

MSc Public Health and Social Care in Practice

Component 2- Service Improvement Report

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Introduction:

In this report, the review of the maternity scandal that occurred in the maternity Services of Shrewsbury and Telford Hospital NHS trust will be analysed. A review conducted at maternity services of Shrewsbury and Telford Hospital NHS trust by Donna Ockenden, showed that there is repeat of maternity care failures which led to preventable incidents and deaths of mothers and babies. The review aimed to give affected families a voice and investigate governance, policies and procedures followed by the hospital. These incidents led to multiple life-long injuries to mothers and babies. There were 1,592 clinical cases of incidents from 2000 to 2019 and 1,486 families involved, suggesting multiple care failures (Department of Health & Social Care, 2022). These preventable incidents occurred due to many different factors; however, the factors that stood out include the lack or delayed referral of mothers to multidisciplinary teams, lack of action by the senior clinicians as the severity of situations would escalate, poor staffing levels which led to increased workload and unnecessary staff distress and frustration and lack of compassion which possibly originated due to lack of training, the environment they staff were working in or lack of interest towards their role in their maternity sector.

The purpose of this service improvement report is to promote change in all maternity services, however mainly at the Shrewsbury and Telford Hospital NHS Trust which is the focus of this report. Along with this, the report was made to utilise theories for analysis of the case to further understand how this also affected the health and social care sector at the time. The applied theories for analysis were Donabedian model, the '5 Whys', SWOT analysis, PDSA cycle and Kurt Lewin's 3 stage model. By applying these theories for analysis are effective as there will be more successful intervention outcomes (Cummins, 2022), identification of strengths and weaknesses (Nieminen, Bearman and Tai, 2022) and assists in identifying and describing occurrences (Eriksson-Zetterquist, Hansson and Nilsson, 2021). By applying the theories in the analysis of this case study, recommendations will be given based on the conclusions taken from the full analysis. These recommendations will also be based on the current policies and procedures applied to not repeat past mistakes, however, they are not being useful as recently another report carried out by Donna Ockenden, shows that maternities in the UK are still repeating the same mistakes leading to more than 2,500 families being affected by the poor service delivery (Pantelic, 2026). From this, it is seen that policies and strategies used to keep mothers and babies safe from preventable incidents are not being useful as they are not being followed or applied accordingly.

Applying the Donabedian model:

To assist in the deeper analysis of the case of maternity scandal, the Donabedian model will be used. The Donabedian model is a framework utilised by hospitals and authorities to analyse and evaluate quality of health care by focusing on structure, process and outcomes (Robby *et al.*, 2025). The aspect of structure of this framework refers to the context of the foundation, environment and resources of care. In this scenario it can also include the training of professionals, workforce, governmental frameworks and regulatory frameworks (Saheb and Saheb, 2024). These aspects are what supports the processes that occur in healthcare (De Rosi, 2024). The aspect of the process refers to the actions taken by the professionals to produce good outcomes of care (Tossaint-Schoenmakers *et al.*, 2021). The last factor of the Donabedian model which is directly affected by structure and process is outcome. The outcome in this model is the reflection of how well structures and processes worked together to produce an optimal result (Yang *et al.*, 2025). For this case of the maternity scandal, the structure and the processes led to extreme poor outcomes as there were a very high number of preventable incidents.

The structure at the maternity service at the Shrewsbury and Telford Hospital NHS trust was poor in many different aspects. The main aspect from this factor that affected the processes leading to poor quality of care is workforce and poor leadership. The workforce in the hospital did not have enough staff meaning that it would overwhelm the current available workforce with high amounts of work which leads to poor working conditions and reduced effectiveness in service delivery increasing the risk of harm (Turner *et al.*, 2024). By being understaffed, high workload causes staff to feel stressed, burnout and fatigued (Waterfield and Barnason, 2022). These effects on their psychological health were projected through the lack of empathy while caring for the mothers and babies and in the communication of the incidents to the family members. The way the workforce in the maternity services was shaped by poor leadership. Leadership in healthcare is crucial as it improves work settings leading to decreased mortality rate and increase in patient satisfaction (Kline, 2019). The poor leadership levels in this case were seen through the lack of action when situations would escalate. Due to poor structuring of the maternity services, the processes were poorly carried out. This is seen through the lack or delayed of maternal referrals to multidisciplinary teams and delayed hospital admissions. The delay and lack of referrals was caused mainly due to the lack of workforce (Nantsupawat *et al.*, 2021). This causes the normal procedures such as routine check-ups to not occur. These routines must occur to pregnant patients as professionals must know the level of risk of pregnancies to determine the level of care the patient will receive and to observe the wellbeing of the foetus (Akshya and Chandrima, 2026). Due to these not occurring, the outcomes at the maternity sector in the hospital were poor resulting in various incidents affecting 1,486 families and yet the leadership denied the mistakes and kept repeating them

leading to the unsatisfaction from families and a demand for answers. In this case, it is seen different poor outcomes which occurred inside the maternity ward and outside. In the maternity ward, patients waited hours to be admitted into the ward when they entered in the state of labour due to the poor relationship between the midwives and obstetricians, this led to babies being delivered in poor conditions and dying a few hours later. Outside the maternity ward, staff would treat families indifferently and would blame them for some of the incidents that occurred. These show that by having a poor structure in the sector, there will be a series of incidents and events due to not having organisation or a plan to start looking after patients.

Root causes- Applying the 5 whys and fishbone analysis diagram:

The 5 whys technique (see Figure 1) is an analysis method to identify the root causes of a circumstance in healthcare (Card, 2017). Identifying the root causes of a specific and repeating problem is crucial in the healthcare setting because it assists in improving the safety of patients (Martin-Delgado, 2020), identifies the gaps present in the system which is leading to failures and factors such as workforce and work environment that were involved in the build up of the failure. The 5 whys is an effective technique because it allows the deep analysis and identification of the root cause of a problem (Ginzburg *et al.*, 2025). To use this analysis method, a statement containing a complaint or highlighting a problem is made to then ask 'why?', five times. Each answer for each why highlights a factor that also contributed to the complaint or problem however these all originated from the same cause (NHS England, no date). This technique is easy to use; however, effectiveness increases when it is combined with another tool such as fishbone analysis diagram (see Figure 2). The fishbone analysis diagram is a tool that assists in visualising the relationship between factors that cause the problem (Kumah *et al.*, 2024). By doing the fishbone analysis diagram, roots of the issue will be addressed as teams will have the capacity to understand their mistakes by creating different categories to the possible factors so they can create an approach plan to improve their quality of care (Cox and Sanberg, 2018). The problem that will be analysed in both diagrams is the preventable incidents which led to maternal and neonates' deaths and permanent injury for mother and babies.

The 5 whys

Problem: Mothers and babies were poorly looked after leading to preventable incidents



Figure 1: The 5 whys analysis diagram. Following this analysis, it is seen that the causative root for the incidents that occurred at the Shrewsbury and Telford Hospital NHS Trust was poor leadership and accountability. The leaders of the hospital and maternity sector denied any mistakes leading to them repeating them and affecting more families.

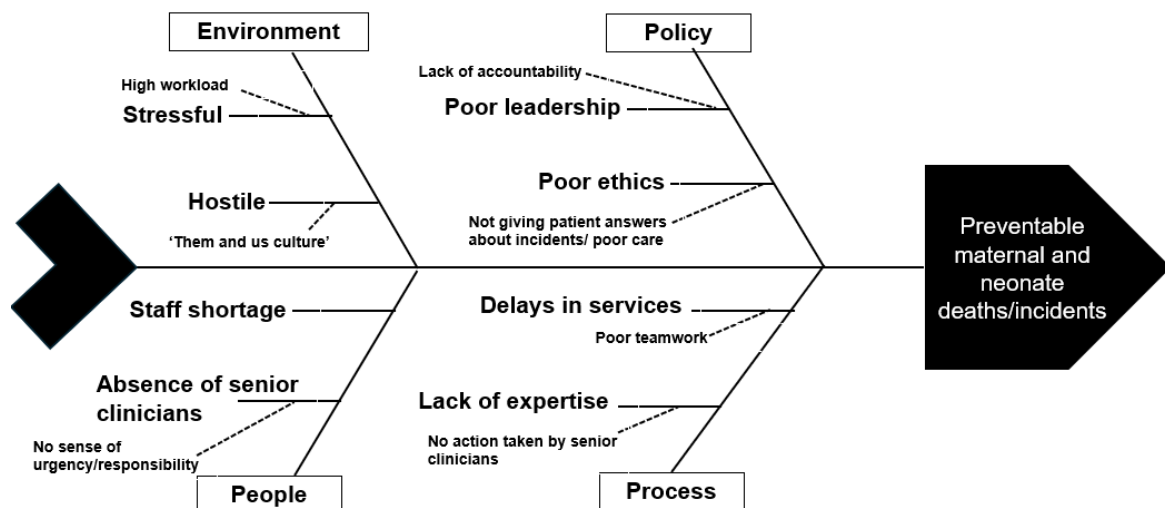


Figure 2: Fishbone diagram based on Shrewsbury and Telford Hospitals NHS Trust. This fishbone diagram demonstrates the root causes of the preventable incidents. The boxes (Environment, Policy, People and Process) are categories where the causes originated from. The dashed lines branching from each category are sub-causes which built up and formed a failure factor. The fish head shows the results of the causes combined with each other creating a problem.

Strategic planning- using SWOT analysis:

SWOT analysis is a strategic planning framework used to evaluate plans. SWOT stands for Strength(s), Weakness(s), Opportunities and Threats (Puyt, Lie and Wilderom, 2023). This framework is useful because it assists in identifying how well an organisation is doing, in this case it is used to identify the state of the Shrewsbury and Telford Hospital NHS Trust. The strengths, show characteristics and factors that are favourable for the organisation (Gürel and Tat, 2017). In this case, the strength of the hospital is having their mistakes acknowledged. This is beneficial to them as they will be more aware to not repeat the same mistakes that led to the incidents, mainly as they were preventable. The weaknesses aspect refers to internal factors that prevents an organisation from growing and developing (Benzaghta, Elwalda and Mousa, 2021). The hospital had numerous internal weaknesses, these include staff shortages, poor work environment, poor team dynamic and lack of appropriate leadership. Staff shortages lead to delays or uncomplete services (Senek *et al.*, 2020). These shortages are the primary cause for the weaknesses that followed. Shortages led to staff to work under pressure and stress leading to poor colleague's interactions and interactions between the maternity staff and the patients. Opportunities are external factors that benefit the organisation based on the strengths and weaknesses. The opportunity for the maternity sector would be additional

funding as it contributes to the creation of weaknesses. The NHS is the main fund provider to hospitals, because of this the funds given by them will be used to increase workforce as explained in the Ockenden report (2022). Threats in the analysis refers to external factors that are uncontrollable and leads to difficulties in the organisation (Sammut-Bunnici and Galea, 2015). The threats for the Shrewsbury and Telford Hospitals NHS Trust would be the increase in pregnant patients. The structure of the hospital and workforce do not allow staff to deliver effective care and services.

Table 1: SWOT analysis. The summary for the analysis of Shrewsbury and Telford Hospitals NHS Trust maternity services is summarised into a SWOT analysis in a table format.

Strengths	Weaknesses	Opportunities	Threats
-Having the knowledge of previous mistakes: This is useful for the future of the services as the professionals will prevent the same mistakes from occurring.	-Staff shortages. -Poor work environment. -Poor team dynamic. -Lack of appropriate leadership.	-Additional funding from the NHS or charities to increase their maternity workload.	-Increase in pregnant patients while the workforce is still not improved.

Recommendations:

In this section of the report, the recommendations provided will be based on the finding above, the Plan- Do- Study- Act (PDSA) cycle and Kurt Lewins 3 stage model.

The PDSA is a quality improvement method that consists of four steps which move in a cycle (Christoff, 2018). On the first step, 'Plan', the health authorities in this case, would need to create a plan based on the problems that has been identified in their work sector to then put it into action. Following this they will follow the 'Do' step where they will implement the plan made in the first step and test it to observe if it will produce positive outcomes. This will be followed by 'Study', where they will analyse the finds from the second step and compare to the predicted outcomes from the first step. Finally, the healthcare professionals will move to the last part of the cycle which is 'Act'. For this part they will decide to make changes or abandon the plan to then begin the cycle again. Creating this cycle in healthcare settings is beneficial because it allows healthcare staff to deliver improved services to patients as they observe care approaches and reflect if changes are required as they also observe the

outcomes (Reed, Davey and Woodcock, 2016). Another benefit of utilising this cycle is that it helps to make changes fast as it allows the identification of required areas of improvement to be detected fast and as services are still being delivered (Prybutok, 2018). This causes healthcare providers to work more cautiously as they are repeating the cycle. In the Shrewsbury and Telford Hospitals NHS Trust, the plan for PDSA that will be tested will be the training of current midwives and obstetricians, so they collaborate accordingly. The indicators that will suggest that they are working together will be the admission times of the pregnant patients. If their admission time decreases, it is more likely that patients and their babies survive from preventable incidents. To measure the admission times of the pregnant patients in the 'Do' step of the cycle, patients' family members will fill an optional questionnaire and survey to describe how they received the services and how long each procedure took. The information obtained from the collected data will allow the maternity services to move onto 'Study' where they will observe if times decreased and that midwives and obstetricians are working together for effectiveness and a positive environment. On the 'Act' stage of the cycle, adjustments will be made if required based on the feedback received from the families. For example, if they stated that reception was slow to find their details, the leadership would need to add training to the staff working in the reception of the maternity sector.

The Kurt Lewin's 3 stage model is a model utilised to observe how organisations implement changes (Hussain *et al.*, 2018). This model consists of 3 stages unfreeze, change and refreeze. The 'unfreeze' stage, presents the factors of the organisation or services that need to change to the professionals so that they are aware of what they must do or what they are not doing. The 'moving' or 'change' stage refers to the discussion of changes with the professionals and carrying out the changes with their awareness of the possible outcomes showing the urgency for the changes. Finally, the last stage is 'refreeze' which refers to ensuring that the changes become permanent and that professionals adapt and engage with those changes (Memon *et al.*, 2021). For this case, this process is going to be aimed at the poor leadership shown in the case at Shrewsbury and Telford Hospitals NHS Trust. The 'unfreezing' in this case, would be the change of leadership as the current in the case showed lack of accountability, effectiveness and initiative of changing. This was seen through the same repeat of the preventable incidents and the lack of answering to the patients' families. Changing leaderships always causes fear among staff in organisations and service providers as the future become uncertain, this is why the healthcare professionals need to be informed of the change and need to be made aware how they contributed for that type of change by the way they deliver their services, which in this case was very poorly. The second stage 'Change' or 'moving', will cause selection of a new leadership board. They must be professionals who are known to work effectively and creating initiative and they must have excellent expertise on

maternity services and the procedures that normally occur. By having a new leadership board, those in the maternity sector will change their way of working as they have a new leader to follow. The last stage is 'refreeze', which will ensure that the new leadership board remains the same for the upcoming years while they are leading a team at the maternity sector which delivers effective care and protects mothers and babies instead of harming them.

Using the PDSA and Kurt Lewin's 3-stage model in the layout demonstrated above, will lead the hospital to have a higher safety rating in their maternity sectors and will prevent incidents from occurring frequently.

Benchmarking

Benchmarking is a process that is used to identify strengths and weaknesses in healthcare to identify factors that need to be improved (Willmington *et al.*, 2022). The factors to be improved are identified through comparing the current organisations or service's performance to the national standard performance. If the performance is poor, the leaders from the organisation or services must create new plans to improve their performance. For this case, the benchmarking will be looking at neonatal mortality rate, maternal mortality rate and brain injury after birth as they indicated how the performance is currently.

Table 2: Benchmarking table for Shrewsbury and Telford Hospitals NHS Trust. This table assists in observing the performance of the maternity service.

<u>Benchmark indicator</u>	<u>National Standard</u>	<u>Hospital performance (before)</u>	<u>Hospital performance (after improvement)</u>
Neonatal mortality rate	1.6 per 1,000 livebirths (Mhrrace-UK, 2024).	77 neonatal deaths recorded (Department of Health and Social Care, 2022). 27.9% of the maternity care was graded as 'major concerns'.	After report, the hospital had 158 actions to complete to increase quality of care, 10% was implemented (The Shrewsbury and Telford Hospital NHS Trust, no date).
Maternal mortality rate	11.56 maternal deaths per 100,000 maternities (Office	9 out of 12 recorded cases were graded as 'major concerns' meaning	Changes have been implemented 100%, however there are no available data

	for Health & Disparities, 2024).	no standard care was met (Department of Health and Social Care, 2022).	specific to maternal deaths.
Brain injury after birth (Hypoxic-Ischaemic Encephalopathy (HIE))	1.5 per 1,000 livebirths is the incidence for HIE in the UK (Gale <i>et al.</i> , 2017).	Report identified 65 HIE severe cases. 65.9% of maternal reviews showed certain concerns contributed to the outcome (Department of Health and Social Care, 2022).	Progress shows that the 158 implementations are ongoing (The Shrewsbury and Telford Hospital NHS Trust, no date).

Conclusion:

In this service improvement report, there were different frameworks utilised to identify the different areas of the maternity sector from Shrewsbury and Telford Hospitals NHS Trust that need to be improved as soon as possible as their poor service delivery is causing preventable incidents which is causing the deaths of mothers and babies. The main issues found in the quality of care of the hospital were poor leadership, poor teamwork, delay in services such as referrals and admissions and lack of expertise from the senior clinicians which were not present in escalations of certain circumstances. These factors leading to poor quality care were analysed in detail utilising the Donabedian model which detected the causes of the problem. The 5 whys and fishbone analysis diagram to identify the causes and sub causes of the main problem which included people, work environment, policies and processes which were poorly carried out. Following these, SWOT analysis was used to identify the strengths, weaknesses, opportunities and threats that the hospital has and will potentially have depending on how they decide to act in the future. Finally, PDSA and Kurt Lewin's 3 stage model were utilised to construct plans that are recommended for the hospital to use to increase their quality of care by changing leaderships and training their staff members to become more efficient. These frameworks allowed the identification of the problem in the maternity sector and potential plans to assist the professionals and the families utilising the services.

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