

International Practice Development Journal

Online journal of FoNS in association with the IPDC and PcP-ICoP (ISSN 2046-9292)



CRITICAL REVIEW OF LITERATURE

Person-centred, safe and effective care in maternity services: the need for greater change towards best practice

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Submitted for publication: 14th January 2019

Accepted for publication: 8th May 2019

Published: 15th May 2019

<https://doi.org/10.19043/ipdj.91.008>

Abstract

Background: Safer maternity care, defined as a triad of safe, effective and person-centred care, is a global health priority. Having a baby in the UK has never been safer, yet several inquiries in England over the past decade have made wide-ranging recommendations to improve the safety of maternity services. These recommendations relate to local and national maternity services, as well as to the wider healthcare system. This pattern of findings and recommendations has been reflected in maternity service reviews internationally. A review of maternity services in England found considerable variation in their quality, identifying that more needs to be done to make services safer, more personalised, kinder, professional and more family friendly. Regulators continue to raise safety concerns for the majority of maternity units in England, concerns that are echoed internationally.

Aims and objectives: The purpose of this article is to identify learning from relevant inquiries into the quality, safety and variation of maternity services, in order to develop understanding about what best practice looks like in maternity settings, and the relevant contextual factors important when implementing best practice in an NHS maternity service. These insights were intended to inform the implementation of best practice in a single site maternity unit in England, described elsewhere.

Methods: Five inquiries with relevance to maternity practice since 2013 (one local with national recommendations, two national and two international), two subsequent national reviews and a further 17 key service publications over 10 years from the grey literature have been identified as sources of data for analysis of best practice.

Findings/results: Three key themes were distilled: framing best practice in relation to the quality triad of patient experience, safety and clinical effectiveness; the need to implement the lessons learned from inquiries into quality and safety; and the importance of contextual factors including leadership, learning and teamwork as enablers of best practice.

Conclusions: Implementing best practice and learning from quality of care inquiries are identified as key challenges when providing person-centred, safe and effective care mediated through contextual factors such as learning, leadership and teamwork. Implementation may be assisted by using the Promoting Action on Research Implementation in Health Services (PARIHS) framework as an analytical framework to assess the context of maternity settings, because of its strengths in contextual analysis for implementation. In combination with practice development methodology, this is a potential approach for facilitating collaborative action towards best practice at the implementation stage.

Implications for practice:

- Maternity units need help to support their teams in implementing best practice and lessons emerging from public inquiries
- The achievement of best practice, described as person-centred, safe and effective, is interdependent with factors such as leadership, culture and teamwork
- The use of the PARIHS framework may be useful to explore the context of a maternity unit when implementing best practice
- An assessment of the readiness of maternity units to embrace best practice should include an examination of context, defined as a focus on culture, leadership and evaluation

Keywords: Person-centred, safe care, effective care, maternity services, context, best practice, inquiries, PARIHS framework

Introduction

Despite increasing case mix complexity confounded by rising maternal age and increased obesity rates, the overall maternal mortality rate has reduced between 2003-05 and 2014-16 (Knight et al., 2018). However, the past decade has also seen a number of reports conclude there is considerable variation in the quality of maternity care across England – notably *Better Births: The National Maternity Review* (NHS England, 2016a). Many of these reports suggest more needs to be done to make services safer, more personalised, kinder, professional and more family friendly.

Safer maternity care is also a major global health priority. The World Health Organization (2016a, 2017) identifies priorities in maternity care as part of its focus on safe, high-quality and people-centred care universal health coverage. Government policy in England reflects these ambitions (Department of Health and Social Care 2016; NHS England 2016b) as does the Royal College of Obstetricians and Gynaecologists (2016). The college's 'Each baby counts' programme aims to halve the rates of stillbirths, neonatal and maternal deaths and brain injuries that occur during or soon after birth in England by 2030 (RCOG, 2015).

Background

According to Save the Children (2015) and The King's Fund (O'Neill et al., 2008), most births in England are safe if measured by quantitative metrics. Despite this, almost half of Care Quality Commission inspections of maternity services in the UK result in safety assessments that are either 'inadequate' (7%) or 'requires improvement' (41%) (CQC, 2018). This picture is reflected internationally, with poor quality of care in many maternity services continuing to drive preventable maternal and neonatal mortality and morbidity (World Health Organization, 2017). Every woman and every baby has the right to high-quality, person-centred healthcare that is safe and effective.

Strategies to improve the provision of maternal and perinatal care, in particular to reduce preventable harm nationally and internationally, are a high priority (Tunçalp et al., 2015). This need to improve underpins this article's analysis of the national inquiries and review documents that inform learning. The aim is to identify the indicators of best practice in maternity services that integrate safety with person-centred and effective services, and the lessons learned from recent inquiries and strategy reports in England and in other countries. The insights generated inform a multiphased project with the goal of implementing best practice in one NHS maternity unit in England.

The purposes of this article then are to:

- Identify learning from relevant inquiries into the quality, safety and variation of maternity services
- Develop understanding about what best practice looks like in maternity settings
- Identify contextual factors that need to be addressed when implementing best practice into maternity services

Methods

A literature review was undertaken using the keywords: maternity; midwifery; report; inquiry; quality; obstetrics; and safety, for the period 2013-18 using the databases PDQ-Evidence for Informed Health Policymaking, Medline, PubMed, Google Scholar, King's Fund database, and Health Policy Reference Center. We only considered English language documents, either from global organisations such as the World Health Organization or English-speaking countries with similarities in maternity care provision.

This search identified five inquiries, relevant to maternity practice, general quality and safety:

- A local review of maternity services in Morecombe Bay, England, with national recommendations (Kirkup, 2015)
- Two national general inquiries (Francis, 2013; Berwick, 2013)
- Two international inquiries, from Djerriwarrh, Australia (Wallace, 2015), and Portlaoise, Ireland (Health Information and Quality Authority, 2015)

It also identified three national reviews of maternity services:

- *Better Births: The National Maternity Review* (NHS England, 2016a)
- *Creating a Better Future Together. National Maternity Strategy for Ireland 2016-2026* (Department of Health, 2016)
- *Maternity Care in Australia: A Framework for a Healthy New Generation of Australians* (RANZCOG, 2017)

A further 17 key service publications over 10 years resulted from a search of the grey literature (see Table 1).

Table 1: Key service publications

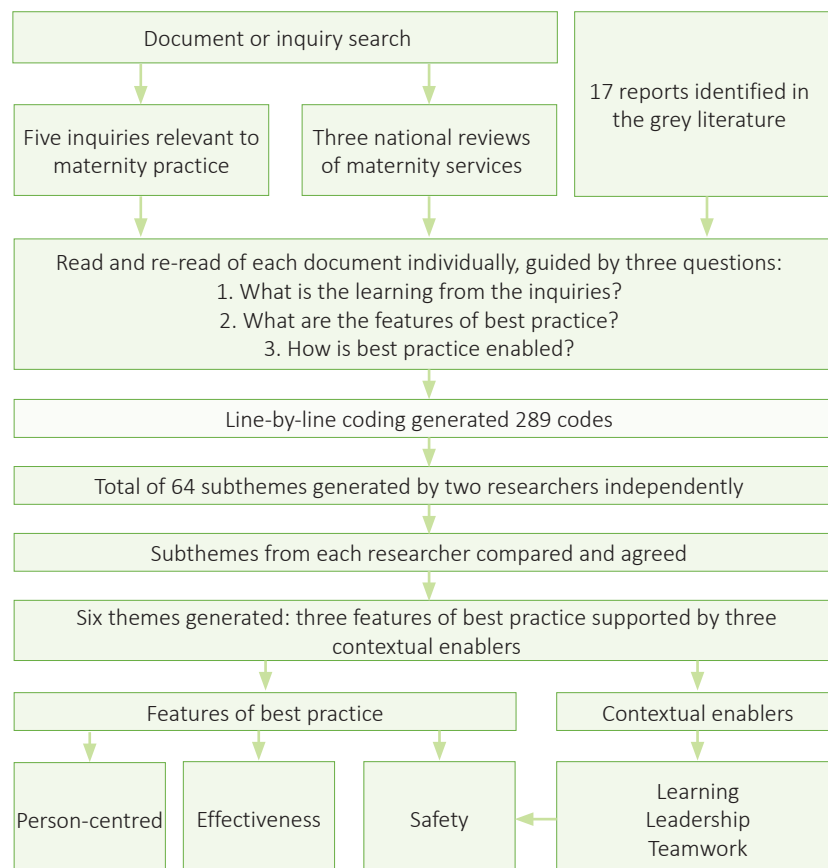
Title	Country and year of publication	Body
Improving maternity services in Australia: the report of the maternity services review	Australia, 2009	Department of Health
National guidance on collaborative maternity care in Australia	Australia, 2010	National Health and Medical Research Council
Investigation into the safety, quality and standards of services provided by the Health Service Executive to patients including pregnant women at risk of clinical deterioration, including those provided in University Hospital Galway, and as reflected in the care and treatment provided to Savita Halappanavar	Ireland, 2013	Health Information and Quality Authority
Each baby counts	England, 2015	Royal College of Obstetricians and Gynaecologists
Spotlight on maternity: contributing to the Government's national ambition to halve the rates of stillbirths, neonatal and maternal deaths and intrapartum brain injuries by 2030	England, 2016	NHS England
Safer maternity care: next steps towards the national maternity ambition	England, 2016	Department of Health and Social Care
National review of maternity services: assessment of quality in maternity services	England, 2016	NHS England
Patient safety in Victorian public hospitals	Australia, 2016	Australian Auditor General's Office (Frost, 2016)
Supporting NHS providers to deliver the right staff and skills, in the right place at the right time	England, 2016	NHS England
Supporting the Victorian hospital system to eliminate avoidable harm and strengthen quality of care	Australia, 2016	Department of Health
Quality of care: a process for making strategic choices in health systems	Switzerland, 2016	World Health Organization
Framework on integrated, people-centred health services	Switzerland, 2016	World Health Organization
High-quality midwifery care	UK, 2014	Royal College of Midwives
2018 survey of women's experiences of maternity care	England, 2019	Care Quality Commission
Standards for improving the quality of care for children and young adolescents in health facilities	Switzerland, 2018	World Health Organization
MBRRACE-UK: mothers and babies: reducing risk through audit and confidential enquiries across the UK	UK, 2017, 2018	National Perinatal Epidemiology Unit (NPEU)
Service delivery, organisation and staff: maternity services	England, 2018	NICE

The reports and commissioned documents were read with a particular focus on their recommendations. A thematic analysis of the entire report of the Morecombe Bay investigation was undertaken to explore its recommendations further. A documentary analysis of each of the inquiry reports was guided by three questions:

- What is the learning from the inquiries?
- What are the features of best practice?
- How is best practice enabled?

The reports were read and reread. First-level analysis involved line-by-line coding and generated 289 initial codes. Second-level analysis involved identifying repetition, similarities, differences and concordance in the data, and generated 64 subthemes. The second-level analysis was reviewed by an independent researcher. The 64 themes were then distilled into six final themes, three of these captured best practice, aligned with the quality criteria of person-centredness, effectiveness and safety, and three were identified as contextual enablers of best practice.

Figure 1: Flowchart: steps of documentary analysis



Findings

The six themes and their subthemes, linked to the documents analysed, are presented in Table 2. The identification of themes was informed by best practice in terms of learning from inquiries, quality and safety, and the factors that enable best practice in maternity services implementation, rather than organisational and systems enablers.

Table 2: Thematic analysis

Theme	Subtheme	Key points from inquiry analysis
The need for a PERSON-CENTRED approach and relationships that embrace the poor relationships between different staff groups that resulted in a lack of person-centred care for women and their babies and a lack of continuity, and the behaviours required to provide it	Putting the patient first	<ul style="list-style-type: none"> • Patient-centred care (Francis, 2013) • Put patients first (Francis, 2013) • Ensure person-centred care is promoted (Health Information Quality Authority [HIQA], 2015) • Maternity carers should share values, goals and a vision that is woman-centred (RANZOG, 2017) • Women should be involved in developing and designing services for their communities (RANZOG, 2017)
	Independent advocacy	<ul style="list-style-type: none"> • Independent national model for patient advocacy (Department of Health, 2016) • Establish an independent patient advocacy service (HIQA, 2015)
	Culture of caring	<ul style="list-style-type: none"> • Focus on a culture of caring (Francis, 2013)
	Women can raise concerns	<ul style="list-style-type: none"> • Patients raising concerns about their care are entitled to: have the matter dealt with as a complaint unless they do not wish it; identification of their expectations; prompt and thorough processing (Francis, 2013)
	Women offered choices, offered a personalised service and empowered to make decisions	<ul style="list-style-type: none"> • Women offered choice, empowered to make informed choice (Department of Health; 2016, RANZOG, 2017) • Personalised care centred on the woman and her family (NHS England, 2016a) • Particular attention should be paid to the needs of indigenous women, disadvantaged women, migrant or other minority groups (RANZOG, 2017) • Help women understand their individual risks so they can make decisions (RANZOG, 2017) • Support women if they have problems accessing care or a choice of care, for example the place of birth (Kirkup, 2015)
	Easy and appropriate access to culturally appropriate service	<ul style="list-style-type: none"> • Women have easy and appropriate access (Department of Health, 2016) • All women must have access to maternity care that is culturally appropriate and personally acceptable (RANZOG, 2017)
	Women's and families' voices	<ul style="list-style-type: none"> • All organisations should seek out the patient and carer voice as an essential asset (Berwick, 2013) • Patients and their carers should be present, powerful and involved at all levels of healthcare organisations (Berwick, 2013)
	Holistic approach	<ul style="list-style-type: none"> • Take a holistic approach to the woman's healthcare (Department of Health, 2016)
	Continuity of care	<ul style="list-style-type: none"> • Continuity of care (RANZOG, 2017) • Continuity of care based on trust between the woman and healthcare provider (NHS England, 2016a) • Every mother must receive continuing support (RANZOG, 2017)
	Caregiver partnership	<ul style="list-style-type: none"> • Caregiver participation in clinical decision making (RANZOG, 2017)

Table 2: Thematic analysis *continued*

Theme	Subtheme	Key points from inquiry analysis
EFFECTIVENESS embraces the need for effective ways of working with people and each other, as well as using evidence-based standards or guidelines and reviewing the extent to which they are used or not used and managing the risks resulting	Data use and information gathering	<ul style="list-style-type: none"> • A focus on data and benchmarking (Department of Health and Social Care [DHSC], 2016; NHS England, 2016) • Services to be effectively measured (Francis, 2013) • The safety of maternity units depends on their level of vigilance to detect risk and deviation from the norm, and on taking effective action when it is found (Kirkup, 2015) • Measurement and analysis for quality improvement (Department of Health, 2016) • A national data warehouse raises important issues around the standardisation of data definitions among units (Kirkup, 2015) • Develop a limited suite of in-house maternity performance indicators to be reported to the health board at a regular interval (Wallace, 2015)
	Partnerships	<ul style="list-style-type: none"> • Forge links, secondments and partnerships with other units, other sites and health boards (Kirkup, 2015; Wallace, 2015) • Maternity care must reconcile these dual aspects in order to be safe, effective and responsive (Kirkup, 2015) • Organisations failed to work together effectively and to communicate effectively (Kirkup, 2015) • Identify an approach to developing better joint working between main hospital sites (Kirkup, 2015)
	Audit and service assessment/review	<ul style="list-style-type: none"> • Regular evaluation, self-assessment and audit of quality and standards (HIQA, 2015; Kirkup, 2015; RANZOG, 2017) • Identify and report risks, ensure compliance with up-to-date and effective clinical treatments, participate in audits of quality (Kirkup, 2015) • Consider external clinical governance review of maternity services, exploring safety, effectiveness, user experience and teamworking (Kirkup, 2015) • Multidisciplinary review meeting on perinatal mortality and morbidity (Wallace, 2015)
	Evidence based policies, guidelines, protocols	<ul style="list-style-type: none"> • Service to be informed by the evidence base, with clear protocols and consistent adherence to guidelines (Kirkup, 2015; Department of Health, 2016; RANZOG, 2017) • Review the processes for carrying out investigations (Kirkup, 2015) • Improve systems for developing, implementing, evaluating, updating and monitoring guidelines and protocols (Kirkup, 2015) • Encourage their members to use existing policies and procedures to raise concerns (Kirkup, 2015) • Ensure compliance with the policies, procedures and strategies of the organisation (Kirkup, 2015) • Comply with evidence-based guidelines (RANZOG, 2017)
	Data transparency and sharing/communication of data	<ul style="list-style-type: none"> • Transparency should be complete, accurate, timely and unequivocal. All data should be shared in a timely fashion, communicated with patients, clinical teams, primary care and commissioners (Berwick, 2013; Francis, 2013; Kirkup, 2015) • Monitor quality of information being communicated to the health board about clinical services and their outcomes, to enable informed assessments of the safety and effectiveness of services (Kirkup, 2015) • When data were allocated according to hospital, suboptimal care was significantly more prevalent at FGH, compared with RLI (Kirkup, 2015)
	Governance, including clinical governance and frameworks	<ul style="list-style-type: none"> • Significant work to be done in embedding a culture of good governance and clinical quality into the organisation (Kirkup, 2015; RANZOG, 2017) • Without clinical engagement, clinical governance is bound to remain poorly informed and ineffective (Kirkup, 2015)
	Measuring patient experience, feedback	<ul style="list-style-type: none"> • Improved systems for dealing with complaints and measuring patient experience (Kirkup, 2015) • Annual survey of women's experience (Department of Health, 2016) • Ensure feedback mechanisms are in place, feedback is welcomed (HIQA, 2015)

Table 2: Thematic analysis *continued*

Theme	Subtheme	Key points from inquiry analysis
<i>(continued)</i> EFFECTIVENESS embraces the need for effective ways of working with people and each other as well as using evidence based standards or guidelines and reviewing the extent to which they are used or not used and managing the risks resulting	Investigations, root-cause analysis, serious incidents	<ul style="list-style-type: none"> • Need for root-cause analysis to include robust discussions with health board committees based on quality analysis, actions taken to rectify problems and multidisciplinary team involvement (Kirkup, 2105) • Timely, standardised process for investigations, actions, reporting and completion of investigations of incidents/serious incidents (HIQA, 2015; Kirkup, 2015; NHS England, 2016) • In addition, training is provided to all SoMs as part of the supervisor's course on how to undertake an effective investigation (Kirkup, 2015) • Effective supervisory investigations in line with relevant standards and established good practice (Kirkup, 2015) • The CQC was also reassured that the local primary care bodies would in future provide oversight of serious incidents (Kirkup, 2015) • Standardised investigation process (NHS England, 2016) • Investigation of incidents should include input from and feedback to families (Kirkup, 2015)
	Effective/robust systems and processes	<ul style="list-style-type: none"> • All systems and processes across the organisation need to be robust enough to identify early signs of problems, including independent scrutiny, role clarity, accountability, responsibility and reporting lines, and appropriate membership to enable coherent and effective documentation and action (Kirkup, 2015) • Organisations need to use a systematic approach and draw on rich sources of information to inform change, and clinical governance such as managing policies and guidelines, and complaints (Kirkup, 2015) • Review the structures, processes and staff involved in responding to complaints, and introduce measures to promote the use of complaints as a source of improvement and reduce defensive 'closed' responses to complainants (Kirkup, 2015)
	Complaints, concerns (management of)	<ul style="list-style-type: none"> • Emphasis is on early, fair and effective resolution of complaints and their management (Kirkup, 2015) • Flexibility in the ways in which people can complain and effective support for people wishing to do so (Kirkup, 2015) • Insufficient clarity as to who was responsible for ensuring that the system operated effectively to understand the concerns of the families (Kirkup, 2015)
SAFETY embraced both how staff practiced, a lack of escalation, as well as, negative outcomes for the patient, their safety and the quality of care	Identifying and responding to unsafe practice through developing safety plans and systems	<ul style="list-style-type: none"> • A system for supporting safe practice, identifying and responding to unsafe practice is required (Kirkup, 2015) • Develop and publish a safety plan (HIQA, 2015) • Maintaining patient safety depends on being vigilant for signs of deviation from normal and being prepared to take effective and prompt action (Kirkup, 2015)
	Escalation	<ul style="list-style-type: none"> • The importance of effective escalation of safety risks to a more senior level to enable correction action and prevent embedding of dysfunctional practice (Kirkup, 2015)
	Openness and honesty	<ul style="list-style-type: none"> • Openness, candour, transparency – share outcomes with staff, patients and regulators (Francis, 2013; Kirkup, 2015)
	Safety culture	<ul style="list-style-type: none"> • Evaluate safety culture (HIQA, 2015) • Leadership for a safety culture (NHS England, 2016) • Develop safety culture barometer (Francis, 2013)
	Safety as a priority/focus area	<ul style="list-style-type: none"> • All leaders should place quality and safety of care in general, and patient safety at the top of their priorities (Berwick, 2013; Department of Health, 2016) • Safety should always be the foremost priority (RANZOG, 2017) • Safe risk management underpins all maternity care (RANZOG, 2017)
	Assessment and planning	<ul style="list-style-type: none"> • Risk assessment and care planning is essential for maintaining safe care and identifying unsafe practice early (Kirkup, 2015)

Table 2: Thematic analysis *continued*

Theme	Subtheme	Key points from inquiry analysis
<p><i>(continued)</i> SAFETY embraced both how staff practiced, a lack of escalation, as well as, negative outcomes for the patient, their safety and the quality of care</p>	Information/data	<ul style="list-style-type: none"> Mounting information in terms of concerns and the general safety, privacy and dignity that patients were being afforded (Kirkup, 2015) There is no mechanism to scrutinise perinatal deaths or maternal deaths independently, to identify patient safety concerns and to provide early warning of adverse trends (Kirkup, 2015)
	Practice/supervision	<ul style="list-style-type: none"> For almost two years a midwife with potentially unsafe practice was not appropriately supervised (Kirkup, 2015)
	Sustainability	<ul style="list-style-type: none"> Review of requirements to sustain safe provision to other services (Kirkup, 2015)
	Responsibilities	<ul style="list-style-type: none"> The division of responsibilities between the Care Quality Commission and other parts of the NHS for oversight of service quality and the implementation of measures to correct patient safety failures was not clear (Kirkup, 2015)
	Systems and structures	<ul style="list-style-type: none"> The service model and the clinical systems need to be robustly aligned to ensure that patient safety and quality is the priority. This will be heavily dependent on frontline clinical information (Kirkup, 2015) Provide a failsafe system that would give early warning of problems by scrutinising the pattern of deaths of both mothers and babies (Kirkup, 2015)
<p>TEAMWORKING Embraces every level and combination of team that interfaces with maternity services as well as the need for team work linked to maternity services</p>	Roles and responsibilities	<ul style="list-style-type: none"> Clarify roles and responsibilities through, for example, a memorandum of understanding to specify these (Kirkup, 2015)
	Relationships	<ul style="list-style-type: none"> Breakdown of/dysfunctional personal and interdisciplinary relationships jeopardise care. There is a need for professionals to work together across boundaries (Kirkup, 2015; NHS England, 2016) The failure to discover these problems or to enquire into the poor interpersonal relationships that afflicted the unit raises serious questions about the diligence and conduct of the clinicians involved in those cases and of the professional leads who knew of the cases, reflecting a poor approach to clinical governance (Kirkup, 2015)
	Effective and collaborative teamworking	<ul style="list-style-type: none"> Interagency and interprofessional collaboration is key to excellent outcomes (RANZOG, 2017) Effective teamwork is essential to reduce failures (Kirkup, 2015; DHSC, 2016)
	Support	<ul style="list-style-type: none"> Staff debriefing and support following serious incidents; also advice and support more generally for junior doctors, midwifery colleagues and teams is important (Kirkup, 2015) Some issues with access to education, lack of senior support, induction and handover (Kirkup, 2015)
	Multiprofesional/interprofessional/multidisciplinary	<ul style="list-style-type: none"> Identify, develop and use approaches and measures that enable effective multidisciplinary working and teamwork including root-cause analysis (Kirkup, 2015; Department of Health, 2016; RANZOG, 2017) Multiprofessional staffing requirement (Department of Health, 2016) Appoint director of midwifery to all maternity units (HIQA, 2015) The trust is strengthening the action plan to ensure the longer-term issues of team and multidisciplinary working are addressed and embedded (Kirkup, 2015)
	Personal	<ul style="list-style-type: none"> Personal clinical interests before safety (Kirkup, 2015)
	Skills/training	<ul style="list-style-type: none"> The need for new skills and expertise in the governance team in midwifery (Kirkup, 2015)
	Communication	<ul style="list-style-type: none"> Failure to communicate effectively within and between clinical teams (Kirkup, 2015) Interprofessional communication between the midwifery and obstetric teams (Kirkup, 2015)
	Experience	<ul style="list-style-type: none"> The use of teams with appropriate experience of the services they are responsible for (Kirkup, 2015)
	Embedded	<ul style="list-style-type: none"> The need to strengthen action plans to ensure the longer-term issues of team and multidisciplinary working are addressed and embedded (Kirkup, 2015)
	Dysfunctional	<ul style="list-style-type: none"> Clear from most of our interviews that teamworking is dysfunctional (Kirkup, 2015)
	Human factors	<ul style="list-style-type: none"> These contributory factors (known as human factors) could include staffing resources, workload, job stress and anxiety, lack of training, teamwork and in some cases the breakdown in communication between clinicians (Kirkup, 2015)

Table 2: Thematic analysis *continued*

Theme	Subtheme	Key points from inquiry analysis
LEADERSHIP embraced the absence of and need for all leaders, particularly clinical leaders to develop leadership skills and be visible and supportive of all	Improvement	<ul style="list-style-type: none"> • Key to delivering a culture of improvement is leadership, both clinical and managerial (Kirkup, 2015) • The improvement of clinical leadership within the trust was a priority (Kirkup, 2015)
	Clinical leadership	<ul style="list-style-type: none"> • The need to strengthen clinical leadership, support and good management at all levels to ensure the right people are in the right place (Kirkup, 2015; Department of Heath, 2016; RANZOG, 2017) • A cadre throughout the organisation who are supported in their development as leaders of the future (Kirkup, 2015)
	Skills/training/development	<ul style="list-style-type: none"> • We recommend that the importance of putting quality first is re-emphasised and local arrangements reviewed to identify any need for personal or organisational development, including among clinical leadership in commissioning organisations (Kirkup, 2015) • All staff with defined responsibilities for clinical leadership should show evidence of attendance at appropriate training and development events (Kirkup, 2015)
	Support	<ul style="list-style-type: none"> • Carried out under supportive leadership (RANZOG, 2017)
	Strategic direction, vision, decision making	<ul style="list-style-type: none"> • Strategic direction and leadership (Department of Health, 2016) • It was difficult to identify evidence of strong and decisive leadership (Kirkup, 2015) • These can be summarised as: strategic leadership and planning (Kirkup, 2015)
	Framework	<ul style="list-style-type: none"> • Leaving a gap in visible leadership in an area of high risk (Kirkup, 2015)
	Changing leadership	<ul style="list-style-type: none"> • By this point a change in leadership was a necessary, but not sufficient, requirement to begin to restore confidence. (Kirkup, 2015) • We are not convinced that the change in midwifery leadership has yet been matched by a comparable improvement in medical leadership at divisional level (Kirkup, 2015)
	LEARNING across professional groups; learning with women and sharing learning across systems aligned to professional frameworks and competence-based practice development will help to drive improvement and reduce harm	Learning organisation
Development		<ul style="list-style-type: none"> • Ongoing professional development including patient safety and quality (Kirkup, 2015; Department of Health, 2016)
Multiprofessional/interprofessional/multidisciplinary		<ul style="list-style-type: none"> • Regular multiprofessional training at both undergraduate and postgraduate level (Kirkup, 2015; Department of Health, 2016; RANZOG 2017) • Regular opportunities to learn together to work together (NHS England, 2016; RANZOG, 2017) • Introducing a midwifery educator position and reviews of midwifery shift handover scheduling to facilitate and support staff education (Wallace, 2015)
Assessment		<ul style="list-style-type: none"> • Review the skills and competencies of all staff (Kirkup, 2015)
Competence and standards		<ul style="list-style-type: none"> • Systems to support a competent workforce, that recognises the limits of competence but also the role of continuing professional development for all (HIQA, 2015; RANZOG, 2017) • Assessment against national standards for every level of practitioner – doctor, midwife, healthcare support worker (Francis, 2013; RANZOG, 2017) • All staff, medical and midwifery, should be required to complete formal foetal surveillance education, preferably by the RANZCOG Fetal Surveillance Education Program (FSEP), on an annual basis and be able to demonstrate a skill level commensurate with their role (Wallace, 2015)
Frameworks		<ul style="list-style-type: none"> • Knowledge and Skills Framework should be reviewed (Francis, 2013) • Development of leadership framework (Francis, 2013)

Table 2: Thematic analysis *continued*

Theme	Subtheme	Key points from inquiry analysis
<p><i>(continued)</i> LEARNING across professional groups; learning with women and sharing learning across systems aligned to professional frameworks and competence based practice development will help to drive improvement and reduce harm</p>	Training and development	<ul style="list-style-type: none"> • Support and deliver continued training and development of staff to maintain knowledge and skills (Kirkup, 2015; RANZOG, 2017) • Regular emergency skills training (Wallace, 2015) • Training needs to build capability (Department of Health, 2016)
	Education	<ul style="list-style-type: none"> • Introduces a staffing infrastructure that supports high-quality midwifery education (Wallace, 2015) • Mastery of quality and patient safety sciences and practices should be part of initial preparation and lifelong education (Berwick, 2013) • Education in new management strategies (RANZOG, 2017)
	Reducing harm/driving improvement	<ul style="list-style-type: none"> • The NHS should continually and forever reduce patient harm by embracing wholeheartedly an ethic of learning (Berwick, 2013) • Learn from safety culture evaluation to drive improvement (HIQA, 2015)
	Learning culture	<ul style="list-style-type: none"> • Foster a learning culture (Department of Health, 2016)
	Sustainability	<ul style="list-style-type: none"> • Underpin and sustain staff training (Wallace, 2015)
	Best practice	<ul style="list-style-type: none"> • Focus on learning and best practice (DHSC, 2016)
	Leadership training	<ul style="list-style-type: none"> • High-quality shared leadership training, skills and continuous professional development required by local leaders for excellent care (Francis, 2013; Kirkup, 2015; RANZOG, 2017)
Shared learning from patients/women/incidents/complaints	<ul style="list-style-type: none"> • Promote the use of incidents and complaints to learn as a source of improvement (Francis, 2013; NHS England, 2013; Kirkup, 2015) • Learn and share learning from patient experiences, patient feedback and investigations to improve services (Francis, 2013; HIQA, 2015; NHS England, 2016) 	

Analysis of the recommendations from the documentary analysis has endorsed the need for: learning lessons from inquiries; recognising best practice as person-centred, safe and effective; and focusing on the contextual enablers including learning, leadership and teamworking of which the need for learning was prominent. The six themes will now be presented, integrated with the literature and informed by the three questions that guided the analysis, to focus on the features of best practice and the need to support its implementation, and the enablers that would support this implementation.

Best practice in maternity services: the quality triad of safety, patient experience and clinical effectiveness

The three best practice themes from the analysis were safety, person-centredness and effectiveness in maternity care. This mirrors the quality triad of safety, clinical effectiveness and patient experience (Berwick, 2013; RCOG, 2016; Department of Health and Social Care, 2016; Royal College of Midwives, 2017). A high-quality maternity service will exhibit all three of these domains. In 2016, all World Health Organization member states agreed on the *Framework for Integrated, People-Centred Health Systems*. This definition extended beyond both 'patient' and 'person' centred care, to embrace participation in service design, education and support, population health and community resilience. At the heart of a high-quality maternity service are staff, women and their families (World Health Organization, 2016a). Each theme emerging from the analysis will be presented in turn.

Safety

Safe maternity services are characterised by systems and structures that are open and honest, learn to improve and develop robust and sustainable safety plans based on the best available evidence, data and information. In safe systems, lines of responsibility are clearly defined and leaders prioritise safety and use plans to escalate concerns rapidly to organisational leaders. Safety is enabled by effective leadership at every level of the organisation (Warwick, 2015), challenging poor practice and facilitating a safe psychological environment where staff feel valued and empowered to raise concerns and to make service improvement suggestions (World Health Organization, 2016b). A safe maternity service is one that breaks down professional boundaries and in which all team members work together to ensure women receive the right care, at the right time, in the right place and from the right person. In essence, the organisation puts its own people first so frontline staff can in turn put women and their families first (NHS employers, 2014; NHS England, 2016c).

However, safety in maternity services is complicated by the technocratic, biomedical model of childbirth prevailing in Western societies (Davis-Floyd, 2001). Childbirth can be seen as an inherently high-risk time in a woman's life, while other professionals view it as a natural, non-medical event (Smith and Dixon, 2008). In the latter case, safety may be classed as high in systems that are person-centred – defined as compassionate, personalised and respectful rather than simply based on quantitative measures of safety such as maternal and infant mortality. How women view the maternity care they receive – and its safety – is therefore likely to vary, depending on their views about childbirth and how risky they perceive it to be (Magee and Askham, 2008). Most expectant and new mothers are experiencing improvements in care overall, however a fifth still report not being sufficiently involved in decisions around their antenatal care. This has remained unchanged since 2015 (CQC, 2019).

Person-centredness

The second theme of person-centredness links to the quality triad domain's patient experience. The analysis found that cultures of caring, choice, a strong patient voice and continuity of care all build person-centred cultures. It is recognised that those services deemed 'safe' are also high performing in terms of quality and efficiency (Department of Health and Social Care, 2016). Organisations with positive staff experiences also have better patient outcomes. This includes improved patient experience, reduced mortality and reduced infection rates (West and Dawson, 2012; West, 2013; Point of Care Foundation, 2017). Continuity of care in maternity services has been identified as a key service ambition for every woman in England because of its association with reduced stillbirth rates, reduced risk of intervention in labour and improved job satisfaction for staff (NHS England, 2017).

Person-centredness, enabled through good intra- and interprofessional teamworking, is the cornerstone to a safe maternity system. High-quality teams have a shared vision, a common sense of purpose, clearly defined roles and involvement in decision making. The relationships within the team are supportive and positive (West, 2013). High-quality maternity teams are not simply reactive to women's and service-user feedback, such as the Family and Friends Survey, but proactively seek out such feedback and share the results accurately and in timely way with colleagues to pre-empt any risk of harm (Griffiths and Leaver, 2017).

Effectiveness

The third theme of effectiveness was described in the analysis as existing in teams that have effective relationships between leaders and team members and women and their families. In such teams, all members value standardised evidence-based guidelines as a means of providing high standards of care. The system encourages and values collecting, learning and sharing data to manage and reduce risks. Effectiveness is strongly supported in the literature as a hallmark of a high-quality maternity service. Effective maternity services reduce unwarranted practice variation (Lord Carter of Coles, 2017) through the use of evidence-based guidelines based on the scientific knowledge. NICE and the Royal College of Obstetricians and Gynaecologists identify a range of national evidence-based standards and guidelines in relation to maternity services, specifically antenatal, intrapartum and postnatal care (RCOG, 2016; NICE, 2018).

Effective maternity services blend professional experience, scientific knowledge, evidence-based guidelines, people's (women and staff) knowledge and experience with local context.

An example of a high-quality maternity service is at Southmead Hospital in the UK city of Bristol. This unit has translated the evidence-based guidelines into a 70% reduction in neonatal injury. A positive safety culture has been cultivated through encouraging risk reporting, reporting of concerns and integrating learning from incidents to training and development. This culture has resulted in some of the lowest rates of birth-related complications reported in the international literature (Draycott et al., 2008).

The three themes describing best practice emerged from inquiries that focused on what needed to be learned and have further been endorsed by the literature, which also identifies the role of enablers such as leadership and teamwork. Although the qualities of best practice are recognised, it is proposed that maternity services need help with implementation of best practice.

The need to improve evidence implementation in daily practice and to focus on context

Like many areas of healthcare, maternity services receive a continuous stream of directives, guidance and centrally mandated policies, all with the good intention of providing evidence-based or group expert opinion to generate effectiveness through equality and standardised care across the UK. The Royal College of Obstetricians and Gynaecologists alone has produced 62 guidelines in total, as well as scientific impact papers, consent and clinical governance guidance (RCOG, 2018). NHS England provides safety alerts and best practice material with maternity providers (NHS Improvement, 2017). The UK overall maternal mortality rate stands at 9.8 per 100,000 and there has been no statistically significant change in this rate since 2009. (Knight et al., 2018) After expert multiprofessional case review, the 2017 MBRRACE Enquiry concluded that improvements in care could have made a difference to the outcome in 42% of the women who died. (Knight et al., 2017). A recent audit of stillbirths found that half of all cases of term, singleton, normally formed antepartum stillbirths had at least one element of care that required improvement and that may have made a difference to the outcome. Expert reviewers found that 76% of babies might have had a different outcome had the care provided been different (RCOG, 2015; Draper et al., 2017). Despite individuals, teams and organisations having a substantial evidence base to help reduce harm and evidence that harm is more likely if this evidence is not implemented, the greatest challenges remain the implementation of this evidence into daily practice and sustaining its use.

Despite clarity about what constitutes best practice, national and international crises in relation to maternity care have been numerous. Most notably these include Portlaoise, Ireland (Health Information and Quality Authority, 2015), Djerriwarrh Health Services, Australia (Picone and Pehm, 2015) and the Morecombe Bay investigation in England (Kirkup, 2015). All investigations found a dysfunctional and unsafe working culture, driven by ineffective teamworking, unclear roles and responsibilities, a lack of leadership and poor communication within and between teams. The impact of the introduction of many new policies and processes also placed significant pressure on staff who were trying to maintain the delivery of day-to-day operational activity safely. Systems failures including poor governance, operation of different policies, systems and standards contributed to an unsafe culture in these maternity services.

The literature suggests that the context into which evidence is introduced to is of equal or greater importance than the evidence itself. Context is defined as 'the setting in which practice takes place' (Rycroft-Malone et al., 2013). Understanding the key features of context in a clinical setting and the interaction between these key features is crucial to successful introduction of evidence embedded into practice (McCormack et al., 2002). The integration of person-centredness, team effectiveness and leadership is also crucial to embedding a safety culture (Manley et al., 2017).

The need to address safety culture in maternity services

'Safety culture' in maternity services has been described as 'the extent to which organisations prioritise and support improvements in safety' (Smith, 2008). This is reflected in a highly proactive methodology to stop harm rather than being reactive when an incident has happened (Frith et al., 2014). Proactive safety systems are built on openness, high reporting of clinical incidents, integrating learning throughout the organisation, not just at an individual level, and above all working with women and their families to improve the system and prevent harm (Raftopoulos et al., 2011a).

A safe maternity culture is built from frontline teams having direct communication and engagement with senior leadership (Manley et al., 2017). The workforce receives and interprets regular, consistent and uniform information from senior leaders (Siassakos et al., 2013). Staff are proactively supported to implement safety improvement ideas through training and development. Attitudes to safety and teamwork in a maternity unit can be embedded by facilitating staff to develop through team training (Raftopoulos et al., 2011b). Organisations with these qualities deliver consistently high outcome metrics in maternity, including low maternal and perinatal mortality and morbidity rates (The Health Foundation, 2011).

In these cultures, staff report lower levels of bullying and undermining behaviour, and there are low rates of sickness and attrition (West et al., 2011; Illing et al., 2013). The leadership of a maternity unit is considered to be the cornerstone of a safe maternity culture. Leadership needs to actively role model safety values aligned to organisations' primary goal of safe care. This can only be achieved if leaders generate a sense of mutual trust through frequent communication, with staff consistently using language that generates psychological safety (Leonard and Frankel, 2012).

Through generating this common safety goal, a leader builds a team that is united, passionate, coordinated and stable. The team is consistently aligned to its core values and follows these to achieve the safety goal. Effective teamwork is a key element of a safe maternity system (Cornthwaite et al., 2013).

Adaptive leadership styles are seen as critical to achieving a safety culture. These leaders are able to use participatory, transformational and facilitative leadership to build psychological safety and support staff to take part in safety improvement. However, to maintain standardisation and reduce variation, leaders need to adapt their style to democratic, strategic and controlled autocratic approaches to ensure staff remain competent, accountable and are led with fairness (Walker, 2001; Mosadegh and Yarmohammadian, 2006).

Variation in the safety vision, significant deviation from non-evidence-based practice between clinicians, inconsistent strategic decision making and communication of muddled messages all feature in unsafe healthcare systems.

Safe maternity systems generate an embedded learning system based on feedback from women and frontline staff. Evaluation is seen as a key metric to drive quality improvement (Proctor, 2002). The voice of women and their families is seen as being of high value and systematically used to identify and close safety gaps (Australian Government Department of Health, 2010). These data are openly shared to promote a congruence of staff, organisational and local women's views of what a safe maternity service looks like (Fung et al., 2008).

Findings from the service reviews above highlight what constitutes a safety culture and the implications when these individual, organisation and team components are not present. A culture of patient safety is recognised in frontline practice through individual and team activities, behaviours and engagement. Safe organisations focus on learning activities that support and embed safety behaviours of frontline individuals and teams. Organisational strategic vision emerges as a key enabler for what individual and teams are able to achieve. There is strong evidence in the international literature that competence-based factors such as knowledge do not account for the majority of medical errors (Vincent et al., 2001; Uramatsu et al., 2017). Staff know the evidence-based guidelines or where to find the evidence (McCormack et al., 2002) yet unsafe maternity cultures persist.

The need to focus on context in maternity units when implementing best practice

The three enablers of best practice identified from documentary thematic analysis were leadership, learning and teamworking. These support the themes of best practice including safety, effectiveness and person-centredness. Learning was identified as the strongest enabler, with 13 sub-elements, followed by teamworking with 11 and leadership with eight. Learning weaved strongly through all three best practice themes as a multidimensional enabler defined by the need for embedded learning systems, learning as multiprofessional teams to facilitate safety culture, and learning with and from staff, women and families to improve safety and person-centredness through continuous evaluation. Leaders who seek out the people's voice, listen and act on what is heard demonstrate true person-centredness, which drives teamwork and enables a safety culture. Leaders with the training and skills to undertake clinical leadership roles are better able to set a clear strategic direction. They provide strong, decisive and sustained support to achieve a safe and effective clinical service based on strong person-centred values and evaluating what matters to people. The themes identified in the analysis and their enablers parallel those found in the PARIHS framework, in particular the 'context' element and its associated sub-elements (McCormack et al., 2002; Rycroft-Malone, 2004; Kitson et al., 2008).

The PARIHS framework postulates that:

- The successful implementation of research evidence into practice is dependent on three dynamic, interrelating components: facilitation, evidence and the context
- That implementation is most likely to be successful when:
 - evidence aligns with the beliefs of staff and people
 - the context into which the evidence is being introduced (non physical and physical aspects) is receptive to implementation, including supportive leadership, context, culture and evaluation systems
 - systems are in place throughout the organisation to facilitate the implementation of evidence into practice

It may therefore have potential to also assess the context prior to implementing best practice (Kitson et al., 2008).

Context, in the knowledge implementation literature, is defined as the setting in which practice takes place, and comprises culture, leadership and evaluation. The biggest challenge for maternity services is therefore enabling what is already known to be implemented and used in clinical practice.

Davies et al. (2015) advocate more research into implementation of change using knowledge mobilisation archetypes. The PARIHS framework is one such archetype. Although other implementation frameworks exist (Damschroder et al., 2009), PARIHS was chosen as an analytical framework because of its particular strengths in contextual analysis and evidence implementation (Bokhour et al., 2015).

For this reason, together with the close interrelationship between the factors promoting successful evidence-based practice, practice development methodology and person-centred workplace cultures, we have identified that PARIHS may be a useful framework to guide implementation of best practice and other change initiatives too (Graham and Tetroe, 2007).

The insights generated here inform a multiphased project that aims to implement best practice in an NHS maternity unit in England. The PARIHS framework will be used to guide contextual analysis to identify the enablers that need to be strengthened for implementation of best practice. Its use will be combined with practice development methodology because of its inclusive, collaborative and participative approach to developing person-centred cultures in which everyone can flourish, using an insider facilitator and embedded researcher model (Manley et al., 2008; Manley, 2017).

Conclusion

The majority of maternity care provided in the UK is safe (Department of Health and Social Care, 2016), but ensuring high-quality care across all providers remains a challenge. Improving safety is one important part of quality care but quality is a complex triad of safe, effective and person-centred care. Some maternity settings have managed to achieve this triad better than others, despite all having the same national and international guidelines, policies and awareness of what builds high-quality care. Maternity providers receive the lessons learned from international investigations into substandard care, yet it continues to occur. Perhaps the greatest challenge is to evaluate and understand why some maternity providers have managed to successfully implement a safety improvement programme while others have not despite access to the same evidence base. It is therefore hypothesised here that the context into which evidence is being introduced is equally, if not more, important than the evidence itself. The insights developed in this documentary analysis about best practice in maternity contexts and how to enable this inform the first phase of a practice development project to be described in a subsequent publication. The project will explore the context of a specific maternity unit and its readiness for implementing best practice using the PARIHS framework as an analytical framework.

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