

Service Improvement Report

LCHS7006 Quality Assurance and Service Improvements

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Introduction

A definition for quality assurance is “a formal and systematic exercise in identifying problems in medical care delivery, designing activities to overcome the problems, and carrying out follow-up monitoring to ensure that no new problems have been introduced and that corrective steps have been effective” (Lohr et al., 1984). High-quality, safe, and person-centred care is a fundamental expectation within the NHS, yet the Shrewsbury and Telford Trust maternity scandal revealed one of the most severe and long-standing breakdowns in care delivery in NHS history. Between 1970 and 2019, at least 1,592 clinical incidents, including stillbirths, neonatal deaths, maternal deaths, and cases of serious long-term harm, were linked to systemic failings within the Trust’s maternity services. The publication of the final Ockenden Report (2022) concluded that these adverse outcomes were not isolated events, but the result of prolonged organisational dysfunction marked by unsafe practices, insufficient oversight, failures in communication, and a deeply embedded defensive culture.

Given this context, this report critically examines the root causes underpinning these failures using key theoretical frameworks. Additionally, it proposes an improvement strategy informed by different frameworks.

Donabedian Model

The quality of health care can be evaluated using the Donabedian model, which assesses three interrelated components (Donabedian, 1988 & Tossaint-Schoenmakers et al., 2021):

- Structure: the setting in which care is delivered, including facilities, equipment, staffing levels, and staff qualifications
- Process: the actions taken in providing and receiving care, such as clinical activities, communication between clinicians and patients, and information sharing.
- Outcome: the consequences of care, including patient health status, satisfaction, and costs.

STRUCTURE	PROCESS	OUTCOME
• Staffing shortages • Physical infrastructure limitations (beds, monitoring equipment) • Governance & oversight gaps (poor adherence to guidelines, weak audits)	• Failure in monitoring & escalation (CTG misinterpretation, delayed response) • Protocol breaches (emergency C-section delays) • Culture issues	• Tragic patient outcomes (hundreds of avoidable baby deaths, several maternal deaths & long-term harm) • Systemic consequences (family loss & trauma, decline in public confidence)

TABLE 1: Donabedian Model applied to the Shrewsbury and Telford NHS Trust Scandal (made by author)

Based on the final Ockenden Report (2022), from a structural perspective, the Trust experienced staffing shortages, physical infrastructure limitations, including insufficient beds and outdated fetal monitoring equipment and also significant governance and oversight gaps, reflected in weak audit systems and poor adherence to national maternity guidelines. These structural weaknesses directly influenced critical care processes. Failures in monitoring and escalation, particularly the misinterpretation of CTG traces and delayed responses to fetal distress, were the most significant contributors to harm. Process failures also included breaches of emergency protocols, such as delayed C-sections, and defensive cultural issues that discouraged escalation of issues and open communication. These defective processes resulted in severe and measurable adverse outcomes, including hundreds of avoidable neonatal deaths, several maternal deaths, and long-term harm to families (Department of Health & Social Care, 2022). Additionally, the scandal produced wider systemic consequences, such as a decline in public confidence and trauma for affected families. When comparing the Trust’s performance to

national standards, namely the Saving Babies' Lives Care Bundle. This goal of this NHS initiative is to reduce stillbirths and improve outcomes for babies through evidence-based maternity care, the Ockenden Review (2022) found that 25% (1 in 4) of reviewed stillbirths had major care failings, hence, it is evident that substantial gaps exist between expected and actual practice, particularly in fetal monitoring standards, escalation procedures, and incident reporting (NHS England, 2023). This interaction between weak structures and flawed processes created a cycle of risk, where inadequate staffing and poor leadership increased process errors, which in turn led to tragic patient outcomes (De Rosis, 2024).

Fishbone Diagram

The Fishbone Diagram is a visual tool shaped like a fish skeleton that illustrates how different factors contribute to a specific problem or outcome. In this diagrammatic depiction, the "head" represents the main problem, the "long bones" represent the main causes for the problem, and "short bones" represent the specific contributing factors linked to each main cause (Kumah et al., 2024). This method addresses problems and quality management by methodically classifying the possible sources of a specific problem into distinct categories (Majka et al., 2023), which in turn enables teams to work together to identify key areas for improvement and create practical, collaborative solutions (Ilie et al., 2010).

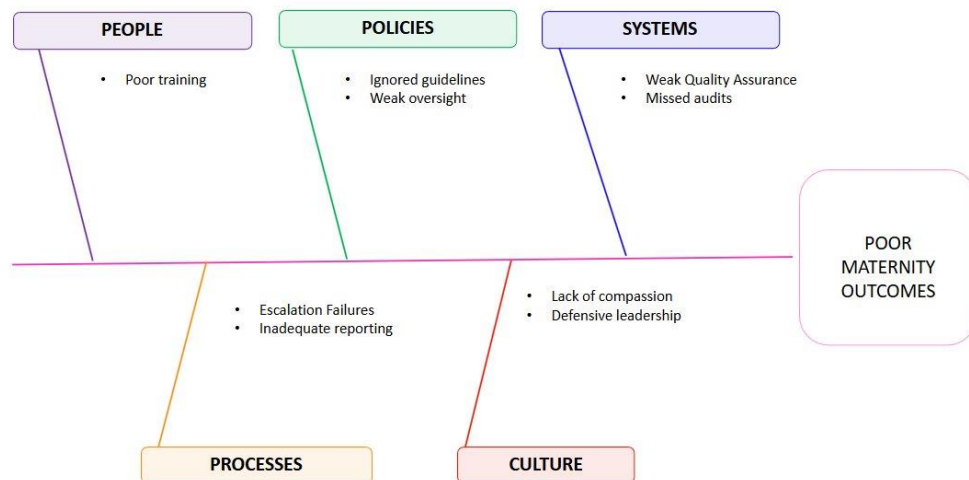


FIGURE 1: Fishbone Diagram applied to the Shrewsbury and Telford NHS Trust Scandal (made by author)

Based on the final Ockenden Report, the above diagram was created. Report found multiple failures to recognize and act on abnormal fetal heart rate patterns, delayed or inappropriate escalations during high-risk deliveries and just an overall lack of adherence to national safety protocols (e.g. emergency C-sections) (Department of Health & Social Care, 2022). The Fishbone Diagram above reveals causes for these incidents as well as important relationships between these causes. Issues related to people include poor training, and this has

a direct impact on processes, policies, and systems since staff can be unsure about how to proceed in situations or might lack knowledge and training across national guidelines (example: multiple failures to recognize and act on abnormal fetal heart rate patterns were found). In addition, the defensive culture and leadership failures in this case (culture) are directly connected to all other causes. The report found staff were not confident about escalating problems (processes), in most cases influenced by the defensive culture. The culture at the trust also allowed unsafe practices to gradually become accepted as routine (policies and systems). Collectively, these failures across people, processes, policies, systems, environment, and culture interacted to produce persistent and avoidable poor maternity outcomes. In the context of the Shrewsbury & Telford Case, the Fishbone diagram is a useful tool since (Long et al., 2000):

- Highlights multiple root causes, not just individual errors.
- Shows how factors like leadership, culture, policy gaps, and staffing can interact and cause harm.
- Supports systems-thinking across governance, workforce, and communication.
- Guides structured improvement planning
- Promotes a learning culture to prevent future systemic failures in NHS maternity care.

The 5-whys method is another helpful strategy to support a more in-depth explanation of root causes. As the name suggests, this entails asking "why" at least five times before deciding on a more thorough response. As we keep asking "why" the problem becomes evident (Ellis, 2023):

1. Why did babies suffer harm during labour (poor maternity outcomes)?
A: Because clinicians did not identify and act on signs of fetal distress.
2. Why did clinicians not identify and act?
A: Because signs were misinterpreted or not reviewed promptly.
3. Why were signs of fetal distress misinterpreted or not reviewed promptly?
A: Because staff lacked training and confidence and there were inconsistent escalation procedures.
4. Why was training and escalation inconsistent?
A: Because leadership did not prioritise training and there was weak adherence to national guidelines.
5. Why did leadership not prioritise these systems/guidelines?
A: Because the trust had a defensive culture, and audits were superficial or missed.

SWOT Analysis

SWOT analysis is generally understood as a framework for evaluating how internal resources and capabilities align with external developments. The central question it addresses is whether an organisation possesses the capacity to manage external threats while taking advantage of potential opportunities (Ginter et al., 2018). At its core, the process typically involves four steps (van Wijngaarden et al., 2012):

1. Assess internal resources and capabilities, categorising them as strengths or weaknesses.
2. Identify external developments and classify them as opportunities or threats.
3. Compare and relate internal strengths and weaknesses to external opportunities and threats.
4. Use these insights to develop strategic options and inform decision-making.

This analysis framework is also seen as an effective quality management tool for healthcare organisations, since it allows them distinguishing between strengths, weaknesses, opportunities, and threats, and decide where to allocate resources, where to intervene urgently, and where cultural or structural barriers must be removed (Siddiqui, 2021). For the complex case of Shrewsbury and Telford, a SWOT analysis is valuable because it integrates internal weaknesses with external constraints; it complements root-cause tools such as the Fishbone Diagram and 5-Whys by identifying actions to improve the root issues, and it supports future planning (Ginter et al., 2018):

STRENGTHS	WEAKNESSES
Access to national evidence-based maternity guidelines (e.g., Saving Babies' Lives, (NHS, 2023)). High national and policy priority for maternity safety improvement (NHS, 2020).	Chronic staffing shortages and lack of training Weak governance and oversight, including superficial or missed audits. Poor communication and teamwork across teams. Defensive culture Inconsistent processes and inadequate incident reporting
OPPORTUNITIES	THREATS
Implementation of structured training (Department of Health & Social Care, 2016). Strengthening whistleblowing.	Ongoing national workforce shortages affecting maternity recruitment and retention. Decline in public confidence and reputational damage Cultural resistance to change, particularly in leadership behaviours. High clinical workload and service demand increase the risk of future failures.

TABLE 2: Shrewsbury and Telford NHS Trust Scandal SWOT analysis (made by author)

Based on Table 2, the strengths include the availability of national, evidence-based maternity guidelines such as Saving Babies' Lives, which provide clear standards for safe fetal monitoring, escalation, and perinatal care (NHS, 2023). Maternity safety is also recognised as a high national and policy priority, with NHS England committed to reducing stillbirths, neonatal deaths and maternal harm (NHS, 2020). However, the Trust has significant weaknesses including chronic staffing shortages which affect the whole industry (Morgan, 2022), alongside limited training. Weak governance, including superficial audits and inconsistent oversight, inadequate incident reporting, poor communication and teamwork, coupled with a defensive culture, are factors that contributed to avoidable harm (Department of Health & Social Care, 2022). Despite these weaknesses, several opportunities exist to support improvement. National guidance emphasises the implementation of training programs to improve maternity safety. As an example, the NHS Safer Maternity Care plan offers an £8 million fund for maternity safety training to assist trusts in advancing maternity safety (Department of Health & Social Care, 2016). There is also an opportunity to strengthen whistleblowing (NHS England, 2024). Nonetheless, it is important to analyze threats alongside these opportunities. A big threat is the persistent workforce shortages faced by the NHS which affect the quality of care (Morgan, 2022). Shortages place considerable strain on NHS staff, which negatively affects wellbeing and contributes to rising sickness absence which translate into growing staff turnover, which in turn heightens workload pressures on existing staff and can negatively affect the quality and safety of patient care (Moscelli et al., 2025). Additionally, the Trust faces reputation damage and declining public confidence following the Ockenden findings, while cultural resistance to change, particularly in leadership behaviours, could affect the implementation of new practices (Department of Health & Social Care, 2022).

PDSA vs Shrewsbury and Telford NHS Trust

The PDSA provides a structured, evidence-based framework for designing, testing and implementing changes that lead to better outcomes. By using PDSA cycles, teams can trial changes on a small scale, analyse what works, and refine interventions before wider adoption, making the improvement process safer, less disruptive and more effective for both staff and patients (Taylor, 2010).



FIGURE 2: PDSA cycle (Taylor, 2010)

The PDSA cycle consists of four stages (Figure 2). In the Plan stage, the change to be tested or implemented is identified, and a clear plan for carrying it out is developed. The proposed intervention for this Trust is the introduction of a standardised, mandatory training package on maternity safety, addressing key failings identified in the case study. During the Do stage, the change is executed on a small scale to test its effects (Connelly, 2021). For this case, data will be collected through clinical audits, competency assessments, and observational data from simulated emergency situations. The Study stage involves collecting data before and after the change based on predetermined outcomes, reflecting on its impact, and identifying what was learned (Taylor, 2010). For Shrewsbury and Telford data collected can be analysed alongside feedback from staff, gathered through surveys and discussions, to assess the effectiveness of the intervention. Finally, in the Act stage, decisions are made about the next steps, whether that involves adjusting the change, starting a new cycle, or implementing it more broadly (Taylor, 2010). Based on the data collected in the previous stage, adjustments could include modifying training content, adjusting delivery methods, or addressing operational barriers such as staffing constraints that limit training attendance (Morgan, 2022).

Kotter's 8-Step Change Model

Introducing a mandatory maternity safety training program at Shrewsbury and Telford NHS Trust is a plan that requires organisational change. Driving organisational change is challenging and requires thoughtful planning, coordinated action, and decisive leadership, hence, applying the Kotter's 8-Step Change Model to this process is essential (Laig et al., 2021):

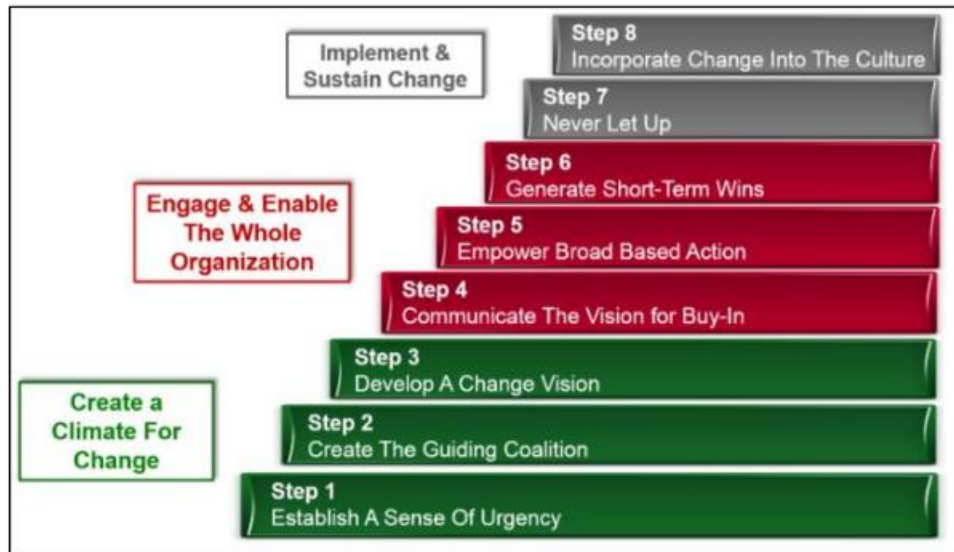


FIGURE 3: Kotter's 8-Step Change Model (Laig et al., 2021)

Central to Kotter's approach is the recognition that change is a complex, non-linear process affecting all levels of an organisation (Makja, 2024). As presented in Figure 3, this model starts by creating urgency, which can be achieved by presenting evidence from the Ockenden Report (2022). A guiding coalition of senior leaders would oversee implementation and ensure accountability, and the same leaders would ensure change be communicated and reinforced throughout the organisation through meetings and training. After the climate for change is created and the organisation is engaged, it is important to implement and sustain change (Zhang et al., 2017). In this case, sustainability would be supported by ongoing audits, competency assessments, and staff feedback. However, since the findings in this case showed defensive cultural norms and overall workload pressures due to staff shortages in the Trust, staff resistance to change can be expected (Moscelli et al., 2025), but this can be mitigated by involving staff and demonstrating the benefits of change.

Recommendations

This report on Shrewsbury and Telford NHS Trust maternity failings demonstrates that improvement requires action across workforce development, culture change, governance, and system redesign. Based on findings from the Donabedian model, Fishbone diagram, SWOT analysis, and the proposed PDSA and Kotter change frameworks, the following evidence-based recommendations are proposed:

1. Implement a Mandatory and Standardised Maternity Safety Training Program to address the key clinical and procedural failures identified in the Ockenden Review, including CTG interpretation, fetal monitoring, emergency escalation, and overall adherence to national guidelines. This aligns with the PDSA proposal to trial and refine this training on a small scale before wider implementation, recognising the staff shortages the NHS experiences (Onyejesi et al., 2025) and investment in simulation-based learning supported by national initiatives (Department of Health & Social Care, 2016).
2. Strengthening governance, auditing, and incident-reporting systems is essential also essential, as the Donabedian and Fishbone analyses highlight weak oversight, inconsistent audits, and poor escalation practices as major contributors to the poor maternity outcomes. These improvements require regular audits of CTG accuracy, routine review of escalation incidents, and learning and feedback, supporting the Study and Act phases of the PDSA cycle and meeting benchmarking expectations for $\geq 90\%$ compliance with maternity-safety standards.
3. Cultural reform is also critical since the report evidence demonstrates that a defensive, culture suppressed escalation and normalised unsafe practices, making it essential to strengthen whistleblowing processes, provide structured debriefing, and ensure leadership behaviours promote openness, accountability, and consistency, actions which align with Kotter's early stages (Makja, 2024).
4. Addressing chronic workforce shortages is also fundamental, given their contribution to clinical errors and unsafe team functioning (Moscelli et al., 2025) this should include targeted recruitment and retention initiatives for current staff (Stinton, 2025), and workforce planning aligned with national maternity safety priorities (NHS England, 2020).

Benchmarking

Area	Metric (Current)	National Standard	Target for Shrewsbury & Telford NHS Trust
Maternity Safety – Saving Babies' Lives Care Bundle (SBLCB)	The Ockenden Review (2022) found that 25% (1 in 4) of reviewed stillbirths had major care failings.	≥ 90% compliance with care standards	Achieve ≥ 90% compliance with all SBLCB standards, including fetal monitoring
Independent Whistleblowing	62.3% of NHS staff agree they feel safe to raise concerns about unsafe clinical practice (Patient Safety Learning, 2024). The Ockenden Review (2022) found a defensive culture and lack of openness.	While there is no set benchmark by the NHS, the NHS staff survey carried every year allows this metric to be analysed. A lot of Trusts use a target of ≥ 90% (Cambridgeshire Community Services NHS Trust, 2025).	Achieve ≥ 90% of staff reporting confidence in raising concerns safely, with measurable improvement in staff survey results

TABLE 3: Shrewsbury and Telford NHS Trust Benchmarking (made by author)

Current performance at the Trust can be measured against national standards such as the Saving Babies' Lives Care Bundle (NHS England, 2023), which expects high compliance with maternity safety practices. The findings of the Ockenden Review (2022) show that 25% of reviewed stillbirths involved major care failings, which suggests substantial divergence from national standards. The target set for the trust is to achieve ≥ 90% compliance with all SBLCB standards, which aligns with the PDSA plan (mandatory training package on maternity safety). In terms of whistleblowing, although there a national standard hasn't been set, many Trust set internal targets of ≥ 90% staff feeling safe to raise concerns (Cambridgeshire Community Services NHS Trust, 2025). Based on this, the target for the Trust is to achieve ≥ 90% of staff reporting confidence in raising concerns safely, which aligns with the change being driven by the Kotter's Model. Whilst benchmarking in healthcare is often associated with improvements in care processes and outcomes (Willmington et al., 2022), it is important to note that comparisons to other Trusts is limited since differences in size, resources, technology, patient population can impact results in quality of care (Arbelo-Pérez et al., 2025).

Conclusion

This analysis demonstrates that the failures at Shrewsbury and Telford NHS Trust were not isolated errors but systemic breakdowns across structure, process, and organisational culture. The integration of multiple theoretical frameworks provided a comprehensive understanding of these failures. The Donabedian model revealed deep structural barriers including staffing shortages, outdated equipment, and governance gaps that directly impaired quality of care. The Fishbone and 5-Whys analyses highlighted how cultural and leadership failings resulted in lack of training, weak processes, and poor communication to create persistent risks. The SWOT analysis further illustrated how internal weaknesses were intensified by external threats such as national workforce shortages.

The proposed improvement strategy of a mandatory maternity-safety training program, demonstrated effective integration of theory and practice through the PDSA cycle, allowing change to be tested, evaluated, and scaled safely. With Kotter's 8-Step Model, the importance of leadership, staff engagement, and cultural transformation in achieving sustainable change was reinforced. The effective implementation of these strategies is expected to poor maternity outcomes, rebuild the reputation, and foster an open culture. Sustaining these improvements will require continued leadership commitment and ongoing data driven evaluations across all maternity services.

Future research could explore the impact of psychological safety interventions on escalation behaviours, evaluate long-term outcomes associated with simulation training, and compare improvement across similar Trusts to strengthen national learning. Ultimately, this case highlights that improving maternity safety requires not only better processes, but also organisational cultures that place learning, accountability, and compassion at the center of care (Mackintosh et al., 2025).

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