both doctors and midwives. The team also introduced Modified Early Obstetric Warning Score (MEOWS) charts and guidelines to support their use. Information on this was available on the intranet and in the library. Staff were also reminded at ward rounds about the use of the documents.

The team audited compliance with the record-keeping guidelines and introduced a system of telling staff in writing about their good or poor record-keeping practices. Copies of the letters are sent to the manager and midwife supervisor who meet with staff with poor record-keeping. The head of midwifery is kept informed in all cases.

Improving recognition and appropriate referral of high-risk women

The team focused on staff skills and staffing levels. Mandatory maternity skills workshops (twice a year) to focus on intrapartum care and communication were developed over the course of the project. This included early recognition of seriously ill pregnant women as part of mandatory resuscitation training and on maternity skills workshops.

Project impact

The maternity team collected the following data as part of the project evaluation. The data provides a snapshot of results but is not statistically significant.

	2008	2010
Serious untoward incidents associated with CTG tracing	3	1
Term stillbirths	2	1
Term early neonatal deaths	3	0
Babies with a cord pH at birth of less than 7.2	3%	2.8%
Term admissions to neonatal unit (NNU) direct from labour ward (retrospectively using NHS London SUI criteria/new NHS London classification – unexpected term admission >24 hours)	33 3 ICU admissions and 4 HDU	32 4 SUI
Live births	3,477	3,578

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Other impacts include:

- 99 per cent of midwives and obstetricians attended mandatory CTG training by the end of 2010, and 96 per cent of staff attended skills and drills training
- discussion/training on CTG is now part of the ward round and attendance is documented
- local guidelines were updated in Feb 2010 and compliance audited. Of the notes audited, 22 of 30 had suspicious or pathological traces and action was taken in 100 per cent of these in line with the local guidelines
- the observation of care as part of the labour audit demonstrated appropriate admission observations in 86 per cent of cases, with 88 per cent having appropriate observations documented throughout the first stage of labour including hourly monitoring of maternal pulse during auscultation of the fetal heart. Seventy-seven per cent of women had a partogram completed. All these results were an improvement on the previous audit results
- the consultant cover on the labour ward increased to 60 hours a week from October 2010, and the audit of the one-to-one care in labour during 2010 showed an improvement with an average of 89 per cent over the year
- the audit of the use of SBAR in 2010 showed more than 77 per cent compliance with onsite handover, and more than 75 per cent compliance with intrapartum/in utero transfer.

Key lessons

Breadth of project

Ensure the remit of your project is not too broad; one particular area of focus is better.

Internal project support/team

The maternity project team should commit themselves to regular planned meetings and have protected time for this.

The core team should not be too large and each individual needs to have a clear role/focus. Staff outside the core team can be used as link staff.

It is useful to have a member of the team who is also a budget holder if possible.

The benefits of working within a small core project team cannot be underestimated. Project teams report a greater bonding/teamworking within the unit to achieve a common goal and improved self-awareness as a unit – particularly when using tools such as the Manchester Patient Safety Framework (MaPSaF), and the University of the West of England interprofessional questionnaire.

Prioritising

Consider applying to be part of a national project/programme after an external review, such as the CNST assessment, so that you can use the feedback from the assessment to inform and link in with the project. Joining while in the process of preparing for the CNST assessment or a similar external review can present a number of challenges around workload management and staff availability. It was difficult to get commitment from group representatives as a result of time constraints and due to members leaving.

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Measuring improvement

Though the numbers used to show improvement/impact were small, the team felt this data provided motivation and encouragement. They recognised that without the data, they would not have seen how the changes were moving them in the right direction.

Networking opportunities

The team felt that being part of the Safer Births programme enabled them to make changes faster than would otherwise have happened. Support from the process mapping and the national study days were cited as particularly useful. Both provided an opportunity for the maternity team to focus on common solutions/ideas articulated by The King's Fund staff and other maternity teams taking part in the programme. This emphasised the importance of ongoing networking among local maternity teams and building on current relationships.

Sustainability

Ongoing training to embed the new approaches developed during the project could be hampered as a result of cost improvement programmes; motivation was considered to be a key factor in ensuring sustainability and the team felt this could be achieved by incorporating the project outputs into staff/developmental appraisals or business plans.

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