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ORIGINAL PRACTICE DEVELOPMENT AND RESEARCH

Assessing contextual readiness: the first step towards maternity transformation

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Abstract

Background: Health policy endorses best practice in maternity services as the quality triad of person-centred, safe and effective care. However, repeated inquiries into the quality of maternity services continue to identify concerns about culture, leadership and teamwork. Therefore support is needed to implement best practice. The Promoting Action on Research Implementation in Health Services framework (PARiHS) has the potential to inform the implementation of quality through an initial exploration of contextual readiness.

Aims and objectives: This paper describes the first phase of a quality transformation programme in a maternity service in England. It aims to assess the service's context, using the PARiHS framework to identify enabling factors to guide the implementation of best practice.

Methods: Collaborative and participative analysis, underpinned by practice development methodology, used reflective insights from diary entries and meeting notes, combined with analysis of national data, local metrics and a staff culture survey. Inductive themes generated were mapped to the 'context' elements of PARiHS to assess contextual readiness.

Results: Four themes emerged: language, leadership, learning and variability. Context mapping, showed low levels of leadership and culture and a medium level for evaluation. 'Learning' underpinned each contextual element and was described as: 1) a shared value needed for high-functioning learning cultures; 2) an attribute of collective leadership; and 3) key to evaluating what matters to women using the service and staff.

Conclusion: The PARiHS framework can help maternity services consider their contextual readiness to implement best practice. Assessing readiness is essential to prepare for successful transformation. Learning is the cornerstone of person-centred, safe and effective maternity care.

Implications for practice:

- Using the PARiHS framework helps maternity services consider their contextual readiness to implement best practice
- Leadership development and quality improvement knowledge are essential in helping maternity services to implement the quality triad of person-centred, safe and effective care
- Collective learning in organisations influences teamwork, leadership and evaluation to reduce the occurrence of safety-related incidents
- Maternity providers should be encouraged to see women as assets for collaborative learning

Keywords: Assessing contextual readiness, learning, maternity, quality, safety, PARiHS framework, person-centred care, quality

Introduction

Despite the availability of national and international evidence, including the lessons learned from international inquiries, some maternity providers have struggled to implement high-quality care – although others have excelled (Crowe and Manley, 2019). Enabling the implementation and use of best practice in maternity care continues to be challenging (Dixon-Woods and Liberati, 2019; Lenguerrand et al., 2019). Following an extensive review of best practice evidence and an analysis of inquiries into failing maternity services, a need was identified to:

1. Support maternity units to implement lessons learned about quality and safety
2. Address contextual factors, such as leadership, learning and teamwork as key enablers of best practice (Crowe and Manley, 2019)

The Promoting Action on Research Implementation in Health Services (PARiHS) framework, with its strengths in contextual analysis, was identified as having the potential to assess a maternity service context before implementing best practice. Practice development methodology supports the exploration of context because it employs a collaborative approach to 'bottom-up', facilitated change (Manley et al., 2008).

The setting

The maternity service has an annual delivery rate of 7,000. It is part of a four-site NHS provider and comprises a 28-bed inpatient ward and a consultant-led labour ward. The community midwifery (with home birth) service covers a rural geography of 60 square miles, alongside a level-three neonatal intensive care unit.

The service has experienced instability for five years. Frontline staff felt the leadership team was inexperienced and the service lacked strategic direction. The nationally recognised midwife-to-birth ratio is 1:28 but the Care Quality Commission identified a ratio of 1:33. The regulator found a culture of under-reporting of safety incidents in which learning from incidents was not always shared. The most recent NHS staff survey found low morale, staff sickness well above expected levels and frontline staff not feeling part of service change. A Royal College of Obstetricians and Gynaecologists quality review found a lack of escalation of incidents between professional groups, and consultants were not visible on the shop floor.

The first author (CC) was employed to support and facilitate the maternity service and its staff with its cultural development, safety and quality initiatives, and acted as an insider facilitator and embedded researcher.

Aim

This paper describes the first phase of a service-level quality transformation programme within an NHS maternity service in England. This 'diagnostic' phase aimed to assess the service's context, using the PARiHS framework to identify enabling factors to guide the implementation of best practice.

Methodology

The methodology of practice development (Manley et al., 2008) combined with the following two linked midrange theories was used to inform the service transformation approach, understanding and analysis, including this diagnostic phase:

- The theory of developing person-centred cultures of effectiveness (Manley et al., 2011; Manley and Jackson, 2019) that embed values of person-centredness, ways of working and continuing effectiveness, including holistic safety and learning
- The theory underpinning the PARiHS framework, notably that successful implementation of evidence into practice is a function of the evidence, facilitation and context (Rycroft-Malone, 2013)

Nine practice development principles inform the methods used to identify the service's readiness to implement best practice (Table 1) and the assumptions underpinning project facilitation (Box 1).

Collaborative and participative analysis, underpinned by practice development methodology, used reflective insights from diary entries and meeting notes combined with analysis of national data, local metrics and a staff culture survey. The inductive themes generated were then mapped to the PARiHS 'context' elements to assess contextual readiness.

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Table 1: Practice development principles linked to method

Principles of practice development	**How the principles were used and linked methods**
1. Develop person-centred, evidence-based care demonstrated by human flourishing and a healthy workplace culture	Developing person-centred care and working with staff in person-centred ways as well as implementing evidence-informed care were the values underpinning the study and planned transformation programme
2. Focus on the relationships at the microsystems level where care is provided and experienced at the frontline of practice	The maternity unit is the microsystem focus rather than the organisation
3. Facilitate active learning and formal systems learning processes to enable real-time learning and care transformation in the workplace	Using the workplace as the main source of learning encompassed: • Using evidence sources that reflect the workplace and discussing these together with staff groups – for example, the SCORE culture survey (Sexton et al., 2018) and national metrics • Supporting the leadership team with quality improvement learning resources via the embedded researcher's facilitation to co-formulate safety improvement transformation plan
4. Enable the use of evidence generated in, through and from practice to transform and improve care delivery	• The SCORE survey was used to capture staff experience and practice in their working environment • Women's voices were obtained from the NHS Friends and Family Test based on their experience of the service • The CQC inspection report captured observations of practice, the voice of women, families and staff • Observations of practice informed the RCOG-commissioned quality review • The PARiHS framework was used to collaboratively map data to ascertain readiness to implement best practice
5. Promote the importance of free thinking by blending creativity (heart, mind, soul) with more formal learning approaches to promote human flourishing – referred to as critical creativity	Two trained facilitators used creative exercises with individuals, the leadership team, ward teams within the maternity service to generate high challenge and high support, and capture staff feedback in relation to the emerging data
6. Select from a range of practice development methods in an intentional and systematic way to help people to learn, change and develop their practice in an effective, sustainable way	Participatory engagement methods were used to begin a journey of change, focused on capturing the readiness of the context through collaborative review of collected data
7. Ensure these methods accord with the methodological principles used and the stated objectives of the endeavour	All methods used embraced the underpinning values of person-centred, safe and effective care and relationships
8. Use processes (including skilled facilitation) that can be translated into context-specific skillsets	Methods included use of claims, concerns and issues (Guba and Lincoln, 1989) and focus group discussions on what mattered to staff and women
9. Integrate evaluation approaches that are collaborative, inclusive and participative	Multiprofessional groups were enabled to participate in the culture survey and values clarification events (Warfield and Manley, 1990) to capture their ambitions for improving the service, and information sharing using different media

Box 1: Underlying assumptions

Participants in the project provide honest and open commentary about the change process and feel safe to challenge and verify data sources used to inform the process, such as notes and minutes, facilitator observations. To increase the reliability of information from the data sources, anonymity is preserved and data source confidentiality maintained. Other data sources that are publicly available are employed to enable triangulation of content provided by staff participants.

Successful change involves working with all staff at all levels of the organisation to understand and work with the context. Data from professional groups at all levels within and outside the immediate maternity team are used, while maintaining ethical principles of confidentiality and anonymity, and adhering to professional standards.

All staff have the potential to change when facilitated to do so and when supported by different levels of the organisation. The readiness to learn and embrace change at various levels within the maternity service has an impact on whether successful implementation of best practice is achieved.

The workplace is a key resource for learning, development and quality improvement. This is because of the large number of deliveries, settings and multiprofessional groups of staff working in the maternity service.

Promoting Action on Research Implementation in Health Services (PARiHS) framework

The PARiHS framework (Kitson et al., 1998, 2008; Rycroft-Malone et al., 2002, 2004; Harvey and Kitson, 2016) was used to assess the contextual readiness of the maternity service to embrace change and improve the quality of services towards person-centred, safe and effective care. The PARiHS framework postulates that:

- The successful implementation of evidence into practice is dependent on three dynamic, interrelating components: facilitation, evidence and context
- Implementation is most likely to be successful when:
  – evidence aligns with people's beliefs and leaders engage stakeholders
  – the context into which the evidence is being introduced (local, organisational and external health system) is receptive to implementation. This is facilitated by leaders who understand the context, encourage innovation, remain positive and reduce variation (Kitson and Harvey, 2016)
  – organisational systems are in place to facilitate the implementation of evidence into practice

iPARiHS revises the original PARiHS framework (Table 2) to additionally highlight that successful operationalisation of the framework is dependent on innovation and facilitation (Harvey and Kitson, 2015).

Table 2: PARiHS vs iPARiHS

Successful implementation in the original PARiHS framework	**Successful implementation in the revised iPARiHS framework**
SI = f(E,C,F) SI = successful implementation f = function (of) E = evidence C = context F = facilitation	*SI = Fac^n (I+R+C)* SI = successful implementation • Achievement of agreed implementation/project goals • The uptake and embedding of the innovation in practice • Individuals, teams and stakeholders are engaged, motivated and 'own' the innovation • Variation related to context is minimised across implementation settings Fac^n = facilitation I = innovation R = recipients (individual and collective) C = context (inner and outer)

It may also, therefore, have potential to assess the context before implementing best practice (Crowe and Manley, 2019).

'Context' has four sub-elements: context, culture, leadership and evaluation. Each is aligned with a high-low continuum that identifies descriptors associated with successful implementation. High cultures value staff, stakeholders and teamwork, and promote a learning culture. A high leadership context demonstrates collaborative leadership styles that enable learning and effective teamwork. A high evaluation context is agile, multisourced and focused on multiple levels. PARiHS researchers conclude that context, when facilitating the translation of evidence into practice, is of equal or greater importance to the quality of the evidence itself. These contextual elements were used to assess the maternity service's readiness for implementing best practice.

Ethical approval

Self-assessment using the NHS Health Research Authority and the UK's Integrated Research Assessment System indicated the project did not need NHS ethics approval. In keeping with the ethical principles of dignity, confidentiality, patient and staff safety, shared values and agreeing process, the project was approved by the healthcare provider's 'Grey area projects' committee.

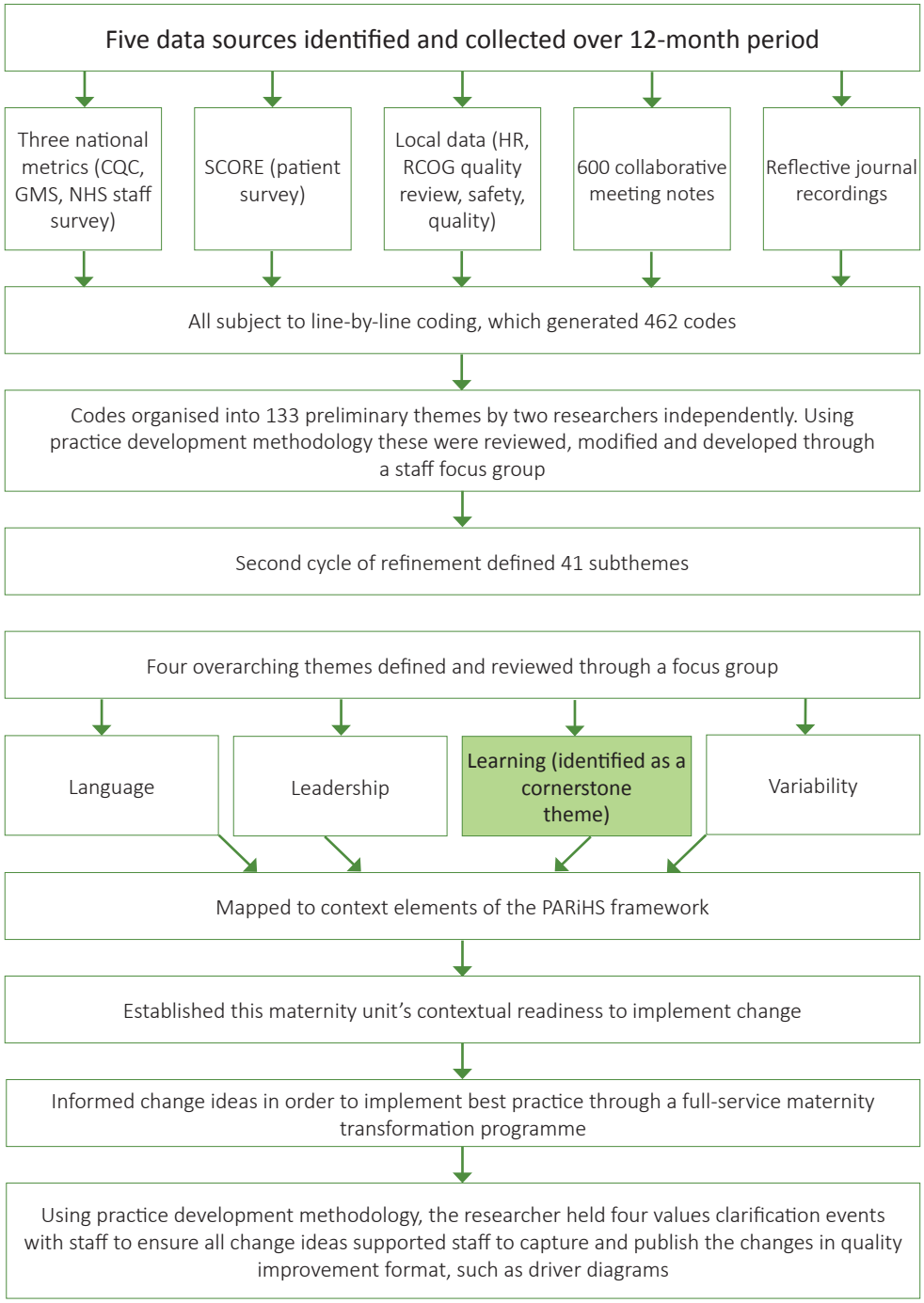
Data collection

Material from five data sources collected over 12 months by the insider facilitator/embedded researcher was reviewed by the second author independently:

- Three national comparative metrics – CQC inspections, the General Medical Council (GMC) national doctors in training survey and the NHS staff survey
- SCORE team safety culture survey conducted by maternity staff (Sexton et al., 2018)
- Locally collated safety, quality and human resources datasets, Royal College of Obstetricians and Gynaecologists (RCOG) invited quality review
- A review of 600 collaborative meeting notes
- Participatory observations recorded by the insider facilitator in a reflective journal. These were used to feed back observations to staff

The insider facilitator undertook an inductive thematic analysis (Braun and Clarke, 2006) on the five data sources, which included reviewing 12 months of reflective journal recordings (September 2016-17) to distil emerging themes. The journal recordings included reflections on internal and external meetings, collaborative interviews and discussions. Codes were reviewed independently to identify any that overlapped. Subsequent review by staff and a practice development collaborative group identified four overarching themes, with 41 subthemes. Findings were mapped against the four PARiHS elements of 'context' (Kitson et al., 2008) and an assessment of contextual readiness completed. This diagnostic phase concluded with identifying the change required. In keeping with quality improvement science methodology, these change ideas were formatted into driver diagrams and re-presented to all staff within the service (The Health Foundation, 2011; Lucas, 2016), (Figure 1).

Figure 1: Methods and themes generated and mapping to PARiHS



Results

Key study findings are presented in two sections:

- The four overarching themes resulting from the thematic analysis are described and illustrated
- Mapping of the themes to the PARiHS context elements to determine the maternity service's contextual readiness to implement best practice

Inductive thematic analysis across each independent dataset, undertaken by the insider researcher, and verified with practice collaborators and the second author, resulted in four overarching themes: language, leadership, learning and variability.

Overarching themes

Language

Language subthemes included a reluctance to challenge, disempowerment of others and a lack of recognition of and reward for good work. Explicit examples of language disempowering staff included: *'that felt like a dig at us'* and *'...deliberately said those things to wind people up. It made me feel so uncomfortable. I just stopped talking during the training'.* Aggressive use of language was observed in clinical and non-clinical settings. It included shouting, talking over each another, use of aggressive tone and defensive body language.

> *'The focus is on individuals when things go wrong. Staff describe anonymity of communication tools as being a "mask to hide behind"'* (Culture survey).

Across all settings there was either silence or lack of challenge, or where there was challenge it was met with language that stopped people speaking. In reflective journal recordings, individuals who suggested alternative approaches or improvement ideas to change current practice described themselves as 'troublemakers'. Leadership was driven by a number of key decision makers, who responded negatively to challenge. Challengers were viewed as obstructive and language was used to suggest they represented a negative energy in the room, which discouraged them from contributing. Multiple sources described subversive bullying – using language to silence staff from speaking up or escalating concerns within teams or wards.

Leadership

'Leadership' denoted those in formal leadership positions at organisational, senior management, ward and team level, as well as the leadership culture throughout the service. Subthemes include the styles, experience and competence of those in formal leadership positions, as well as the lack of vision and collaborative change implementation within this culture. Further subthemes described a lack of role modeling, poor communication and a lack of organisational cohesiveness.

Staff reported that leaders did not always role model a safety culture and that those in leadership positions were indecisive. Staff were not all invited to contribute to decision making, which created further distance between levels of the organisational hierarchy – *'the leadership team make decisions which are out of touch with the real world'.* A strong subtheme was a lack of communication flow and this resulted in a lack of cohesiveness horizontally and vertically within the service. This was described by frontline staff as: *'we get little or no information why this change has happened – it just does'*; *'a poster just appears telling us about something new'*; and *'there is an apparent discrepancy between what we are achieving in this project and what the executive team think we are achieving'.*

> *'We need firm decisions before moving forward. Medical leadership just do not turn up'* (Meeting notes).

Leadership styles were described as almost entirely autocratic, with little autonomy for ward managers to make decisions. Yet when wards or teams asked for support, leaders were described as having a 'hands-off' approach. This deterred individuals, teams and ward leaders from seeking help, escalating concerns or suggesting ideas. Instead, wards and teams were said to operate differently, with no single aligned vision. This drove 'underground' pockets of improvement described as *'we just get on with things that we think make a difference'*, with such improvements not shared with other areas. This was supported by reports that senior leaders were not visible and described as *'saying the values, but not living them'.*

> *'There are so many hoops to go through. You can just not get anything done around here.'*
>
> *'I just gave up because I kept asking and hearing nothing back. What is the point?'*
>
> *'There is no point in completing a Datix. Nothing ever changes.'*
>
> (Meeting notes, reflective journal recordings, culture survey).

Leadership was regarded by staff as unstable and inexperienced. There were multiple changes in short succession at all levels of the formal leadership team in midwifery and the medical workforce. Staff said some leaders and managers showed favouritism to some individuals, teams and areas. Others described themselves as *'*outsiders*'*, reporting that they lacked a voice and that decision making was unhealthily influenced by favourites. Outsiders said senior organisational leaders were 'fed information' that positively framed those who were favoured. There were some reports of outsiders being actively discredited by being labeled as 'obstructive', while those favoured were described as having a 'can do' attitude. The findings suggest that leadership was characterised by staff as the thoughts, perceptions and assumptions leaders make about their own decisions, actions and behaviours compared with the interpretations, assumptions and perceived thoughts that people around them have.

Learning

Learning subthemes included a lack of clinical leadership training, safety training and multiprofessional staff training. There was no evidence of learning with women and staff to generate improvement. The potential role of learning as an approach to safety improvement emerged most strongly from the culture survey, RCOG quality review and reflective journal recordings.

> *'In this organisation Datix is not about learning, it is about audit'* (Meeting notes, reflective journal recordings, culture survey).

> *'We cannot use the workplace to learn. I worry about staff turning up'* (Meeting notes, reflective journal recordings).

> *'How can we expect staff to implement findings from QI program if leadership don't understand it? They won't see any value in it'* (National metrics, reflective journal recordings, meeting notes).

> *'I don't think we should be sharing feedback data with the public' (*Meeting notes).

Learning focused mainly on single profession technical skills training, which was poorly attended, with an acceptance of arriving late and leaving early. There was no quality improvement or formal leadership training within the team. There was no evidence of non-technical skills or team training. Staff reported that learning was not viewed as a priority by those in leadership and management roles. For example, staff reported that safety investigations were undertaken but only those directly involved would receive feedback on the actions generated. There was no dissemination of learning from safety-critical incidents and no integration of learning from these into the staff training and development programme. Staff did not feel that senior leaders wanted to learn with them to improve the service and there was no evidence of learning with women and families.

Variability

The theme of variability included deviation from evidence-based practice, data and vision. Some safety metrics were not consistently collected, shared with staff or reviewed in a timely manner. Data collection was mainly through annual audit. A dashboard existed but was not used to track quality trends, with the majority of frontline staff unaware of its existence. The quality and robustness of data were reported as poor. Midwives reported fatigue from challenging widespread deviation from national and locally agreed guidelines among individual clinicians.

There was variation in vision of what a safe maternity service looks like, and the strategy to achieve it was often defined differently by different professional groups.

One of the key processes identified within the variation theme is that of equitable and standardised professional accountability:

> *'If midwives turn up late they are disciplined but if medical staff turn up late nothing happens'* (Meeting notes, reflective journal recordings).

'We [doctors] are held to account when we don't complete electronic patient records, but midwives can just ignore it and nothing happens' (Meeting notes).

'Challenging decisions that have in the past been accepted as "true" without understanding the data is really difficult. You cannot talk to the data because it is so poor. It just gets picked over. This causes confusion and no decision is made' (Meeting notes, reflective journal recordings).

Mapping a maternity service against the PARiHS context element

The four themes are mapped to the high-low continua of the context element of PARiHS and its sub-elements.

Culture

Table 3: Emerging themes mapped to culture sub-element of PARiHS context

LOW	HIGH
Unclear values and beliefs	Able to define culture(s) in terms of prevailing values/beliefs
Low regard for individuals	Values individual staff and clients (women)
Task-driven organisation	Organisation that promotes learning
Lack of consistency	Consistency of individuals' role/experience to value relationship, teamwork, rewards and recognition
Resources not allocated	Resources – human, financial, equipment – allocated
Poorly integrated with strategic goals	Initiative fits with strategic goals and is a key practice/patient issue

After Kitson et al., 1998

Although there was a vision and values statement, many staff reported that they did not know where this came from, saying *'it just appeared as a poster on the wall one day'.* Leaders struggled to recall the values when asked. Sentiment on the shop floor showed values unaligned with the priorities of staff and women, and a lack of involvement in their development. Staff reported this conveyed how out of touch leadership was. Senior leadership couldn't define the current culture nor describe the features of safe, reliable systems. The NHS staff survey found most staff felt they were unable to fulfil their potential at work, there was no clear vision and many had considered leaving the organisation in the previous 12 months.

Data analysis showed that staff did not have resources to do their job safely and felt reporting this through safety alert systems was futile as no change followed. Significant staff shortages added further pressure, with some reporting burnout, evidenced by high staff turnover and sickness, and poor recruitment. Despite clinical leaders valuing learning and development, pressure on resources meant that current service and financial needs were being prioritised by the organisation. This often resulted in staff being taken off training, or a training day being cancelled. Attendance at mandatory skills training was 25% for medical staff and 60% for midwifery staff.

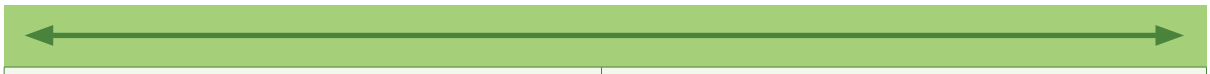
There was strong evidence of distrust within and between teams, particularly when things 'went wrong'. All evidence sources described a focus on the individual(s) involved rather than systemwide learning. Individuals described being in the 'spotlight', which generated 'resentment' towards the organisation and the managers involved, and contributed to them wanting to leave. A number of staff reported they felt the culture was reactive and punitive. During investigations, midwives felt they were treated unfairly in comparison with doctors. Although a risk governance e-newsletter was shared with staff, they felt it was ineffective at promoting systemwide learning.

There was no clinical strategy that focused on the needs of women and staff. Leadership used multiple action plans from external and internal service reviews, which often caused conflict between what leaders felt was important, what senior organisational leaders set as priorities, and what frontline staff and women felt was important. Action plans were not always aligned to national best practice or to innovative systems and processes in maternity care.

Findings suggest a highly task-driven environment with no rewards system or individual recognition. Frontline staff reported trying to maintain person-centred care but being challenged by low morale, influenced by distrust within and between professional groups. Low regard for individuals was evidenced through poor teamworking and often by a lack of escalation due to a perception of inaction from those further up the hierarchy. Overall, this context maps as 'low' for culture.

Leadership

Table 4: Emerging themes mapped to the leadership sub-element of PARiHS context



LOW	HIGH
Traditional command-and-control leadership	Transformational leadership
Lack of role clarity	Role clarity
Lack of teamwork	Effective teamwork
Poor organisational structures	Effective organisational structures
Autocratic decision-making processes	Democratic/inclusive decision-making processes
Didactic approaches to learning/teaching/managing	Enabling/empowering approach to learning/teaching/managing

After Kitson et al., 1998

There was a perceived lack of leadership at all levels to drive safety. Although safety was said to be a key organisational priority, this was not the view of ward-level management or frontline staff. Staff from different professional groups reported that leaders did not consistently model behaviours to create a safety culture.

There was a high focus on a small number of decision makers. If they were not present, no decisions would be made. There was also a hope that someone else would make the decision as opposed to there being collective decision making. Staff reported feeling distant from change and uninvolved in changes that had a direct impact on them. Interventions were not tracked, which hindered learning whether an intervention was successful or not.

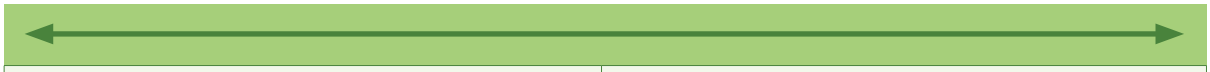
Managers and clinical leaders felt that maternity was often 'overlooked' within the current organisational structure, as it sat alongside cancer services and children's services. The effect was that there was insufficient time for maternity leaders to share concerns, innovative ideas or service changes of the necessary breadth or depth. Non-clinical management felt they did not have the resources to commit to all of these large service areas, resulting in delayed decision making and disempowered maternity leaders.

The existing learning and development programme within the service was mainly restricted to single professions. Doctors, midwives and other workers described it as 'mandatory' and not necessarily of benefit to them, the teams or women. Meeting targets was seen as a priority, meaning training and development was often cancelled or staff taken off the training day. When training did take place, it was in the form of one-off days that focused on technical skills. Development was not viewed as a

continuous process of learning that used the workplace as the main source of learning. The regulator reported bullying within the midwifery workforce and it was felt clinical leaders lacked the training and teambuilding skills necessary to supportively challenge staff without them feeling bullied. Overall, there was a picture of a workplace that was 'low' on the PARiHS context's leadership continuum.

Evaluation

Table 5: Emerging themes mapped to evaluation sub-element of PARiHS context



LOW	HIGH
Absence of any form of feedback	Feedback on individual, team and system performance
Narrow use of performance information sources	Use of multiple sources of information on performance
Evaluations rely on single rather than multiple methods	Use of multiple methods, including clinical, performance, economic and experience

After Kitson et al., 1998

Overall, the service's approach to measurement was based on annual and national surveys. Staff feedback was collected through the annual NHS staff survey, while women were encouraged to provide feedback via the NHS Friends and Family Test. Ward leaders and those with lead practice roles said they wished to seek individual and team-level feedback more frequently but did not have the time to do so. For example, the practice development team did not routinely seek feedback on staff training as it had no time to review and act on it. Many staff reported having improvement ideas but that there was no infrastructure in place to hear these or that they did not feel listened to. Despite managers and clinical leadership reporting that feedback from women and staff was important, frontline staff experienced feedback fatigue as 'nothing ever changes'. There was a misalignment between what staff felt was important to measure and what leadership and management were measuring. There was low evidence of how feedback from women and staff was disseminated, how systems changes were embedded in practice and what tangible changes were implemented.

Quality improvement data collection was through an annual audit programme and a clinical performance dashboard. Audit mainly centred on the medical workforce and there was little evidence that robust action plans were developed, shared, implemented or monitored across systems. The dashboard, although regularly reviewed by the management team, was not known to or engaged with by frontline staff. There was no central source of system performance data accessible to staff, with monitoring performance considered only relevant to 'management'. Many midwives and junior doctors did not know their team's safety performance indicators – for example rates of Caesarean sections, obstetric anal sphincter injury or induction of labour – nor were they familiar with patient feedback scores for their area of work. Data at all levels were viewed as something that had to be collected for the purposes of reporting to 'others' (the executive board or external agencies) rather than reflecting a lived value to drive improvement. There was no evidence of using quality improvement methodologies or the promotion of quality improvement as an inherent part of practice development.

This maternity service has low leadership, low culture and low-to-medium evaluation levels when mapped to the context element of the PARiHS framework. There is a need to develop transformational, compassionate leaders who role model a unified vision, value safety and facilitate effective teamwork, and who cultivate autonomy in others by enabling decentralised decision making and collective learning cultures. The system needs to use multisource and more frequent feedback of individual, team and system-level performance. On a positive note, there is recognition at all levels of the need for change based on women's feedback.

Discussion

What needs to change?

The discussion focuses on the changes required to optimise the contextual readiness of the maternity setting to develop and implement best practice. Particular reference is given to learning, a concept interdependent with the language, leadership and variability findings, and influential in terms of the context's readiness for implementing best practice when mapped to the culture, leadership and evaluation sub-elements of context in the PARiHS framework. Learning, a recurring theme in a recent analysis of maternity-related inquiries (Crowe and Manley, 2019), is argued here as the cornerstone for: embracing leadership skills and experience, quality improvement skills, technical and non-technical competence; valuing feedback from women and staff; and seeking, making sense of and using multiple sources of evidence to embed system changes. Learning is a collective value required for high-functioning cultures and an attribute of collective leadership needed to optimise the readiness of the culture to implement change (Akhtar et al., 2016).

The benefits of learning organisations in the commercial world are linked to leaders who facilitate collective learning to enhance individual capabilities and outcomes. Collective learning facilitates achievement of high productivity, sustained innovation and continued evidence-based practice (Senge, 1990; Odor, 2018). Safety-critical settings, such as aviation and the nuclear and chemical industries, demonstrate collective learning to build 'highly reliable organisations' (Roberts, 1990; Senge 1990). Similarly, evidence in healthcare suggests that collaborative learning generates safe and reliable systems where clinical outcomes are improved (NHS Improvement, 2016). It is therefore a priority to develop high-functioning collective learning organisations and teams that exhibit all three aspects of the quality triad, supported by clinical leadership, effective teamwork and evidence-based practice. The leadership and cultural contextual readiness elements of such organisations would be high on the PARiHS continua.

A learning culture creates strong leadership and teamwork, positive language and reduced variation

A high contextual readiness for leadership and culture will mean the maternity service is better placed to implement best practice. Within the study context, leadership needs to move towards being participative and compassionate, alongside promoting a learning culture that reduces the occurrence of harm. Failing to embed learning from safety incidents for all staff, or doing so inconsistently, may increase variation in clinical practice and clinical outcomes (Lenguerrand et al., 2019). Consistent leadership that role models the dissemination of good practice, reduces professional tribalism and encourages multiprofessional working and learning therefore has potential to reduce variation through teamwork.

Learning in the context of safety is often confined to incidents after harm has occurred (Hollnagel et al., 2015) and accentuated in healthcare by not tackling multiprofessional conflict and barriers to multiprofessional working. This impacts on whether culture change is successful, and non-clinical industries set good examples in this respect (Barker, 2007). Teams in non-clinical environments more often have goals in common with the organisation; a major barrier to effective healthcare teams are differing allegiances between professional groups and the wider team (Firth-Cozens, 2001). Effective clinical leadership and teamwork inherently rely on different professional groups living a shared goal for the primary interest of the team (Mitchell et al., 2012; Babiker et al., 2014) and abandoning professional tribalism (Weller et al., 2014). Leaders with good facilitation skills can enable workplace learning together to overcome these cultural barriers and build a workforce that works effectively together (Braithwaite et al., 2016). Such leaders use the workplace as the main resource for continuous learning in order to achieve the full potential of the person and the team (Akhtar et al., 2016).

Learning generates time and space for different professional groups at all system levels to come together and innovate (West, 2015). Innovative cultures are safer and more effective through stimulating positive wellbeing (Doyle et al., 2017), enthusiasm and staff engagement for quality improvement

within their services (The King's Fund, 2015). Shared learning in a safe environment encourages high support and high challenge between team members (Gurm, 2015), which helps resolve conflict between and within multiprofessional groups (McKibben, 2017).

Transformative leaders are compassionate, collaborative, visible and use positive language. Visibility supports relationships through building trust (Collins, 2015) and enables collaborative leaders to demonstrate compassion, role model safety behaviour and recognise good work – this changes how others around them behave, react and respond (West, 2015). Visibility and its consequences are further enhanced by senior leaders undertaking multiprofessional skills training alongside frontline staff (World Health Organization, 2011; NHS Leadership Academy, 2013). Through learning from and building on what went well, leaders nurture a safety culture that minimises the occurrence of harm (Hollnagel et al., 2015). Positive language builds an appreciative approach and is a powerful engagement tool for countering the negativity that impairs readiness to change. It can generate new ideas and motivate staff to go the extra mile; positive language invites challenge and provides a continuous stream of feedback to staff to maintain and enhance relationships between staff, service users and senior leaders.

Leadership types, styles and experience impact on teamwork and team culture (Manley et al., 2011). Transformational leaders role model teamworking, affiliation, enablement and openness, and understand the relevance of implementing innovative evidence in their workplace setting (Cook and Leathard, 2004). Leaders also have the potential to enable organisational processes that facilitate the integration of new evidence (McFadden et al., 2009).

A learning organisation builds stability and reduces variation

Stability is defined here in terms of a stable workforce and human resources processes, and aligned vision and decision making. Learning and development impacts positively on factors causing instability, such as bullying and a lack of compassion, to reduce turnover and attract staff as being part of a high-functioning team directly improves job satisfaction (Lee-Kelley and Blackman, 2007). While people in multiprofessional groups come from diverse backgrounds with different learned behaviours and ingrained practices, lifelong learning is common to all.

When staff from multiprofessional groups learn together they develop shared goals, a common vision and better understanding of each other's professional roles (Hulks et al., 2017). Individuals and teams feel valued and abolish barriers resulting from perceived ideas, concerns and expectations that one professional group may have of another. Compassionate leadership contributes inclusive and values-based recruitment, a shared vision and continuous learning, and allows everyone to have a voice. The resultant system creates a sense of belonging, professional growth, fulfilment and supportive, fair, employee-centred practices. This in turn leads to reduced turnover and improved workforce stability (West and Chowla, 2017). A stable workforce sustains a safety culture because staff are more familiar with local systems, policy and guidelines, and are more likely to work together for longer, build psychological safety (Frankel et al., 2017), behave altruistically towards each other, challenge conflict and live a shared vision (Senge et al., 2015).

A learning organisation delivers person-centred care

People learning together in maternity care settings is about co-production with women and staff. Within PARiHS (Kitson et al., 2008), the definition of high culture is one that is client and staff focused. Defining high-functioning learning organisations as 'person-centred' embraces understanding of women as people reflecting a contemporary research focus. Evidence shows that maternity systems designed with women are safer, more effective and of high quality (Vennik et al., 2016). Women should be part of the team when embedding personalised and safe care. Co-production has historical roots in American civil rights and social care. Collaborative co-production brings together two expert groups – providers and recipients of care – who learn together and co-create long-term relationships

based on skills and shared information (Realpe and Wallace, 2010). Another outcome of co-production is empowered frontline staff (Needham and Carr, 2009) who practice autonomously, supported by collaborative leaders. Collaborative leaders in maternity services seek feedback from women and staff on their own actions, behaviours and others perceptions to gain learning that helps them build trust within teams (Nielsen et al., 2008). Shifts in leadership style, from approaches that are centralised and outcomes based to approaches that analyse systems and processes with those who are familiar with them, will empower staff and women to undertake quality improvement supported by senior leaders, to ensure the priorities of women, frontline staff and the organisation are aligned.

Resource pressures, particularly insufficient time, are such that staff have little opportunity to develop creative solutions. Investing more time in learning and development goes beyond benefiting those learning – it is also an investment that supports organisational systems in producing high-quality, safe and effective maternity services (Davies and Nutley, 2000). This illustrates so-called double-loop learning, as described by Argyris and Schön (1996), where learning questions current strategy and the feedback used to inform it.

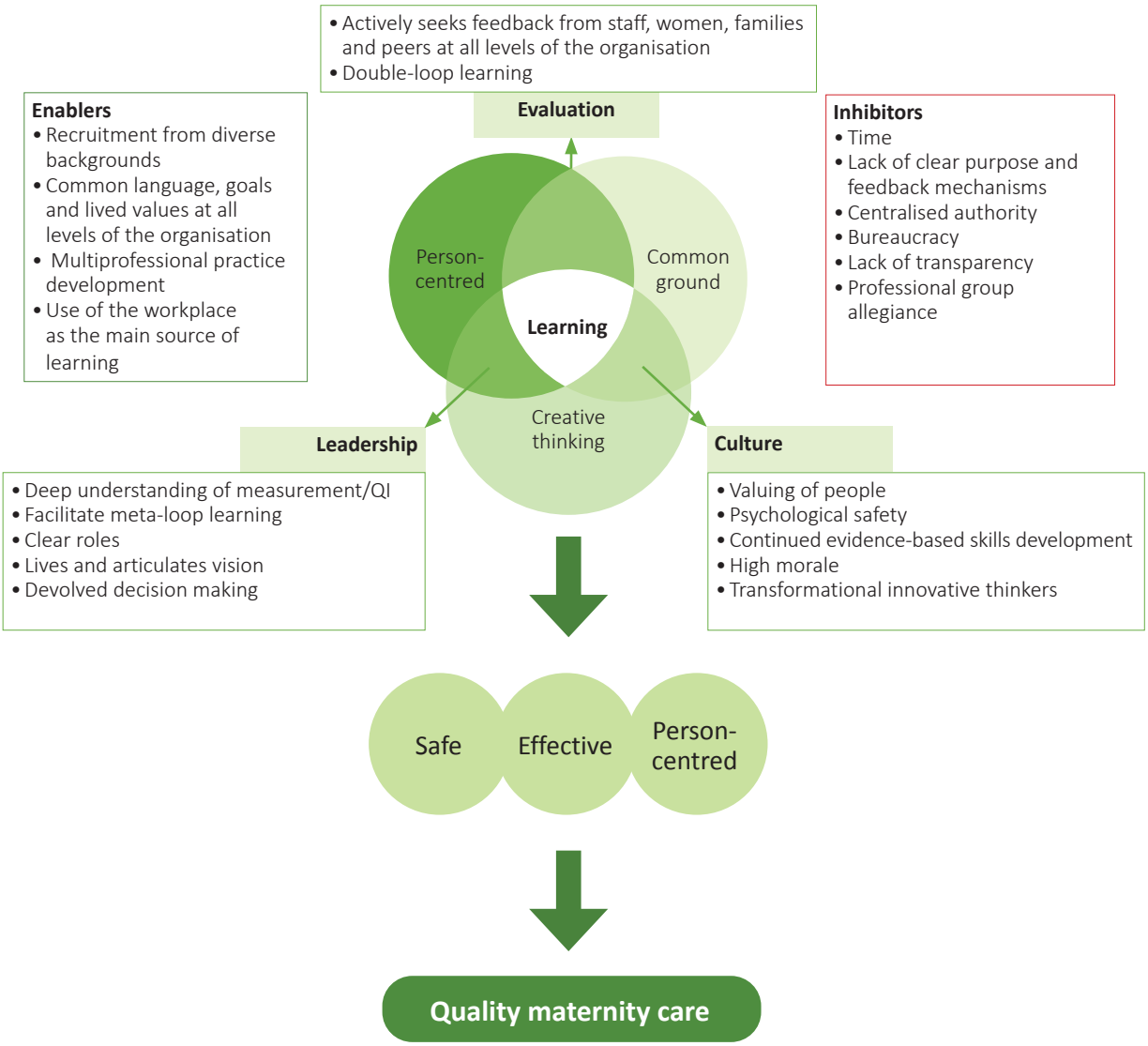
A learning organisation promotes reflection

Reflection on individual, team and organisational behaviours is a facet of high-performing learning organisations. This was identified as missing within this maternity service's context when mapped to PARiHS. Systems that encourage reflexivity are regarded as safer (Iedema, 2011) and, at an individual level, are essential for practising clinicians (Mann et al., 2009). Learning and development in a safe environment facilitate reflexivity and also allow clinicians to reflect at team level (Reiter-Palmon et al., 2018). High-functioning learning organisations are defined by Argyris and Schön (1996) as embodying the third and highest form of learning – meta-learning (Greenwood, 1998). Meta-learning shifts the organisation's focus from task-orientated learning (gained through reflecting on the task undertaken) to capturing the lessons learned from double-loop learning, reflecting on these and sharing the learning across the organisation. Meta-learning is embedded by supporting staff to develop skills to collect, measure and use data intelligently.

Measuring useful data, learning from them and sharing the findings is inherent to learning organisations (Clarke et al., 2009), enabling a high-evaluation context and reducing variability. In this study, neither staff nor leaders reported using or being trained in improvement methodologies (Raleigh and Foot, 2010) and this was reflected in the service having an annual audit programme that made little use of contemporaneous data to drive quality improvement agility. It is important to involve women and staff in action planning to focus on changing systems to reflect what is important to them, and engage their values to embed system change (Hughes, 2008).

Learning is the thread that supports all four PARiHS context sub-elements. To improve the contextual readiness for change implementation, learning needs to be redefined beyond learning a skill, shared learning or learning from patient safety incidents, to encompass person-centred values that build commonality and support creative, innovative thinkers to generate high-quality maternity services. This synthesis is presented in a framework for safe, effective, person-centred care (Figure 2).

Figure 2: A synthesised framework for safe, effective and person-centred care with learning as the cornerstone driver of each contextual element



Successful implementation of the quality triad is dependent on achieving a high contextual readiness. The maternity service and the organisation should adopt a broader definition of learning and live the values of a high-functioning learning organisation. This includes learning together as teams, learning with women and learning in high-functioning leadership teams. This will generate respect, understanding and support to achieve the vision, embed an evaluation ethos and empower teams to use the workplace as the main source of learning, as defined by PARiHS. To become a learning organisation, leaders at all levels need to be equipped with the quality improvement, transformational-leadership and practice-development skills necessary to facilitate learning compassionately and collaboratively (Manley et al., 2017a). Such an approach relies on an evaluation ethos that seeks out, values and acts on feedback from staff and women.

The maternity service in this study had an evaluation level of low to medium when mapped to the PARiHS framework context element because of infrequent data collection, reliance on a limited number of evaluation tools and limited evidence of how the data collected generated change. To address this, a move from annual audit and dashboard data to continuous data collection using multi-evaluative methods is necessary. Seeking out and providing feedback at individual, team and system

levels will enable staff to value evaluation and its necessity to implementing the quality triad. For staff to value performance data, the data need to be visible, transparent and presented in an easy-to-use format. This requires knowledge and understanding of quality improvement methodology as well as tools to identify what matters to women and staff, such as emotional touchpoints (Dewar et al., 2009). It requires leaders to learn a deeper understanding of quality improvement methodology so that they can collect useful data, interpret them and present them in multiple formats guided by the principles of practice development (Manley et al., 2017b). An openness to evaluation with staff, women and families, with clearly defined strategies to monitor effectiveness of actions, would support this process and is a feature of practice development (Manley et al., 2008). Finally, learning needs to be inherently linked to evaluation, both in order to design the learning and development opportunities around the needs of women and staff, and to continuously improve these through engaging with them.

Effective teamwork, professional relationships and valuing people cannot be achieved without leadership that promotes a collective, continuous learning culture. Such a culture, aligned with the high contextual elements of PARiHS, focuses on changing systems when things go wrong, supporting those involved and applying appropriate and transparent decision-making processes to hold those involved to account. Leaders need to develop facilitation skills to help staff learn collectively and view learning as the cornerstone of effective, safe and person-centred care.

Facilitative leaders nurture creativity and encourage frontline teams to innovate. Leaders with formal leadership and quality-improvement skills role model respect, empathy, credibility and support. In collaboration with women and staff, they co-create a clear vision, set goals and remain positive, engaging those around them to ensure change is embedded (Harvey and Kitson, 2016). Manley et al. (2017a) further contextualise effective facilitation at each level of an organisation as a key component of safety culture, identifying both the quality of clinical leadership and the skills and attributes of the frontline team facilitator as the most influential factors in engaging frontline staff to embed a safety culture. Organisational facilitators can enable this culture through providing strong awareness of transformation work and ensuring there is a supportive infrastructure in place across the organisation to share learning and improve the capacity and capability of facilitators (Manley et al., 2017a).

Limitations

The PARiHS framework has been used by clinicians, practice developers and researchers heuristically to guide the implementation of evidence into practice (Brown and McCormack, 2005; Wright et al., 2007; Wallin et al., 2006). This paper uses PARiHS as a diagnostic tool to assess the context of a maternity service and its readiness for the translation of best evidence into practice. Best practice evidence is used to include person-centred and safety values, as well as evidence from research. Use of both the PARiHS and new the framework (Figure 2) to assess contextual readiness more broadly warrants further evaluation. Further critique is invited as endorsed by Davies and colleagues (2015) and Graham and Tetroe (2007) regarding the use of knowledge-mobilisation frameworks in other settings.

Conclusion

The PARiHS framework, specifically its context element, was used to undertake a service review of the contextual enablers in a single maternity service for implementing best practice and building a high leadership and high evaluation ethos. Despite the use of high-quality, evidence-based practice, internal and external reports raised concerns over the quality of care. The PARiHS framework suggests high-quality evidence alone has little impact on achieving high-quality maternity care, defined as safe, effective and person-centred. Without high context and high facilitation, as defined by PARiHS, high evidence has little impact on service transformation.

The findings from an inductive thematic analysis revealed four themes: language, leadership, learning and variability. Each theme was mapped to the PARiHS framework, enabling 1) gaps in the context to be identified, around safety, leadership and evaluation; 2) an understanding of the scope of the gap; and

3) identification of learning as the 'key enabler' to address the gap, interdependent with leadership, language, variability and each element of context. Learning, facilitated at an organisational level and implemented by frontline teams, has the ability to generate safe, effective and person-centred maternity care. This builds a high-functioning learning team, which is the key to quality maternity care. The insights from this contextual analysis have led to the development of a framework that identifies the factors to be considered when developing quality contexts for maternity care with learning at its heart. This framework will guide the next phase of the project to develop a person-centred, safe and effective service supported by the practice development principles of collaboration, inclusion and participation, combined with an understanding of the cultural, leadership and evaluation factors, underpinned by collective learning as the pivotal concept.

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