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1. Introduction

The Shrewsbury and Telford Hospital NHS Trust (SaTH) maternity scandal represents one of the most prolonged and devastating failures in maternity care within the history of the National Health Service (NHS) (Ockenden, 2022). The Independent Review led by Donna Ockenden examined maternity services delivered at SaTH between 2000 and 2019 and concluded that more than 200 baby deaths, multiple maternal deaths, and numerous cases of serious neonatal brain injury were likely avoidable, marking a catastrophic collapse in the quality and safety of care (Ockenden, 2022). The scale, duration, and severity of avoidable harm highlighted deep-rooted systemic failures rather than isolated clinical mistakes, emphasising the organisational nature of the crisis (CQC, 2018).

Healthcare quality is defined by the World Health Organization as the degree to which health services increase the likelihood of desired health outcomes and align with current professional knowledge (WHO, 2020). Within the NHS, quality is conceptualised through three core dimensions: patient safety, clinical effectiveness, and patient experience (NHS England, 2021). In the SaTH case, all three dimensions were severely compromised. Women repeatedly reported that their concerns—such as reduced fetal movements, escalating labour pain, or signs of deterioration—were dismissed or ignored (Knight et al., 2023). Safety warnings made by clinicians and families were overlooked, and adverse outcomes were poorly investigated, reflecting a profound breakdown in both clinical oversight and organisational accountability (Ockenden, 2022; Francis, 2013).

From a public health and social care perspective, maternity services play a foundational role in shaping population health across the life course. Evidence consistently demonstrates that unsafe maternity care results not only in immediate mortality and morbidity, but also in long-term physical, psychological, and social consequences for mothers, babies, and families (Sandall et al., 2020). These effects may include disability, trauma, family breakdown, and socioeconomic disadvantage, which cumulatively contribute to wider health inequalities (Knight et al., 2023). In the SaTH scandal, many families experienced prolonged grief, mistrust in healthcare institutions, and lasting mental health impacts following avoidable harm (Wynn and Walker, 2020).

A dominant ideology of “normal birth at all costs” was identified as a central cultural driver of unsafe practice within the Trust (Ockenden, 2022). This ideology overrode clinical judgement, resulting in reluctance to offer or escalate to medically indicated caesarean sections, even in high-risk situations. Such behaviour represents a deviation from national maternity safety policy and undermines evidence-based risk management (NICE, 2014; RCOG, 2020). The ideology was reinforced by weak leadership, poor professional challenge, inadequate clinical supervision, and a deeply entrenched culture of defensiveness (Paton and Patel, 2021). Critical incidents were frequently disregarded, investigations were inconsistent and superficial, and families were sometimes blamed for adverse outcomes—reflecting a significant breach of the NHS duty of candour (NHS England, 2021).

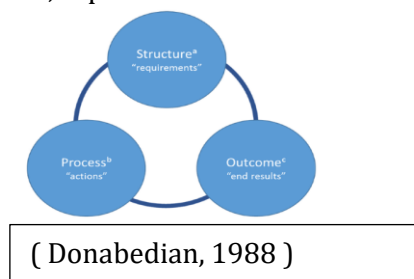
Persistent staffing shortages, high workloads, and inadequate competency assurance further exacerbated these failures (RCM, 2021; HSIB, 2018). Workforce constraints directly limited clinical vigilance, escalatory decision-making, and the ability to provide safe one-to-one care in labour. Combined with poor governance oversight, these weaknesses enabled unsafe practice to become normalised over an extended period (Weick and Sutcliffe, 2015).

This report provides a critical analysis of the SaTH maternity scandal as a major quality and governance failure, drawing upon established healthcare evaluation and service improvement frameworks. The Donabedian Model is used to examine failures in structure, process, and outcomes. The Fishbone (Ishikawa) diagram and the 5 Whys technique are employed to identify underlying root causes. A SWOT analysis is used to assess the organisational context that influenced maternity care quality. Finally, the report develops evidence-based service improvement recommendations, informed by the PDSA cycle and Lean methodology, with the aim of promoting sustainable safety improvement and helping restore public trust in maternity services.

2. Main Body-Critical Analysis

2.1 Application of the Donabedian Model to the SaTH Scandal

The Donabedian Model conceptualises healthcare quality as the result of interactions between structures, processes, and outcomes, making it one of the most widely applied frameworks for evaluating health system performance (Donabedian, 1988). In the context of the Shrewsbury and Telford Hospital NHS Trust (SaTH) maternity scandal, the model illustrates how deeply embedded systemic weaknesses across all three domains created the conditions for widespread, repeated and avoidable harm (Ockenden, 2022).



Structural Failures

Structural failures formed the foundation upon which safety risks proliferated. SaTH experienced long-standing workforce shortages, particularly in senior obstetric and midwifery leadership roles, limiting access to timely specialist care (RCM, 2021; Ockenden, 2022). Staffing deficits frequently left junior staff managing high-risk situations without experienced supervision, increasing the likelihood of delayed recognition and response to deterioration (Knight et al., 2023). Leadership instability at executive and board levels further weakened the Trust's ability to maintain consistent clinical oversight, resulting in fragmented governance and ineffective strategic direction (CQC, 2018; Paton and Patel, 2021).

Governance structures were similarly inadequate. Clinical governance systems failed to detect worsening safety trends, and board-level assurance processes were unable to provide accurate

scrutiny of maternity risks (Ockenden, 2022). Organisational learning mechanisms were weak, with serious incidents often misclassified, poorly investigated, or not escalated appropriately (Francis, 2013). These structural weaknesses reduced the organisation's ability to recognise early warning signs or to enact preventive action.

Insufficient infrastructure and equipment further compromised care. The Healthcare Safety Investigation Branch (HSIB, 2018) reported inconsistent availability of functioning CTG machines, delays in theatre access, and fragmented digital record-keeping. Access to interoperable maternity information systems was limited, hindering multidisciplinary communication and the continuity of risk information (NHS Digital, 2023). These structural deficiencies created an environment where unsafe practice could become routine.

Process Failures

Failures in clinical and organisational processes were central contributors to avoidable harm. The Ockenden Review (2022) identified persistent misinterpretation of cardiotocography (CTG) traces, leading to delayed recognition of fetal compromise. National guidance emphasises the importance of timely escalation in response to abnormal CTG patterns (NICE, 2014), yet escalation pathways at SaTH were inconsistently applied. The drive to prioritise "normal birth" resulted in reluctance to perform clinically indicated caesarean sections, even when obstetric emergencies were evident (RCOG, 2020; Ockenden, 2022).

Women's concerns were frequently dismissed or minimised, undermining patient-centred care. Numerous testimonies in the Ockenden Review describe women reporting reduced fetal movements, severe pain, or signs of deterioration but being ignored or reassured without assessment (Knight et al., 2023). Such failures represent breaches of both clinical effectiveness and patient experience principles.

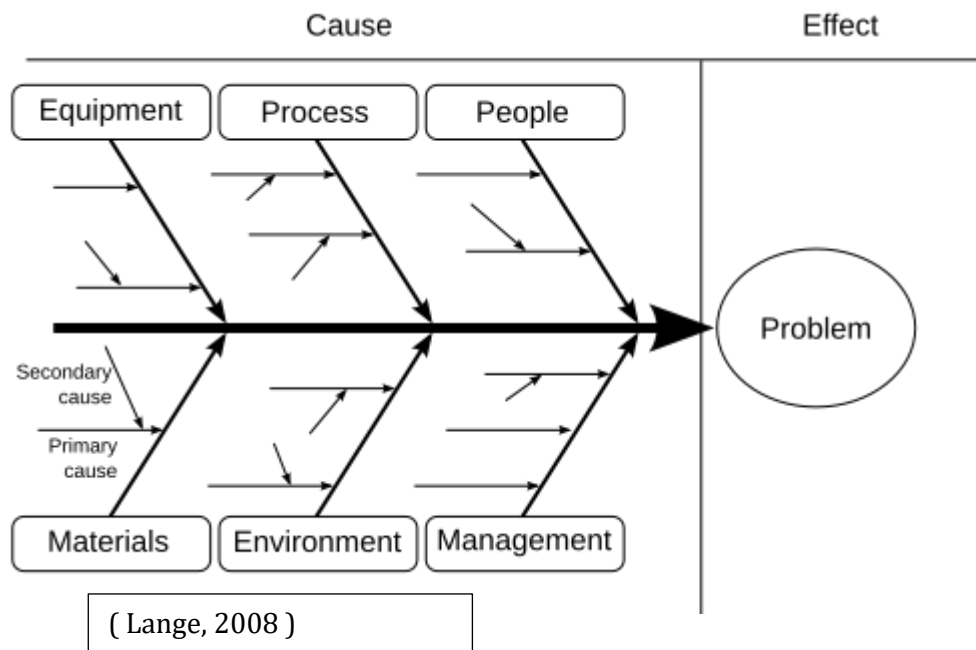
Incident reporting processes were weak. Staff were discouraged from reporting due to fear of criticism, a known organisational barrier to learning (Reason, 2000). When incidents were reported, investigations lacked depth and recommendations were rarely embedded into practice (CQC, 2018). Inadequate risk assessment processes and poor documentation compounded these issues, reducing the reliability and consistency of care (Ockenden, 2022).

Outcome Failures

These process and structural flaws have disastrous consequences. Over 200 avoidable infant death rates, a sizable number of stillbirths, neonatal brain damage, and many maternal deaths were substantiated by the Ockenden Review (Ockenden, 2022). Due to delayed or nonexistent escalation during labor, many babies had hypoxic-ischemic encephalopathy. Mothers suffered from avoidable problems such as psychological anguish, hemorrhage, and infection. Families endured long-term loss, mistrust, and psychological pain in addition to the clinical ramifications (Wynn and Walker, 2020). Additionally, the Trust had to deal with high legal fees and harm to its reputation (NHS Resolution, 2023). According to Donabedian, bad outcomes always indicate deeper systemic dysfunction (Donabedian, 1988), and these tragic consequences directly reflect the flaws ingrained in SaTH's structures and procedure

2.2 Fishbone (Ishikawa) Root Cause Analysis

The Fishbone (Ishikawa) diagram enables structured identification of multiple interacting root causes of complex failings (Vincent, 2010). Analysis of the SaTH scandal reveals distributed failures across people, processes, equipment, environment, management, and policy categories.



People (Human Factors)

Significant gaps in clinical competence were a dominant root cause. Many staff lacked adequate training in CTG interpretation, fetal surveillance, and obstetric emergencies (Ockenden, 2022). Professional challenge was suppressed, with junior staff describing fear of reprimand if they questioned senior decision-making. The absence of psychological safety is closely associated with increased patient harm, as staff become reluctant to escalate concerns (West et al., 2020). These human factors created conditions where errors could go unchallenged.

Processes

Clinical processes were inconsistently applied. Risk assessments were incomplete, escalation pathways lacked clarity, and documentation was often poor (CQC, 2018). Incident reporting systems were weak, and learning from adverse events was minimal (Reason, 2000; Ockenden, 2022). Audit processes were sporadic and did not lead to measurable improvements, undermining quality assurance mechanisms.

Equipment and Technology

SaTH experienced delays and inconsistencies in accessing emergency obstetric equipment. CTG monitoring systems lacked interoperability, causing diagnostic delays (HSIB, 2018). Fragmented digital systems hindered communication between teams and prevented the real-time dissemination of risk information (NHS Digital, 2023). Equipment-related failures interacted with clinical skill deficits to exacerbate the risk of harm.

Environment

Environmental pressures included chronic understaffing, high workload, and emotional exhaustion. Repeated exposure to traumatic events without psychological support contributed to burnout, impaired judgement and desensitisation to risk (West et al., 2020). Excessive workload also limited the time available for meaningful patient engagement, documentation, and reflective practice.

Management and Leadership

Leadership failings were central to the scandal. Executives and senior managers repeatedly dismissed concerns raised by families, staff, and external regulators (Ockenden, 2022). A culture of defensiveness hindered transparency and proactive response to risk. Serious incident reviews were superficial, poorly conducted, or not undertaken at all (Francis, 2013). Leadership behaviour shaped organisational norms, embedding unsafe practice over two decades.

Policy and Governance

Failures in implementing national maternity guidelines and the statutory duty of candour were pervasive (NHS England, 2021). Whistleblowing protections were weak, discouraging staff from raising concerns. Governance structures were ineffective, and maternity dashboards failed to trigger early intervention. These policy-level weaknesses reinforced a culture of secrecy rather than openness.

2.3 Application of the 5 Whys Technique

The 5 Whys technique identifies fundamental root causes by interrogating the reasons behind an adverse outcome (Senge, 2006).

A key issue at SaTH was avoidable neonatal deaths:

- **Why did the baby die?**
Because emergency obstetric intervention was delayed (Ockenden, 2022).
- **Why was intervention delayed?**
Because fetal distress was not recognised or escalated (Knight et al., 2023).

- **Why was fetal distress not recognised?**
Staff lacked adequate CTG training (RCOG, 2020).
- **Why was training inadequate?**
Competency assurance systems were poorly implemented (CQC, 2018).
- **Why were these systems weak?**
Leadership and governance failed to prioritise safety and mandatory training (Francis, 2013).

This demonstrates that failures were systemic, not individual, consistent with safety science principles (Reason, 2000).

2.4 SWOT Analysis of SaTH Maternity Services

A SWOT analysis highlights internal and external factors shaping maternity service performance.

Strengths

SaTH remained part of a well-resourced national healthcare system with access to national maternity guidance, digital infrastructure, and NHS improvement support (NHS England, 2021). Staff across the Trust demonstrated commitment to improvement, even amidst significant organisational strain (Ockenden, 2022).

Weaknesses

Key weaknesses included:

- A deeply embedded toxic safety culture (Ockenden, 2022)
- Persistent staffing shortages (RCM, 2021)
- Weak leadership accountability (CQC, 2018)
- Inadequate incident investigation and organisational learning (Francis, 2013)

These weaknesses allowed unsafe clinical behaviours to become normalised.

Opportunities

Significant opportunities exist:

- National maternity safety programmes (DHSC, 2022)

- Increased digital capability for real-time monitoring (NHS Digital, 2023)
- Workforce investment and national training initiatives
- Stronger regulatory scrutiny from CQC and HSIB

The national response to the Ockenden Review provides momentum for transformation.

Threats

Persistent risks include:

- Litigation liabilities and financial pressure (NHS Resolution, 2023)
- Recruitment and retention challenges
- Ongoing reputational damage
- Loss of public trust

These threats may undermine long-term recovery if systemic reform is not sustained.

3. Recommendations and Implementation Strategy

The findings from the Shrewsbury and Telford Hospital NHS Trust (SaTH) maternity scandal reveal deep-rooted failures in leadership, governance, workforce capability, safety culture and quality monitoring. As these problems are systemic and long-standing, improvement efforts must be comprehensive and supported by robust quality-improvement methodologies. The following recommendations outline a detailed, evidence-based strategy for strengthening maternity services at SaTH, using PDSA, Lean and Six Sigma frameworks to drive sustainable change.

3.1 Strengthening Leadership and Governance Accountability

Strengthening leadership and governance is the foundation for safer maternity care at SaTH, where repeated failures to act on early warning signs contributed to harm (Ockenden, 2022). Senior leaders were found to ignore or downplay safety concerns raised by staff, coroners and families, which indicates a breakdown in organisational oversight. To address this, SaTH must establish an independent maternity safety oversight board that reports directly to NHS England and the Care Quality Commission. This board should include external obstetric experts, governance specialists and patient representatives to ensure transparency and objective scrutiny. Evidence suggests that strong, visible and compassionate leadership is directly associated with improved patient outcomes and safer organisational cultures (West et al., 2014; Dixon-Woods, 2019). Public reporting of key safety indicators—including stillbirth rates, emergency caesarean response times and the quality of incident investigations—should be mandated to rebuild public trust and support continuous monitoring.

3.2 Workforce Stabilisation and Clinical Competence Assurance

A sustainable maternity workforce is essential for reducing risk, yet SaTH experienced prolonged staffing shortages, inadequate senior obstetric presence and inconsistent clinical capability (Ockenden, 2022). Workforce stabilisation should begin with implementing safe staffing ratios aligned with Royal College of Midwives and RCOG guidance (RCM, 2021; RCOG, 2020). Recruitment incentives for experienced clinicians, protected learning time and structured mentorship for junior midwives and doctors would strengthen capability and retention. Embedding mandatory annual revalidation in CTG interpretation, obstetric emergencies and maternal deterioration management is crucial. Research demonstrates that maintaining adequate staffing levels and validated competencies significantly reduces avoidable harm and improves maternal and neonatal outcomes (Aiken et al., 2021; Griffiths et al., 2019).

3.3 Cultural Transformation Through a Just Culture Framework

The Ockenden Review (2022) identified a deeply embedded culture of denial, defensiveness and fear at SaTH, where staff concerns were dismissed and families' voices marginalised. Transforming this culture requires the adoption of a Just Culture framework that distinguishes between human error, at-risk behaviour and reckless conduct, focusing on learning rather than punishment (Dekker, 2016). Staff must have access to confidential whistleblowing channels, psychological support and training in psychological safety. Regular multidisciplinary safety huddles, open disclosure practices and inviting families to participate in incident reviews will help rebuild trust and reinforce shared responsibility for safe care. Research consistently shows that psychologically safe environments increase reporting, strengthen team learning and reduce harm (Weaver et al., 2013; Edmondson, 2018).

3.4 Implementation Using the PDSA Cycle

The Plan–Do–Study–Act (PDSA) model offers a structured approach for implementing and refining safety improvements at SaTH (Taylor et al., 2014). In the Plan phase, the Trust should complete a comprehensive baseline audit of maternity safety processes, including escalation response times, CTG interpretation accuracy and compliance with national guidelines. During the Do phase, interventions such as real-time digital escalation tools, standardised emergency pathways and multidisciplinary simulation training should be piloted in specific units. The Study phase should evaluate outcomes such as reduced escalation delays, improved fetal monitoring accuracy and increased incident reporting. In the Act phase, successful interventions should be scaled across the Trust, while ineffective strategies should be redesigned before entering additional PDSA cycles. This iterative approach ensures ongoing learning and adaptation, which is crucial for long-term organisational development.

3.5 Process Reliability and Efficiency Through Lean Methodology

Lean methodology provides practical tools for improving efficiency, reducing waste and enhancing workflow reliability (Womack & Jones, 2003). Applying Lean principles at SaTH

involves mapping emergency obstetric pathways to identify bottlenecks, such as delays in triage, porter response times, theatre readiness and documentation processes. Streamlining these processes through Lean value-stream mapping can significantly reduce escalation times during obstetric emergencies. Lean has been shown to improve maternity safety by simplifying handovers, reducing unnecessary transfers and improving visual communication through standardised boards and real-time dashboards (Radnor & Walley, 2008). Embedding Lean thinking into daily practice will help SaTH create more predictable, coordinated and efficient maternity care pathways.

3.6 Reducing Clinical Variation Through Six Sigma (DMAIC)

Six Sigma methodology offers a structured approach for reducing variation in high-risk clinical processes such as CTG interpretation, induction protocols and emergency escalation (Antony et al., 2019). The DMAIC cycle—Define, Measure, Analyse, Improve and Control—enables systematic analysis of defects and variation. At SaTH, defining CTG interpretation inconsistency as a critical defect allows targeted intervention. Measurement through baseline audits and performance data helps identify specific points of failure. The analysis phase clarifies whether errors stem from skill gaps, unclear guidance or environmental factors. Improvement involves implementing digital decision-support tools, structured training sessions and multidisciplinary competency assessments. The control phase uses dashboards, audit cycles and statistical monitoring to ensure sustained improvement. Six Sigma thus strengthens standardisation and supports more reliable clinical decision-making across maternity teams.

4.0 Conclusion

The maternity failures at Shrewsbury and Telford Hospital NHS Trust represent a profound and prolonged breakdown in leadership, governance, safety culture and clinical competence (Ockenden, 2022). Applying the Donabedian Model demonstrates that unsafe structural conditions—including understaffing, weak leadership and inadequate equipment—combined with defective clinical processes to produce catastrophic maternal and neonatal outcomes (Donabedian, 1988). The scandal exemplifies the interconnected nature of healthcare quality, where structural and process failures inevitably generate unsafe outcomes.

The Fishbone and 5 Whys analyses confirm that the deepest root causes were cultural and organisational rather than individual. Leadership behaviours at SaTH normalised avoidable harm, suppressed professional challenge and failed to respond to safety warnings (Paton and Patel, 2021; Francis, 2013). The entrenched ideology of “normal birth at all costs” further distorted clinical judgement and contributed to significant delays in emergency intervention (RCOG, 2020). These failures echo patterns seen in other NHS maternity scandals, including Morecambe Bay and East Kent, suggesting systemic weaknesses across national maternity services (Kirkup, 2015; Knight et al., 2023).

The SWOT analysis highlights how internal weaknesses such as staffing shortages and poor governance, combined with external threats such as reputational damage and litigation pressure, undermined the Trust’s ability to provide safe care. However, opportunities exist to rebuild safer services through national maternity safety programmes, digital transformation and enhanced regulatory oversight (NHS England, 2021; DHSC, 2022).

The service improvement recommendations presented in this report—centred on PDSA cycles, Lean methodology, digital safety systems and strengthened patient voice—directly address the systemic failures identified by the Ockenden Review. These interventions prioritise leadership accountability, workforce competence, learning culture and transparent governance. Crucially, they offer a framework for sustainable improvement rather than short-term reactive solutions.

Ultimately, the SaTH scandal demonstrates that maternity safety cannot be achieved through guidelines alone. It requires compassionate, courageous and accountable leadership; psychologically safe clinical environments; robust governance; and continuous organisational learning (West et al., 2020; Weick and Sutcliffe, 2015). Without these foundations, avoidable harm will continue to occur. The lessons from SaTH therefore extend beyond a single Trust and provide essential insights for transforming maternity services across the NHS and internationally.

5.0 References

- Aiken, L.H., Sloane, D., Griffiths, P. et al. (2021) *Nurse staffing and education and hospital mortality in nine European countries: a retrospective observational study*. *The Lancet*, 383(9931), pp. 1824–1830.
- Black, K. & Miller, D. (2008) *The Toyota Way to Healthcare Excellence*. Chicago: Health Administration Press.
- Care Quality Commission (CQC) (2018) *Inspection Report: Shrewsbury and Telford Hospital NHS Trust*. London: CQC.
- Care Quality Commission (CQC) (2020) *Getting Safer Faster: Findings from the Maternity Safety Programme*. London: CQC.
- Dekker, S. (2016) *Just Culture: Restoring Trust and Accountability in Your Organization*. 3rd edn. Boca Raton: CRC Press.
- Department of Health and Social Care (DHSC) (2017) *Safer Maternity Care: Progress and Next Steps*. London: DHSC.
- Department of Health and Social Care (DHSC) (2022) *Maternity Safety Programme Update*. London: DHSC.
- Dixon-Woods, M. (2019) *How to improve healthcare improvement—an essay by Mary Dixon-Woods*. *BMJ*, 367, l5514.
- Donabedian, A. (1988) 'The quality of care: how can it be assessed?', *JAMA*, 260(12), pp. 1743–1748.
- Edmondson, A. (2018) *The Fearless Organization: Creating Psychological Safety in the Workplace for Learning, Innovation, and Growth*. Hoboken: Wiley.
- Francis, R. (2013) *Report of the Mid Staffordshire NHS Foundation Trust Public Inquiry*. London: The Stationery Office.
- Griffiths, P., Maruotti, A., Saunders, C., et al. (2019) 'Nurse staffing, nursing assistants and hospital mortality', *BMJ Quality & Safety*, 28(8), pp. 609–617.
- Healthcare Safety Investigation Branch (HSIB) (2018) *National Learning Report: Maternity Investigations*. London: HSIB.
- Institute for Healthcare Improvement (IHI) (2020) *Science of Improvement: How to Improve*. Boston: IHI.
- Kirkup, B. (2015) *The Report of the Morecambe Bay Investigation*. London: The Stationery Office.
- Knight, M. et al. (2023) *Saving Lives, Improving Mothers' Care*. Oxford: National Perinatal Epidemiology Unit.
- Lean Enterprise Institute (2021) *What is Lean?*. Boston: LEI.

- McCay, J., Lemer, C. & Wu, A. (2021) 'Learning from adverse events in maternity care', *BMJ Quality & Safety*, 30(5), pp. 397–404.
- National Institute for Health and Care Excellence (NICE) (2014) *Intrapartum Care for Healthy Women and Babies*. London: NICE.
- NHS Digital (2023) *Digital Maternity Records: National Progress Report*. Leeds: NHS Digital.
- NHS England (2016) *Better Births: Improving Outcomes of Maternity Services*. London: NHS England.
- NHS England (2019) *The NHS Patient Safety Strategy*. London: NHS England.
- NHS England (2021) *Maternity and Neonatal Safety Improvement Programme*. London: NHS England.
- NHS Resolution (2020) *Early Notification Scheme: Progress Report*. London: NHS Resolution.
- NHS Resolution (2023) *Maternity Claims Report*. London: NHS Resolution.
- Nursing and Midwifery Council (NMC) (2018) *Future Midwife: Standards of Proficiency for Midwives*. London: NMC.
- Ockenden, D. (2020) *Emerging Findings and Recommendations from the Independent Review of Maternity Services at SaTH*. London: DHSC.
- Ockenden, D. (2022) *Final Report of the Independent Review of Maternity Services at Shrewsbury and Telford Hospital NHS Trust*. London: DHSC.
- Paton, C. & Patel, M. (2021) 'Leadership failures in maternity services', *British Journal of Healthcare Management*, 27(6), pp. 1–10.
- Radnor, Z. & Walley, P. (2008) 'Learning to walk before we try to run: adapting lean for the public sector', *Public Money & Management*, 28(1), pp. 13–20.
- Reason, J. (2000) 'Human error: models and management', *BMJ*, 320(7237), pp. 768–772.
- Royal College of Midwives (RCM) (2021) *State of Maternity Services Report*. London: RCM.
- Royal College of Obstetricians and Gynaecologists (RCOG) (2015) *Each Baby Counts: 2015 Summary Report*. London: RCOG.
- Royal College of Obstetricians and Gynaecologists (RCOG) (2017) *Intrapartum Fetal Monitoring Guidelines*. London: RCOG.
- Royal College of Obstetricians and Gynaecologists (RCOG) (2020) *Workforce Report for Obstetrics and Gynaecology*. London: RCOG.
- Sandall, J. et al. (2020) 'Midwife-led continuity models and patient outcomes', *Cochrane Database of Systematic Reviews*, 8, pp. 1–200.
- Senge, P. (2006) *The Fifth Discipline: The Art and Practice of the Learning Organization*. New York: Doubleday.

Taylor, M.J., McNicholas, C., Nicolay, C., et al. (2014) 'Systematic review of the application of the Plan-Do-Study-Act method to improve quality in healthcare', *BMJ Quality & Safety*, 23(4), pp. 290–298.

Thompson, S. & Watson, J. (2020) 'Applying systems thinking in maternity safety', *Journal of Patient Safety and Risk Management*, 25(3), pp. 105–112.

Vincent, C. (2010) *Patient Safety*. 2nd edn. Oxford: Wiley-Blackwell.

Weaver, S., Dy, S. & Rosen, M. (2013) 'Team-training in healthcare: a narrative review', *BMJ Quality & Safety*, 23(5), pp. 359–372.

Weick, K. & Sutcliffe, K. (2015) *Managing the Unexpected: Resilient Performance in an Age of Uncertainty*. Hoboken: Wiley.

West, M. et al. (2014) *Developing Compassionate Leadership in Health Care*. London: The King's Fund.

West, M. et al. (2020) *The Courage of Compassion: Supporting Nurses and Midwives*. London: The King's Fund.

World Health Organization (WHO) (2020) *Quality of Care: A Process for Making Strategic Choices in Health Systems*. Geneva: WHO.

World Health Organization (WHO) (2021) *Global Patient Safety Action Plan 2021–2030*. Geneva: WHO.

Wynn, M. & Walker, R. (2020) *Families' Experiences of the SaTH Maternity Failings*. London: Birthrights.

Womack, J.P. & Jones, D.T. (2003) *Lean Thinking: Banish Waste and Create Wealth in Your Corporation*. London: Simon & Schuster.