

Prioritising Quality Factors in Maternity and Inpatient Service from Free-text Feedback Using a Computational Text Analysis Approach

Findings from the Secondary Analyses of Qualitative Responses from National Maternity and Inpatient Experience Surveys

Final Report

Table of Contents

Executive Summary	3
Key Findings.....	4
Introduction	6
Approach	6
ARC Conceptual Framework.....	7
Data Annotation.....	9
ARC Pattern Mining.....	9
Suggestion Extraction.....	9
Dashboard Design & Development	9
Public, Patient & Carer Involvement Workshops.....	10
Findings from the 2020 Maternity Experience Survey.....	12
Positive Experience.....	12
Negative Experience.....	14
Issues not covered.....	15
Findings from the 2019 Inpatient Experience Survey	17
Positive Experience.....	17
Negative Experience.....	18
Suggestions by patients	20
Findings From Longitudinal Analysis of Inpatient Surveys	21
Recommendations	27
Appendices.....	28
Appendix A – Maternity Care Experience Charts	28
Appendix B - Inpatient Services Charts	29
HRB-SDAP/NCEP Project Team	30

Secondary Analysis of Qualitative Response from 2020 Maternity & 2019 Inpatient Surveys

Executive Summary

This report summarises the results of the Secondary Data Analysis Project (SDAP) entitled “Generating Actionable Insights from Free-text Care Experience Survey Data Using Qualitative and Computational Text Analysis”, funded by the Health Research Board and the National Care Experience Programme. The project aimed to leverage qualitative feedback from the 2019 National Inpatient Experience Survey and 2020 National Maternity Experience Survey to enhance the quality of healthcare services in Irish hospitals. By integrating computational and qualitative analysis, the project overcame the time and resource barriers that have historically limited the use of free-text data from NCEP surveys. The development of a dashboard ensures that the research findings are accessible and actionable for those with the authority and responsibility to implement changes.

The specific objectives of the project included:

- Analyse qualitative responses from the 2020 maternity and 2019 inpatient NCEP surveys provided by patients and service users to identify key care activity-, resource-, and context-related (ARC) factors associated with positive and negative experiences across different demographic groups in the country.
- Identify key areas for improvement, monitoring, and interventions in inpatient and maternity care services based on the analysis of qualitative feedback from patients and service users.
- Provide quality managers, practitioners, and other relevant stakeholders with a platform or tool that offers actionable insights derived from the qualitative feedback analysis, enabling them to drive targeted improvements in specific hospital and practice contexts.

Altogether, 6,896 comments related to women's maternity care experiences were analysed. Of these, 2,639 comments reflected positive experiences, 2,621 highlighted areas needing improvement, and 1,636 addressed aspects of care not covered in the survey questionnaire. For the 2019 inpatient survey, the project analysed 15,552 comments, with 8,350 comments reflecting positive experiences, 7,254 identifying areas needing improvement, and 4,687 offering suggestions.

Additionally, a longitudinal analysis of 72,892 qualitative responses from five national inpatient surveys (2017-2022) was conducted to identify key trends in the perceived quality of inpatient care at national, hospital, and socio-demographic levels. The data included 14,551 comments from the 2017 survey, 12,919 from 2018, 15,552 from 2019, 14,888 from 2021, and 14,982 from 2022.

To ensure the research was relevant and useful to stakeholders, five Public, Patient, and Carer Involvement (PPI) workshops were organised during the project. The first workshop gathered insights from PPI contributors on the project's aims, research questions, preliminary results, and next steps. Participants included professionals in patient advocacy, healthcare quality, patient safety, and operational performance management within the Irish healthcare system. The second and third workshops focused on gathering feedback from policymakers, patient advocates, and quality managers on the initial prototype of the developed dashboard and in-depth data analyses. The fourth workshop was designed to understand the information needs and priorities of the general public regarding the survey findings and related actions. Participants included healthcare professionals, the general public, and retired or former healthcare staff, ensuring a comprehensive view from various stakeholders. The fifth and last PPI workshop presented the project's findings to hospital quality managers and sought their input on using these insights as rigorous evidence to enhance care practices.

The project also developed dashboards to make the results and key findings of the various analyses from the maternity and inpatient datasets accessible to relevant knowledge users on an ongoing basis. These dashboards feature interactive charts and tables with advanced search and data export capabilities.

The details of the study protocol and methodological approaches are provided in the endnotesⁱ. The related scientific publications are also included in the endnotes^{ii,iii}.

Key Findings

This section presents the findings of our analysis of maternity survey results, followed by inpatient survey results, longitudinal analysis and then recommendations for addressing these findings.

2020 National Maternity Experience Survey

Key factors associated with good maternity care experience

The most important factor contributing to positive maternity care experiences for women was overwhelmingly linked to the professionalism and supportive care provided by midwives, nurses, consultants, and other healthcare professionals. In general, the key factors included:

- Overall professionalism and friendly attitude of midwives (including community midwives), consultants and other healthcare professionals
- Quality care provided by midwives in the labour ward and particularly during labour and delivery
- High quality of care in high-risk pregnancy cases
- Breastfeeding support and the availability of lactation consultants or nurses when they are needed
- Reassurance from having additional appointments and scans

Key factors associated with negative maternity care experience

The key factors associated with negative maternity experiences were related to breastfeeding support, inconsistency in advice, postpartum support covering the mental health of women and support for young and first-time mothers. Specific key areas for improving maternity care experiences:

- Inconsistency in care-related advice and care during labour stages
- Inadequate breastfeeding support provided by lactation consultants, nurses or midwives along with stigmatisation of bottle-feeding
- Overcrowding in the pre-labour ward and insufficient bed capacity in the delivery suite
- Inadequate postpartum care, particularly in terms of vigilance and the early detection of postnatal depression
- Insufficient post-C-section care, especially in preventing mother-baby separation and providing feeding assistance
- Inadequate support for young and first-time mothers, especially during nighttime

Other important areas for improvement include not providing clearer explanations to mothers about the labour induction process, failing to allow partners to support women after a C-section, particularly at night, not offering high-quality meals that meet dietary needs, and overburdened midwives, resulting in women being left unattended when they need assistance.

Aspects of care deserving more attention in future surveys

Based on the analysis of women's feedback on aspects of their maternity care not covered by the questions in the survey, the following key areas deserve more attention in future surveys:

- Breastfeeding support for women including access to lactation consultants
- Pain relief-related issues and the management of fissures or tears during labour
- Previous birth and complication experiences of women
- Overall postpartum support and care, including communication about postpartum recovery, mental health support
- After C-section care for women covering pain relief, access to baby, attention from nurses for reassurance, and dietary needs

2019 National Inpatient Experience Survey

Key factors that contributed to positive inpatient care experience

The most important factor associated with a positive inpatient experience is the high level of professionalism maintained by the healthcare team, even when working under pressure. The key factors contributing to positive experiences include:

- Dedication, attentiveness and compassion of healthcare professionals during care on the ward
- Quality and variety of meals along with the catering service
- Overall quality of care and treatment received from healthcare professionals

Other factors associated with good inpatient experience include effective diagnosis and appropriate care response by the medical team, clarity of explanations from doctors, nurses and other medical staff, and the cleanliness of the hospital environment.

Key factors associated with negative inpatient experience

The following aspects of care were identified as the key areas for improving the inpatient care experience:

- Meal quality, variety, availability, poor catering services, and lack of consideration for dietary requirements¹
- Long waiting times at the emergency department (ED), including issues of overcrowding and prolonged waiting on trolleys before ward admission
- Ward hygiene, particularly in bathrooms and toilets, due to insufficient cleaning frequency
- Doctors' communication, including bedside manners, clarity and patience in explanations, and addressing language barriers
- Communication during discharge, particularly the provision of information to family members and carers before discharge, and ensuring the patient receives a discharge note
- Ward conditions, including noise from staff or other patients and disruptive lighting affecting sleep at night

Other important factors associated with negative inpatient experience include inadequate patient privacy, understaffing at the ED, and difficulties contacting doctors after discharge.

Suggestions by patients for improving the inpatient care experience

An analysis of patients' suggestions for improving their hospital care revealed a focus on incentives for healthcare professionals, emergency department services, gender-specific wards, meals, and communication. The specific suggestions by patients are as follows:

- Incentivise healthcare professionals working in challenging conditions, particularly nurses, and increase the size of the healthcare workforce.
- Address overcrowding, reduce waiting times, and enhance ED services
- Improve accessibility and modernise infrastructure in hospitals
- Enhance communication during discharge planning, particularly regarding family involvement.
- Provide gender-specific wards to ensure privacy and dignity in hospitals
- Improve the quality, variety, and availability of meals
- Strengthen communication between doctors and patients by offering more detailed explanations, providing advance notice before meeting patients, and supporting foreign doctors in overcoming language barriers

Other suggestions include showing greater appreciation for healthcare professionals, the immediate digitisation of medical records with patient access, and improving post-discharge care instructions.

¹ The association of meal quality, variety, and availability as well as the quality of catering services with both positive and negative patient experiences indicates that these are high-impact factors that should be prioritised for improvement. This may also signal possible inconsistency in how meal and catering services are delivered across hospitals.

Introduction

The collection of patient experience data is crucial for shaping healthcare policy, strategy, and quality improvement efforts (AHRQ, 2017; Torres, 2014; Zakkar, 2019). This data provides valuable insights into the effectiveness and safety of healthcare services from the perspective of patients, helping identify areas of strength and those needing improvement. By using patient feedback, healthcare providers can implement targeted quality improvement initiatives, while policymakers can make informed decisions to allocate resources effectively. Patient experience plays a critical role in driving healthcare improvements by capturing real-world feedback on care quality, hospital staff performance, treatment effectiveness, and resource allocation (Cunningham and Wells, 2017). Patient experience surveys highlight recurring issues and patterns, enabling healthcare providers to address gaps in service delivery and prevent repeated shortcomings (Larson *et al.*, 2019). This continuous feedback loop supports evidence-based decision-making, ensuring that changes in healthcare practice lead to measurable improvements in patient outcomes. Recognising patient experience as a core pillar of quality care, alongside clinical effectiveness and safety, ensures that healthcare evolves to be more responsive, patient-centred, and outcome-driven.

This project systematically analysed large volumes of qualitative data from two Irish National Care Experience Programme surveys to provide in-depth insights into patient experiences across acute hospital and maternity services. Using a computational approach, it categorized and examined qualitative responses from the surveys. By conducting this analysis, the study provided a service satisfaction prioritisation which enables the determination of the aspects of care that require immediate attention for improvement (Ojo *et al.*, 2024). Moreover, the factors strongly associated with good care experience, factors deserving more attention in future surveys (for maternity care) and additional suggestions for care improvement (for inpatient care) were determined. This project also highlighted key care activities, resources, and contextual (ARC) factors shaping patient experiences across different demographic groups. By uncovering patterns in both positive and negative care experiences, the study informed national efforts to enhance health and social care delivery, policy development, and regulatory practices. The results present the concrete decision tool to support the attainment of key targets related to improving maternity and inpatient care under Sustainable Development Goal 3 (SDG 3²) which is concerned with good health and well-being in general ensuring patient-centred care. Beyond the immediate findings and actionable insights, the project also contributed to the development of a specialised analytical dashboard — a tool designed to streamline and standardise the processing of patient experience data while making the results more accessible and useful for various stakeholders in the Irish healthcare system.

Approach

The study employs a structured, computational approach to analyse qualitative data from patient experience surveys in the Irish healthcare system (Figure 1). First, an ARC conceptual framework (explained below) was developed using a combination of inductive and deductive approaches, drawing from existing literature while iteratively incorporating new elements identified through patient textual feedback annotation. Second, an exploratory analysis of textual feedback and metadata was conducted using structural topic modelling (STM) and predictive modeling techniques to uncover key themes, provide rigorous evidence for prioritizing national healthcare issues based on patient feedback, and validate findings. Third, ARC-based association rule mining was applied to identify key patterns associated with both positive and negative experiences in maternity and inpatient care. Fourth, to support decision-making, suggestions and emotion extraction were performed using deep learning techniques. Finally, the generated insights were integrated into a dashboard, developed using a scenario-based design approach, to enable stakeholders, including healthcare professionals and policymakers, to explore and utilize the findings effectively. The entire process is supported by patient, public, and carer involvement (PPI) workshops, ensuring that patient voices actively contribute to shaping healthcare improvements.

² <https://sdgs.un.org/goals/goal3>

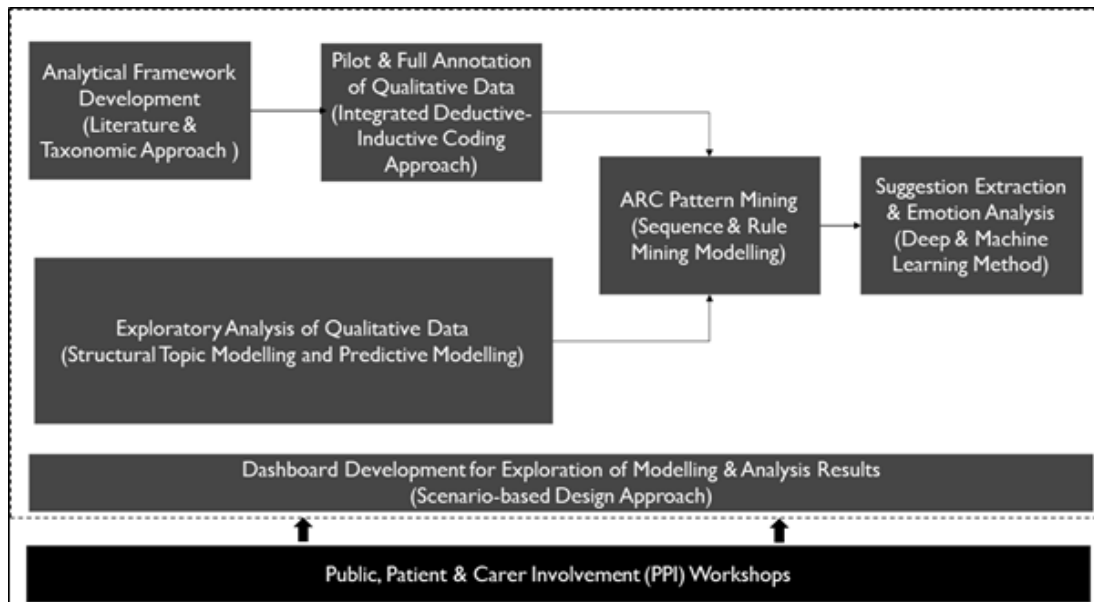


Figure 1. Overall Research Design and Methodological Approach

ARC Conceptual Framework

To examine both positive and negative patient experiences in inpatient and maternity care settings, patient experiences are conceptualized as the result of interactions with healthcare systems, administrative and clinical processes, and various staff members involved in care provision. The conceptual framework is designed to comprehensively analyse patient and customer feedback by focusing on the value creation process through activities, resources, and contextual (ARC) factors. The linguistics-based ARC approach (Ordenes *et al.*, 2014) examines the interactions between service activities, the resources involved, and the contextual factors influencing these interactions. This structured method enables a deeper understanding of experiences by identifying key elements that shape service delivery. The framework follows a structured process, which includes (i) extracting ARC elements from feedback, (ii) assigning linguistic patterns to these elements, and (iii) systematically categorizing textual feedback based on specific factors, high-level themes, and patient experience sentiment.

In the ARC framework, *activities* refer to the specific actions taken by either the service provider or the customer that contribute to the value creation process. In healthcare, activities include consultations, treatments, or administrative procedures that directly impact patient experience. *Resources* represent the various elements provided by the service provider or accessed by the patient to facilitate these activities. These can include medical staff, equipment, facilities, information, and administrative services - critical components that enable interactions between healthcare providers and patients, directly influencing service quality and satisfaction. *Context* encompasses the situational and personal factors shaping a patient's experience. Situational context includes external factors such as waiting times, hospital environment, and service delays, while personal context includes individual characteristics such as age, disabilities, or specific health conditions. Understanding context is crucial for recognizing how different circumstances shape perceptions of care. Annotators used a bespoke platform to view patient comments, assign relevant activities, resources, and contexts using dropdown menus, and identify trigger terms related to these elements. Each comment could be associated with multiple ARC components, ensuring a comprehensive and structured categorization of patient feedback. This annotation system improved consistency and efficiency, making it easier to identify patterns across large datasets.

Exploratory Analysis

In parallel with the analytical framework development and data annotation process, the exploratory phase of this study was performed. This phase aimed to validate, enrich and refine the analytical framework by uncovering additional important concepts related to activities, resources and contexts contained within the comments. Two computational techniques were utilised for exploratory analysis - Structural Topic Modeling (STM) and Predictive modelling.

Structural Topic Modeling is an extension of the Latent Dirichlet Allocation (LDA) and is a known unsupervised learning-based text analysis framework (Blei *et al.*, 2012), that is widely adopted in customer experience studies

(Schmiedel *et al.*, 2019). In our project structural topic models were set up and applied to identify the key latent topics (themes) that impact healthcare service satisfaction. For each identified care theme, we (1) determined topic *label* - domain experts (from healthcare, text analytics, linguistics, and the social sciences) were involved in this process; (2) calculated the *topic prevalence* as the total document-topic proportion over all free-text patients responses. The prevalence of a topic is a measure of the *quality gap* associated with the care theme. Additionally, we explored the relationships between these themes and demographic (age, sex, ethnicity, disability) and organisational (e.g. hospital size) factors, using these factors as STM models covariates.

The *Random Forest* (RF) algorithm is a predictive model that combines multiple decision, each built on a random subset of the data and features, to improve accuracy and reduce the risk of overfitting (Breiman, 2001). In our project, we employed the RF prediction models to estimate the *effect* of identified themes on overall care experience rating. Additionally, sentiment analysis was conducted using four sentiment tools³ to classify responses as positive or negative. The geometric mean of normalized sentiment scores for the most representative comments per topic was calculated to estimate the negative affect associated with each care theme. The values of estimated themes' quality gaps, effect, and negative affect were normalised to values between 0 and 1. Issues with high-quality gaps, effect and negative affect will have values closer to 1.

To enhance our finding interpretability, we developed the conceptualisation model that extends SERVQUAL service quality model (Parasuraman *et al.*, 1988) with the theoretical concepts of *valence* and *salience*. Based on our conceptualisation, *salient* issues are those that significantly influence overall care experience rating (satisfaction) and are widely recognised (have a high volume of discussion) by healthcare patients, making them ideal targets for healthcare improvements. Salience was computed as a function of estimated effect and topic prevalence. *Valence* reflects the emotional intensity associated with a care issue, specifically measuring the extent of negative emotions linked to it. Issues with high valence carry strong emotional weight and can significantly impact patients' perceptions of care quality. In a hospital setting, where patients are often in vulnerable states, emotional responses to care experiences can be heightened, making valence a critical factor in understanding patient satisfaction and identifying areas for improvement. Valence was computed as a function of negative affect and topic prevalence (Ojo *et al.*, 2024). presents our conceptual model for identifying important care dimensions for prioritisation.

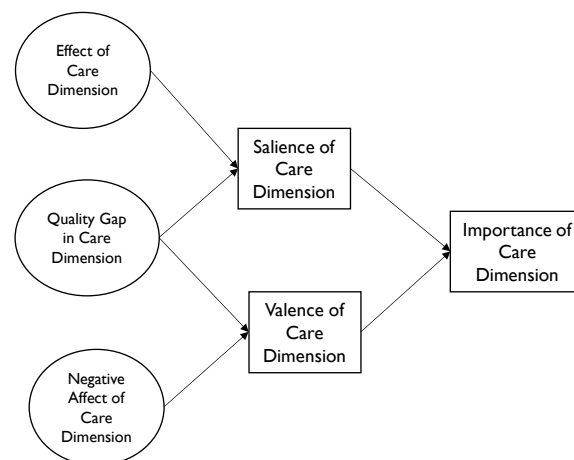


Figure 2. Conceptual Model for Identifying Important Care Dimensions for Prioritisation

The extended *longitudinal analysis* of the inpatient dataset for the period 2017–2022 (excluding 2020, when no survey was conducted due to the COVID-19 pandemic) was conducted to identify key trends in the perceived quality of inpatient care. Each of the five datasets contains two types of comments: Need Improvement and Good Experience. During the longitudinal analysis, a single Structural Topic Model was applied to the entire five-year dataset without separating comments based on patient experience type. The main phases of the STM results analysis are as follows: (1) identifying the proportion of key themes in Need Improvement and Good Experience types of patient feedback; (2) calculating the difference between topic proportions in Need Improvement and Good Experience parts of free-text responses within each theme; (3) testing the significance of changes (t-test) in these differences across two-year intervals from 2017 to 2022; (4) visualizing the trends in key themes of patient experience (based on topic proportion differences) over the years, highlighting the significance of changes and general theme sentiment (prevalence of Need Improvement or Good Experience in each theme); (5)

³ [Syuzhet Package](#); [Bing lexicon](#); [AFINN lexicon](#); VADER sentiment analysis library (Hutto, C.J. and Gilbert, 2014)

repeating steps 2-4 for different socio-demographic (e.g., age, sex, ethnicity, disability) and organizational (national, hospital levels, hospital size) factors.

Data Annotation

The dataset annotation using the analytical framework was conducted in two stages. The first stage, the *pilot phase*, focused on testing and refining the analytical framework to ensure clarity and consistency in the ARC taxonomies. A random sample of comments from both datasets was selected for pilot annotation, serving as training data for the development of an automatic annotation model in the second stage. During the pilot annotation, the ARC analytical framework was applied to structure patients' textual feedback systematically. One primary annotator coded the comments using the coding app, selecting relevant ARC elements from predefined lists. To ensure consistency, a second reviewer independently annotated a subset of comments for validation, helping to identify and resolve discrepancies. If a comment did not fit within the existing framework, the annotator could introduce new elements, ensuring the framework's adaptability and comprehensiveness. This structured approach maintained annotation accuracy while allowing for iterative framework expansion as needed. In total, 4,972 comments were coded, with the breakdown by comment type and survey type detailed in Table I.

Table I. Breakdown of Coded Comments

Dataset	Comment Type	Total Coded Comments
Inpatient	Need Improvement	2001
Inpatient	Good Experience	1000
Maternity	Need Improvement	1175
Maternity	Good Experience	400
Maternity	Not Covered	396

The second stage involved *automating the annotation process* using a model trained on the manually annotated pilot data. The automatic annotation process leveraged vector embeddings similarity to classify comments into ARC categories. A Sentence-BERT (SBERT)⁴ model was trained on the manually annotated data, converting comments into vector embeddings and comparing them with predefined ARC elements using multiple similarity measures. The model then predicted the most relevant ARC categories by selecting those with the highest similarity scores, enabling efficient and scalable classification of large-scale qualitative data.

ARC Pattern Mining

Following the annotation of datasets, association rule mining was used as another approach to identify key patterns related to both positive and negative experiences in the maternity and inpatient datasets. This approach was then applied to extract frequently occurring patterns from the annotated comments, helping to prioritise improvement plans for both datasets. Applying association rule mining led to the identification of patterns that capture contextual factors, specific service touchpoints, and associated resources, providing valuable insights for prioritising improvements in care experiences.

Suggestion Extraction

A deep learning model was used to automatically identify and classify suggestive comments from both the maternity and inpatient datasets. This approach was chosen to efficiently analyse large volumes of unstructured feedback and detect meaningful patterns related to service improvement. To achieve this, an end-to-end neural network architecture for multi-label classification was applied, allowing the model to categorise comments into multiple relevant themes. This systematic classification provided a structured way to interpret feedback across different care settings. Linking the extracted suggestions to the identified priority areas for improvement will facilitate the development of initiatives to improve inpatient and maternity care experiences.

Dashboard Design & Development

To provide access to the results of our analysis for use by knowledge users and relevant stakeholders, an analytics dashboard was developed to facilitate the visualization and exploration of key insights. The dashboard allows

⁴ <https://sbert.net/>

users to drill down into specific hospital groups, hospitals, and practices within hospitals, as well as focus on key themes such as safety, hygiene, or ambulatory services, ensuring that insights are both accessible and actionable.

The dashboard development followed a *user-centred, iterative methodology*, incorporating several key phases. *First*, A set of *personas* was defined to represent different stakeholder groups who would interact with the dashboard. This step ensured that the design effectively addressed the diverse information and decision-making needs of policymakers, healthcare administrators, and patient advocacy groups. *Second*, based on the identified user needs, *use case scenarios* were developed to map out how stakeholders would engage with the dashboard, the types of queries they would perform, and the specific insights they would require. This step helped structure the functionalities needed to support decision-making in a healthcare context. *Third*, initial *dashboard wireframes* were created to conceptualize the layout, interactivity, and filtering options. These prototypes were iteratively refined based on stakeholder feedback before moving on to full-scale development. The dashboard was implemented using *Power BI*, with two tailored versions: one for *inpatient care* and another for *maternity care*. Multiple iterations were conducted, incorporating feedback from internal team members and external stakeholders on aspects such as content relevance, design intuitiveness, interactivity, filter functionality, and layout optimization. *Fifth*, throughout the development process, different versions of the dashboard were shared with stakeholders for *validation*. Continuous feedback loops were established to refine the dashboard's usability, ensuring it met the practical needs of end users

A key component of the development approach was incorporating insights from *Patient and Public Involvement (PPI) workshops*. Feedback from service users ensured that the dashboard was shaped not only by institutional priorities but also by the lived experiences and needs of patients.

Public, Patient & Carer Involvement Workshops

A fundamental aspect of our research design is the active engagement of patients, carers, patient representative groups, and knowledge users directly associated with the project. To ensure that the voices of service users and advocates are integrated into our research, we conducted five PPI workshops. The National Care Experience Programme is committed to meaningful PPI through the involvement of patients, service users, and advocates in its Steering Group, Programme Boards, and Advisory Groups. This commitment was reflected in our project through a series of workshops designed to capture insights that would inform both the research process and the development of an analytics dashboard.

The *first* workshop was designed to gather input from PPI contributors on the project's aims, research questions, preliminary results, and next steps. Participants included a diverse group of internal stakeholders actively engaged in patient advocacy, healthcare quality, patient safety, and operational performance management within the Irish healthcare system. The insights gathered during this session not only validated our research approach but also played a crucial role in shaping the development of the dashboard. This feedback ensured that the dashboard would provide meaningful insights tailored to stakeholder needs, allowing them to explore data and analysis efficiently and effectively.

The *second* and *third* workshops focused on obtaining feedback from policymakers, patient advocates, and quality managers regarding the initial prototype of the dashboard. These sessions also provided an opportunity to review the more detailed analyses performed on the collected data. As a result of these discussions, the dashboard underwent significant improvements, making it more informative, effective, and user-friendly. Beyond improving usability, the updated version provided deeper insights into key areas that should be prioritised for strategic improvement initiatives. Programme directors and managers expressed strong support for the refined insights, recognising their potential to enhance hospital performance and workflow within the Irish healthcare system. Ultimately, these refinements aimed to improve the overall experience and quality of care for service users.

The *fourth* workshop was conducted to gain a deeper understanding of the informational needs, values, and priorities of the general public. The goal was to collect insights that would help prioritise findings, identify potential interventions, and derive actionable recommendations based on public perspectives. This workshop brought together a diverse group of participants, including healthcare professionals, members of the general public, and retired or former healthcare workers. By ensuring broad representation across different genders, ethnicities, roles, and backgrounds, the workshop provided a comprehensive and inclusive perspective on healthcare challenges and opportunities for improvement in Ireland's public health system. The final workshop shared the project's findings with hospital quality managers and gathered their feedback on how these insights could be used as robust evidence to improve care practices.

Throughout the development process, every stage of the project, from defining research questions to refining the dashboard, was supported by PPI contributions. The workshops provided valuable, iterative feedback, ensuring that patient voices and perspectives were not only heard but actively integrated into the decision-making process. By embedding continuous engagement with service users, healthcare professionals, and policymakers, the project remains aligned with the core mission of the National Care Experience Programme, to enhance healthcare quality, improve service user experiences, and foster a data-driven approach to decision making in the Irish healthcare system.

Findings from the 2020 National Maternity Experience Survey

2020 National Maternity Experience Survey

The National Maternity Experience Survey was conducted by the National Care Experience Programme (NCEP) in Ireland, providing women with the opportunity to share their experiences of the country's maternity services. The target group for this study are women aged 16+ years who have recently given birth in one of Ireland's 20 maternity care services (comprised of 19 public hospitals and a range of National Home Birth Services). The survey was conducted digitally (online) and physically (paper) in February and March 2020. It consists of 65 closed-ended questions. Participants were also asked to rate their overall experience on a scale from 0 to 10. Additionally, the survey included three open-ended questions, which were central to our analysis and from which the framework reported in this document was developed: "*What was particularly good about your maternity care?*", "*Was there anything that could be improved?*", and "*Were there any other important parts of your maternity care experience that are not covered by the questions in this survey?*" A total of 6,357 women who gave birth in October and November 2019 were invited to take part in the survey. In total, 3,204 women (50%) returned a completed questionnaire.

Positive Experience

The five major factors associated with the highest *valence* of positive maternity care experiences – those with the *highest volume* of discussions among women and the *most positive sentiment* – include (Figure 3):

- *Midwife care* provided throughout pregnancy, labour, and postnatal stages, with clear communication, emotional reassurance, and attentiveness
- *Friendly & professional staff*, including midwives, doctors, and support teams, demonstrating warmth and professionalism to ensure mothers feel confident and well cared for, even in busy environments
- *Exceptional care in the labour ward*, with midwives and consultants providing reassurance, guidance, and compassionate support
- Supportive and empowering *care during delivery*, respecting birth preferences, facilitating natural birthing experiences, and ensuring guidance and reassurance throughout labor and recovery
- *Breastfeeding support*, with lactation consultants or nurses available when needed to assist mothers

The five major factors associated with the highest *salience* of positive maternity care experiences – those with the *highest volume* of women discussions and the *greatest impact on overall satisfaction* (overall rating) – include (Figure 5):

- *Treating with dignity and respect* through personalized and compassionate care, ensuring birth preferences were acknowledged, concerns were addressed, and clear communication was maintained throughout pregnancy, labour, and postpartum stages
- *Regular and thorough scans* for frequent monitoring and check-ups, ensuring vigilant care for *high-risk pregnancies*, including women with pre-existing conditions, previous complications, or multiple pregnancies, providing reassurance and early detection of potential issues
- *Friendly & professional staff, care in the labour ward and care during delivery*

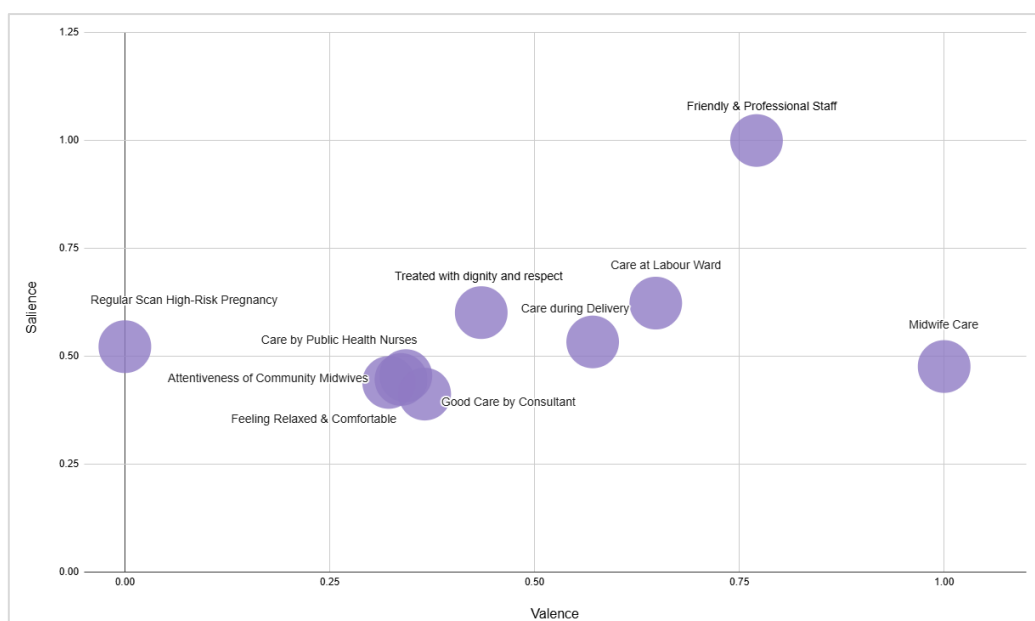


Figure 3. Salience and Valence of the top 10 factors associated with positive maternity care experiences

The top five factors contributing to positive maternity care experiences for women include (Figure 4):

- *Professionalism and friendliness* of midwives, consultants, and other healthcare professionals
- *Quality midwife care* in the labour ward, particularly during *labour* and *delivery*
- *Treating with dignity and respect*, honouring birth preferences, addressing concerns, and maintaining clear communication
- *Breastfeeding support* through guidance and hands-on assistance from midwives, lactation consultants, and public health nurses

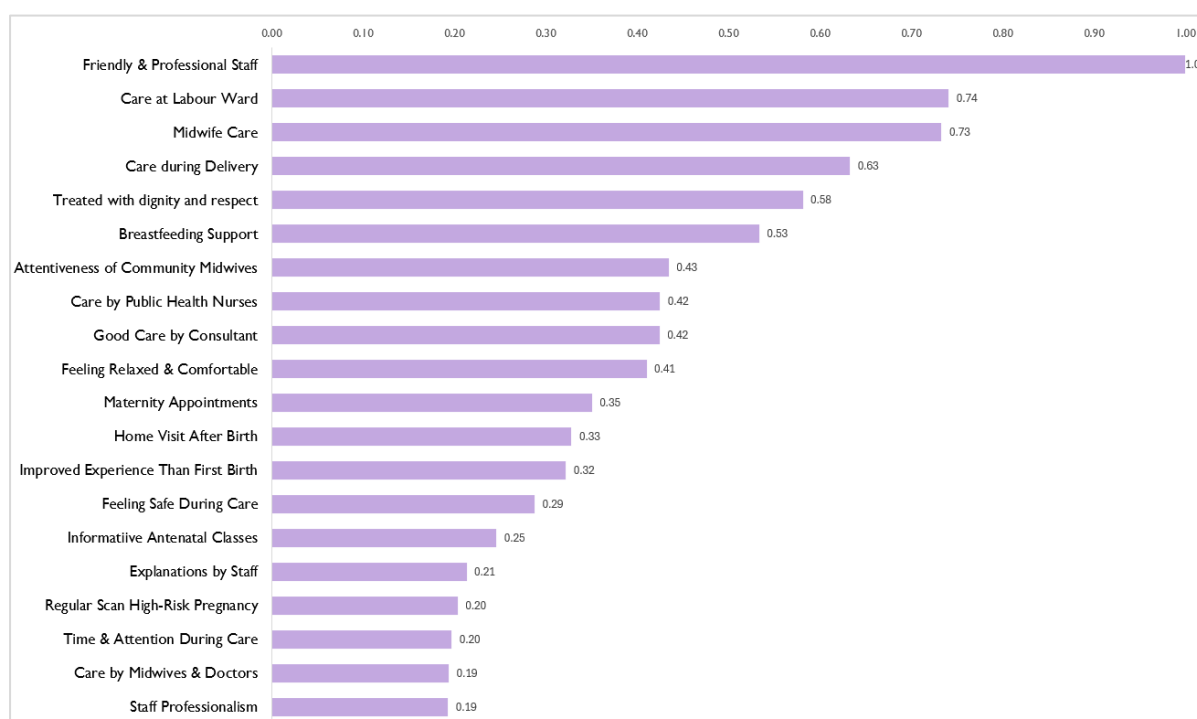


Figure 4. Top 20 factors associated with a positive maternity care experience

Negative Experience

The five major factors associated with the highest *valence* of negative maternity care experiences – those with the *highest volume* of discussions among women and the *most negative sentiment* – include (Figure 5):

- *Long waiting times* before appointments
- *Inconsistent care-related advice* from midwives, GPs, and doctors and care during different labour stages
- *Limited access to pain relief* options before admission to the labour ward
- *Overburdened midwives* in pre-and post-natal wards

The five major factors associated with the highest *salience* of negative maternity care experiences – those with the *highest volume* of women discussions and the *greatest impact on overall satisfaction* (overall rating) – include:

- *Inadequate breastfeeding support* provided by lactation consultants, nurses or midwives along with stigmatisation of bottle-feeding
- *Limited post-delivery physical well-being healing and mental health checks*
- *Insufficient post-C-section care*, especially in preventing mother-baby separation and providing feeding assistance
- *Inconsistencies in care-related advice and care during different labour stages*



Figure 5. Salience and Valence of the top 10 factors associated with Negative Maternity Care Experiences

The top five factors with the highest *valence* and highest *salience* for *improving maternity care experiences* include (Figure 6):

- *Inconsistencies in care-related advice and support* during labour stages
- *Inadequate breastfeeding support* from lactation consultants, nurses, or midwives
- *Insufficient post-C-section care*
- *Overburdened midwives* in pre-and postnatal wards
- *Insensitivity of doctors*, especially rushed hospital check-ups

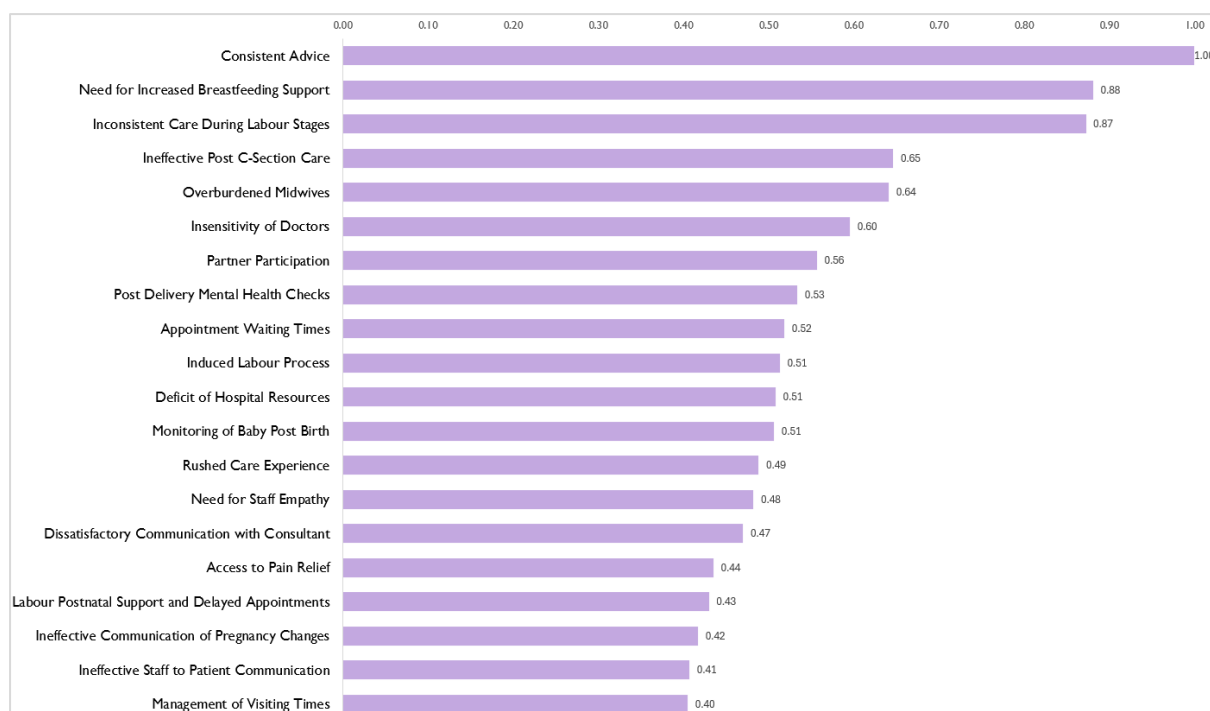


Figure 6. Top 20 factors for improving maternity care experience

Issues not covered

The five major aspects of care deserving more attention in *future surveys* with the highest *valence* (i.e. those most discussed and with the *most* negative sentiment) include (Figure 7):

- *Breastfeeding support* for women, including access to lactation consultants
- Increased awareness, extended care, and better support to address postpartum *depression* and maternal *well-being* beyond six weeks
- A *shortage* of *midwives* and *nurses*, increased pressure on maternity services
- Midwives and nurses are overworked due to understaffing, impacting the quality of care, breastfeeding support, and overall hospital resources
- Greater recognition of *previous pregnancy complications*, miscarriage care, and individualised support

The five major aspects of care deserving more attention in *future surveys* with the highest *salience* (i.e. those most discussed and with the *greatest impact on overall satisfaction or rating*) include (Figure 7):

- *Recognition of staff excellence*, *Prior complication experience* and *Breastfeeding support*
- *Pain relief*-related issues and the management of fissures or tears during labour
- Comparison to *previous birth experiences* to assess improvements in care, recognition of maternal experience, and the extent to which women feel heard, supported, and involved in decision-making
- Greater adherence to birth plans, informed consent for episiotomies, improved pain management, and enhanced recovery support for severe *tears* and *stitching* complications

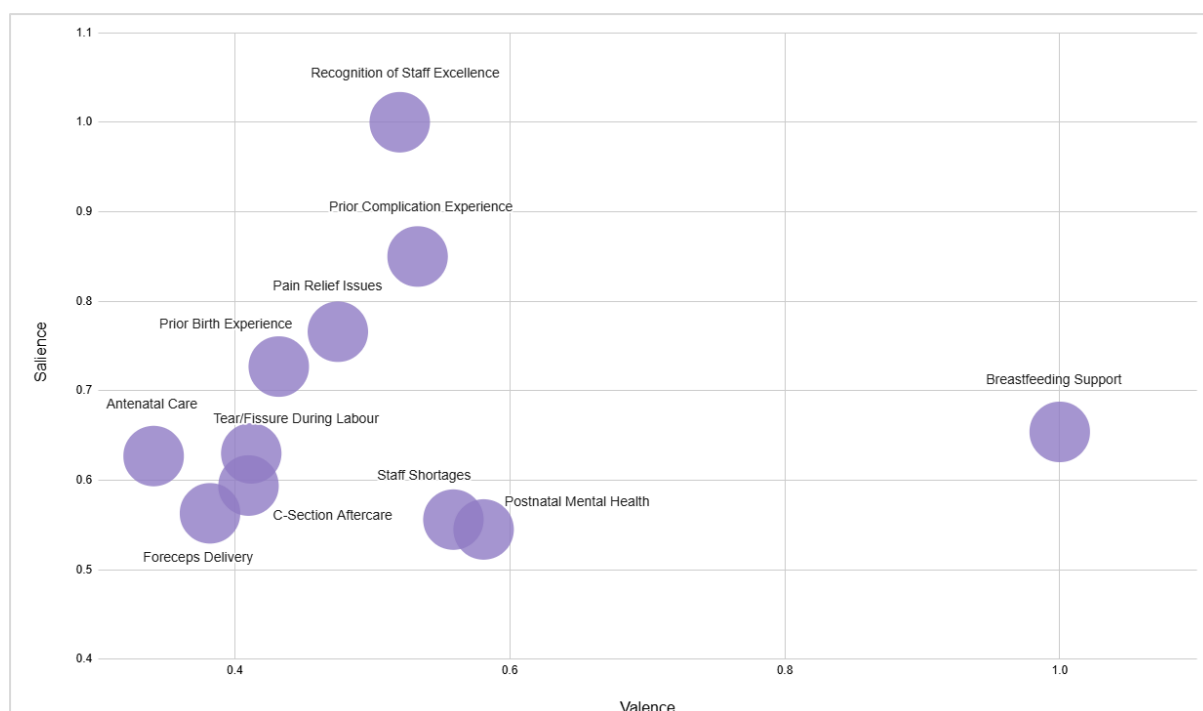


Figure 7. Salience and Valence of the top 10 factors not covered by the questions in the survey

The top five critical aspects of maternity care *not covered* by the questions with the highest *valence* and highest *salience*, include (Figure 8):

- Greater access to dedicated lactation support, consistent guidance in hospitals and postnatally, and a non-pressuring approach to *breastfeeding* and bottle-feeding choices
- Previous *birth* and *complication* experiences of women
- *Pain relief*-related issues and the management of fissures or tears during labour
- Overall postpartum support and care, including *mental health* support
- Midwives and nurses are *overworked* due to understaffing, impacting the quality of care, breastfeeding support, and overall hospital resources

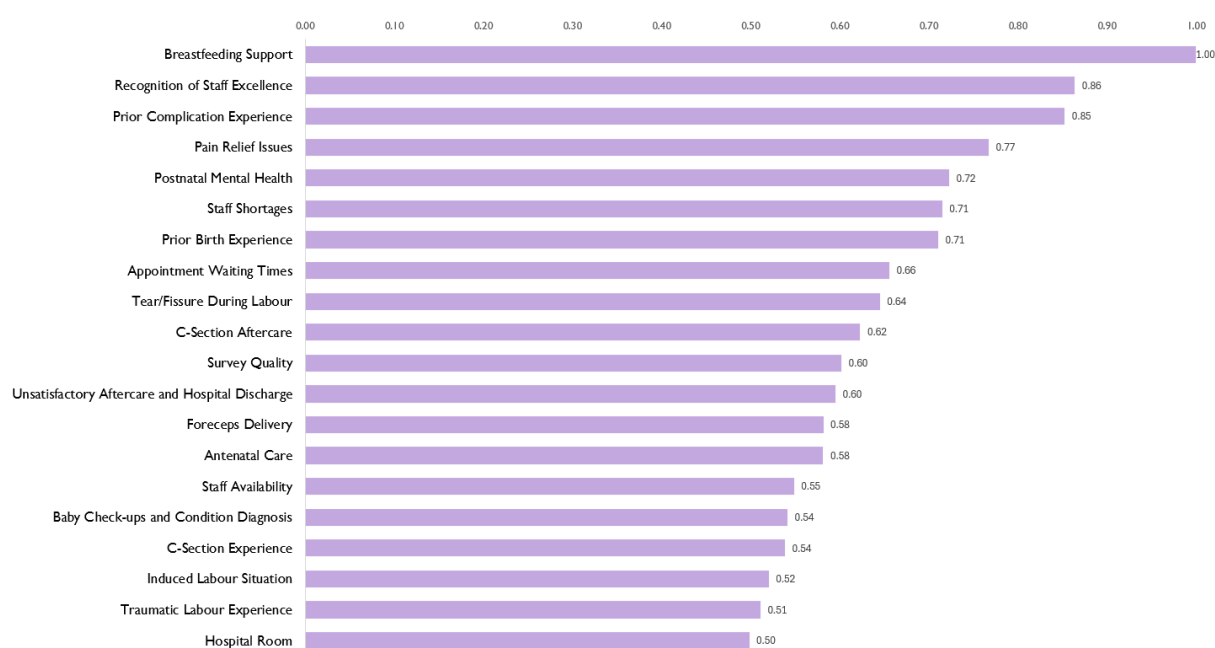


Figure 8. Top 20 aspects of care not covered by the questions in the survey

Findings from the 2019 National Inpatient Experience Survey

The National Inpatient Experience Survey was conducted by the National Care Experience Programme (NCEP) in Ireland, allowing patients to share their experiences in public acute hospitals and using their feedback to identify areas of good practice and areas needing improvement. The 2019 survey focused on patients aged 16 and older who had spent at least 24 hours in one of 40 public acute hospitals and were discharged in May 2019. Excluded from the survey were maternity, day cases, paediatric, psychiatric, specialist services (less than 24-hour stays), and private hospitals. The National Inpatient Experience Survey 2019 followed the patient's journey from admission to discharge, with questions structured around five stages: admission, care on the ward, examinations, diagnosis and treatment, discharge or transfer, and other aspects of care. Participants were also asked to rate their overall experience on a scale from 0 to 10. Additionally, the survey included three open-ended questions, which formed the core of our analysis and from which our framework reported in this document was developed: “Was there anything particularly good about your hospital care?”, “Was there anything that could be improved?”, and “Any other comments or suggestions?”. Eligible patients received the survey by post within two months of discharge and were asked to complete and return it. Of the 26,897 patients invited to participate, 12,343 (46%) completed the questionnaire. Participants included 6,056 males (49.1%) and 6,287 females (50.9%).

Positive Experience

The five major factors associated with the highest *valence* of positive inpatient care experiences (those with the *highest volume* of discussions among patients and the *most positive sentiment*) and highest *salience* of negative inpatient care experiences (those with the *highest volume* of discussions and the *greatest impact on overall satisfaction* - overall rating) include (Figure 9, Figure 10):

- *Excellent care*, high-quality treatment and professionalism from doctors, nurses, and staff with dignity and respect
- Exceptional *kindness*, compassion, and support from healthcare staff, creating a welcoming and caring environment
- Staff nurses, doctors, and hospital staff provided *attentive* and compassionate care, offering continuous support
- *Quality* and variety of *meals* along with the catering service
- Healthcare staff remained dedicated, *professional* and hardworking, delivering quality care despite pressure, understaffing, overcrowding, and challenging working conditions

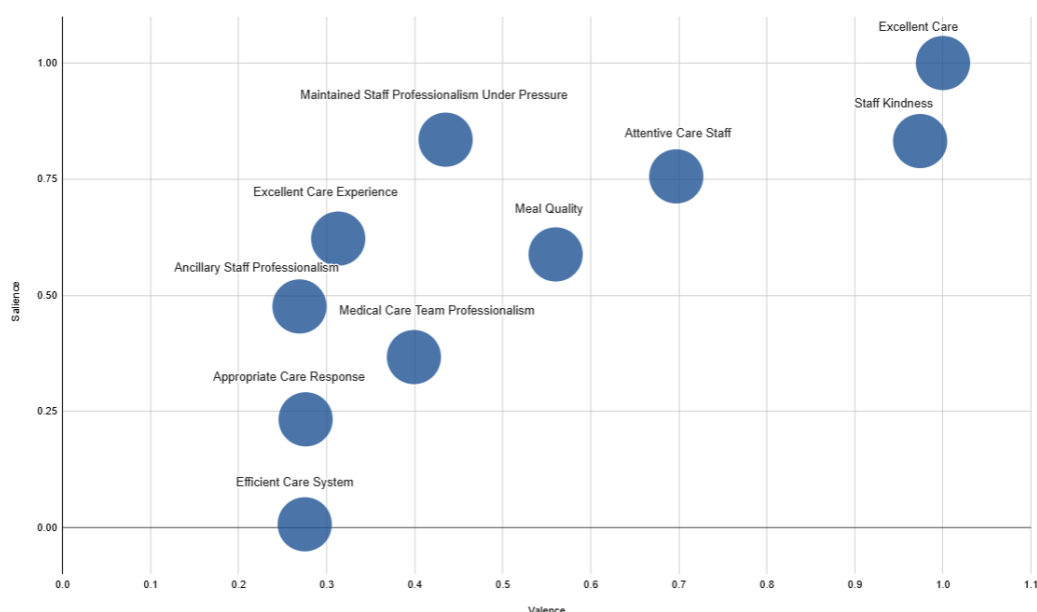


Figure 9. Salience and Valence of the top 10 factors for positive inpatient care experiences

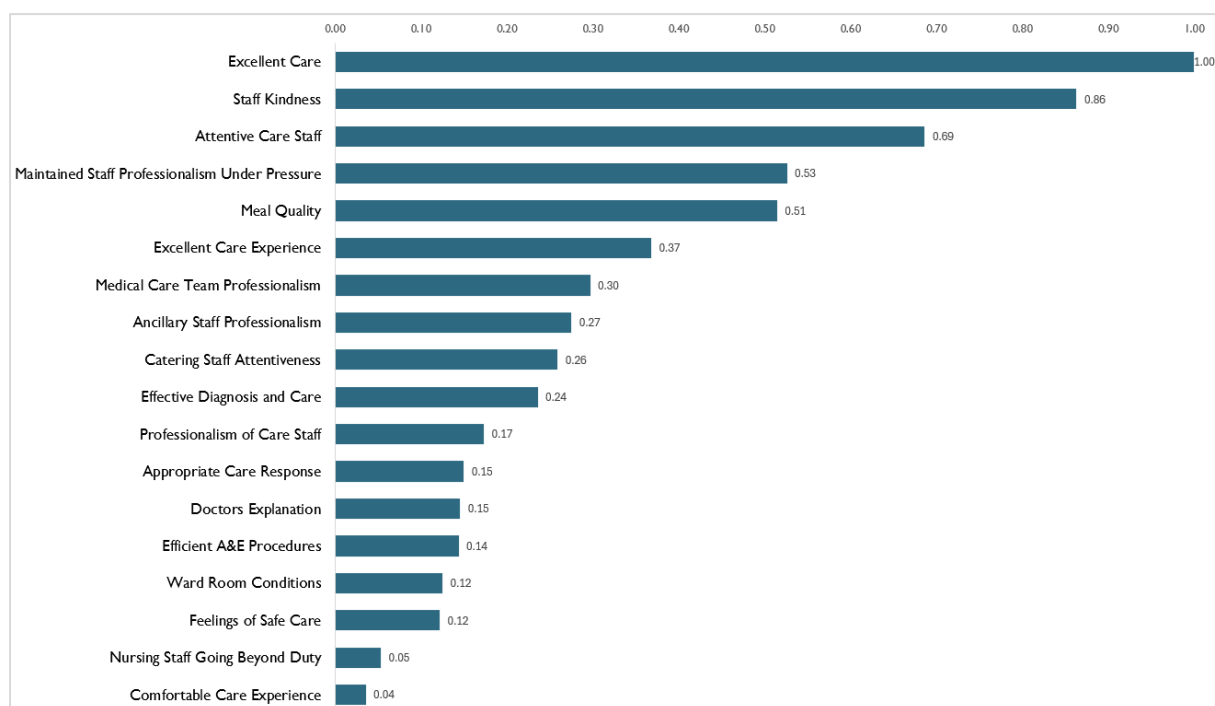


Figure 10. Top 20 factors associated with positive inpatient care experience

Negative Experience

The five major factors associated with the highest *valence* of negative inpatient experiences – those with the *highest volume* of discussions among patients and the *most negative sentiment* – include (Figure 11):

- *Meal* variety, nutritional balance, meal timing, and serving practices, ensuring better quality, temperature control, need for better dietary options, improved meal distribution
- Excessive delays in the *emergency* department, with long *waits* for triage, doctor assessments, and ward admissions, often resulting in prolonged stays on trolleys in overcrowded conditions
- Concerns about *cleanliness* in wards, bathrooms, and shared spaces, need for improved cleaning standards, better hygiene practices, and more frequent sanitation
- Dismissive or unprofessional *attitude* from some medical staff, need for improved communication, empathy, and respect in patient interactions, particularly for vulnerable and elderly patients
- Insufficient *medical* and *nursing staffing level* delays in care, rushed treatment, and increased pressure on overworked personnel

The five major factors associated with the highest *salience* of negative inpatient care experiences – those with the *highest volume* of patient discussions and the *greatest impact on overall satisfaction* (overall rating) – include (Figure 11):

- Lack of clear *communication* with patients and families regarding *discharge* plans, follow-up care, and medical instructions, need for better coordination and timely information sharing
- Need for clearer *explanations*, better *listening* skills, better patient engagement needed to ensure understanding of diagnoses, treatments, and discharge plans, especially for older patients and those facing language barriers
- *Meal quality & access*, *Ward hygiene*, *A&E waiting times*

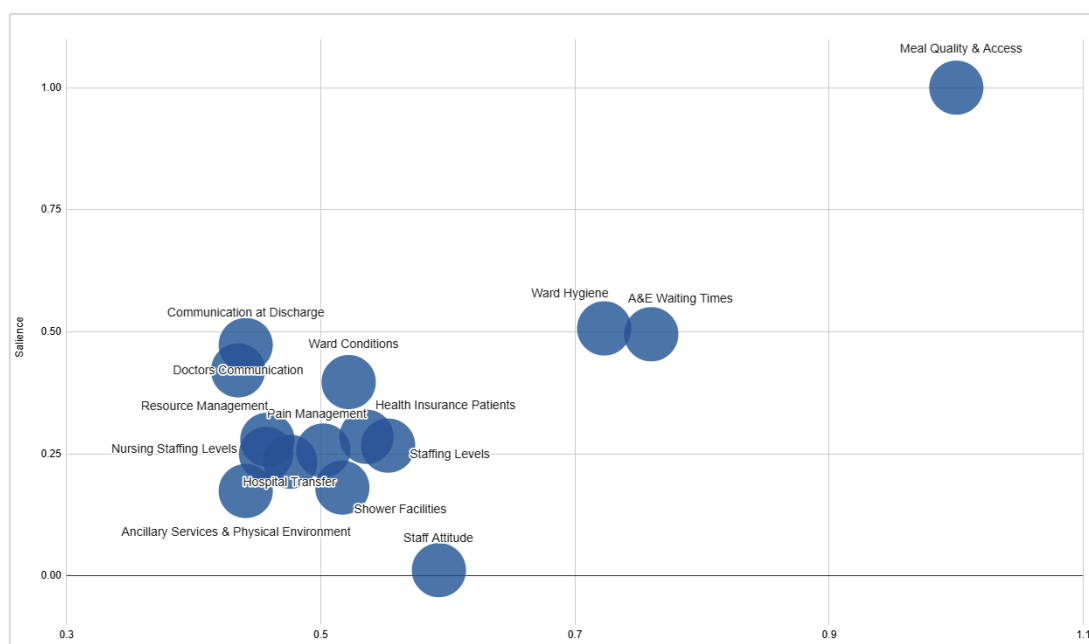


Figure 11. Salience and Valence of top-15 factors of negative inpatient care experiences

The top five critical aspects of inpatient care experiences and associated with the highest *valence* and highest *salience*, include (Figure 12):

- Meal quality, variety, availability, poor catering services, and lack of consideration for dietary requirements⁵
- Long waiting times at the emergency department (ED), including issues of overcrowding and prolonged waiting on trolleys before ward admission

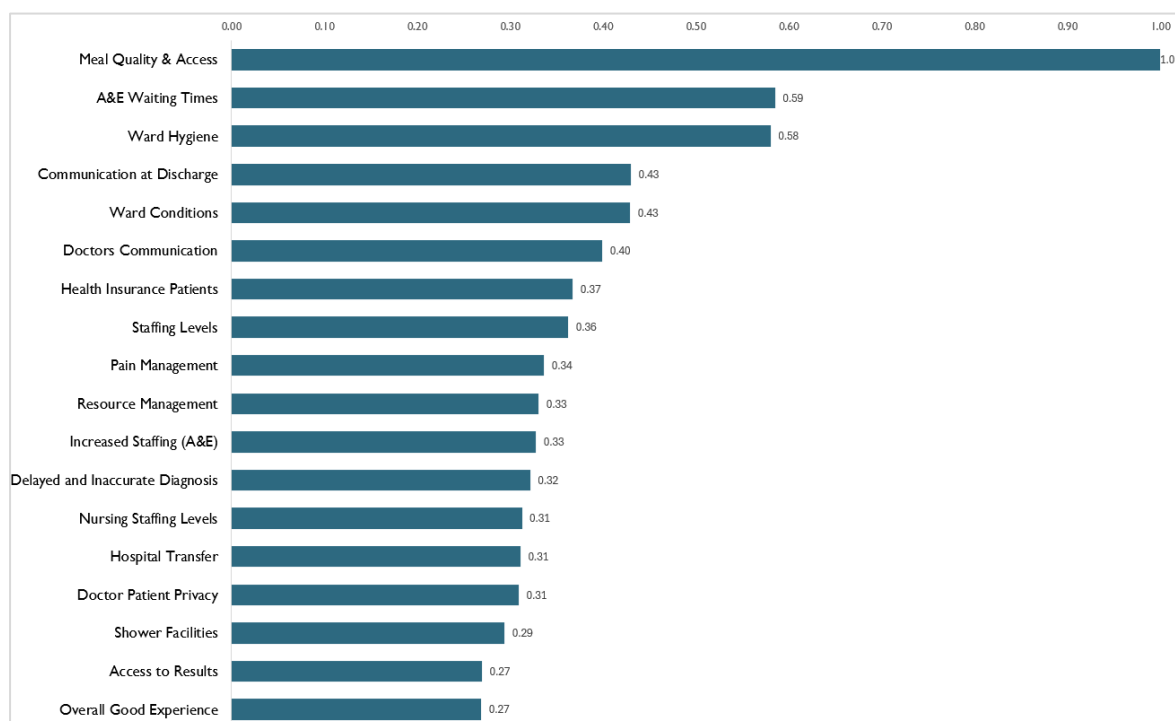


Figure 12. Top 20 factors associated with negative inpatient experience

⁵ The association of meal quality, variety, and availability as well as the quality of catering services with both positive and negative patient experiences indicates that these are high-impact factors that should be prioritised for improvement. This may also signal possible inconsistency in how meal and catering services are delivered across hospitals.

- Ward hygiene, particularly in bathrooms and toilets, due to insufficient cleaning frequency
- Communication during discharge, particularly the provision of information to family members and carers before discharge, and ensuring the patient receives a discharge note
- Ward conditions, including noise from staff or other patients and disruptive lighting affecting sleep at night

Suggestions by patients

Suggestions for improving the inpatient care experience

An analysis of patients' suggestions for improving their hospital care revealed a focus on incentives for healthcare professionals, emergency department services, gender-specific wards, meals, and communication. *Figure 13* below shows the different topics identified from the suggestions.



Figure 13 Prevalence of Suggestion themes

The specific suggestions by patients are as follows:

- Incentivise healthcare professionals working in challenging conditions, particularly nurses, and increase the size of the healthcare workforce.
- Address overcrowding, reduce waiting times, and enhance ED services
- Improve accessibility and modernise infrastructure in hospitals
- Enhance communication during discharge planning, particularly regarding family involvement.
- Provide gender-specific wards to ensure privacy and dignity in hospitals
- Improve the quality, variety, and availability of meals
- Strengthen communication between doctors and patients by offering more detailed explanations, providing advance notice before meeting patients, and supporting foreign doctors in overcoming language barriers

Other suggestions include showing greater appreciation for healthcare professionals, immediately digitising medical records with patient access, and improving post-discharge care instructions.

Findings From Longitudinal Analysis of Inpatient Surveys

The analyses of the qualitative responses from inpatient surveys estimated the difference between the aggregate proportions of positive and negative experiences across various themes and sub-themes over time (2017, 2018, 2019, 2021 & 2022). Overall, 17 major themes and 100 sub-themes were identified from the 72,892 analysed comments. The major themes include:

1. *Dedication, compassion and professionalism of the staff.* Patients repeatedly praised the kindness, attentiveness, and professionalism of doctors, nurses, and other healthcare workers. Staff are appreciated for remaining supportive even under pressure, with consistent themes of respect, attentiveness, and high standards of care. However, this praise sometimes contrasts with structural or environmental challenges faced by the staff.
2. *Privacy and mixed gender issues in the ward.* Concerns centre around overcrowded wards, inadequate bed spacing, shared facilities between genders, and the lack of physical and auditory privacy. Patients express discomfort with mixed-gender arrangements, limited hygiene, and the inability to rest or speak confidentially in such settings.
3. *Staffing and working conditions.* Numerous responses reflect understaffing, excessive workload, poor staff-to-patient ratios, and a general lack of support for healthcare professionals. This impacts service quality and patient experience, with frequent mentions of burnout and low morale among nurses and emergency staff.
4. *Meal quality and options.* Hospital food is one of the most criticized aspects of care. Comments describe cold, bland, and nutritionally inadequate meals, limited dietary accommodations, and inflexible mealtimes. Patients also highlight communication failures around dietary needs.
5. *Communication with and among staff.* Patients identify serious communication breakdowns, especially around discharge procedures, coordination among staff, and informing families of vulnerable patients. Poor bedside manner and lack of updates or explanations fuel dissatisfaction and confusion.
6. *Hospital environment and facilities.* Complaints include outdated infrastructure, poor hygiene in bathrooms and showers, overheated rooms, night-time noise, inadequate smoking policies, and expensive parking. The physical environment is seen as unwelcoming and stressful.
7. *General quality of care and experience.* Experiences vary widely: some patients report excellent care and outcomes, while others describe serious failings in compassion, responsiveness, or medical attention.
8. *Pain management.* Patients report instances of insufficient or ineffective pain management during treatment, with inadequate monitoring or delayed interventions.
9. *Information provision.* Criticism includes poor aftercare instructions, lack of clarity about medication, and limited guidance upon discharge, leaving patients uncertain about recovery steps.
10. *Adequacy of explanation.* Patients want better explanations of test results, diagnoses, and treatment plans. Insufficient detail or overly technical language contributes to anxiety and miscommunication.
11. *Waiting time and condition at the ED.* This theme captures frustration with long wait times in emergency departments, uncomfortable waiting environments, lack of updates, and overcrowding. Even when care is eventually good, the initial experience in A&E detracts from the overall perception.
12. *Hospital service responsiveness.* Patients call for quicker responses to emergencies, clearer wait times, and better coordination during weekends or in rural areas. Delays in imaging, treatment, or ambulance services reduce trust and impact health outcomes.
13. *Dignity and respect.* This minor but vital theme highlights patients' desire to feel respected and treated with compassion and dignity throughout their hospital stay, especially during vulnerable moments.
14. *Treatment and prescription.* Concerns include misdiagnosis, medication errors, allergic reactions, and discomfort during procedures. Some patients report poor consent practices or difficulties during routine treatments.
15. *Use of financial resources in hospitals and financial burdens on patients.* Patients express concerns over perceived waste in healthcare budgets and the growing out-of-pocket financial burdens they face, suggesting inefficiencies in public resource allocation.

16. *Care during COVID*. Patients describe issues specific to the pandemic: reduced visiting hours, lack of clear communication during lockdowns, and difficulty getting information via phone or digital channels.

17. *Care in specific contexts*. Includes concerns about care for vulnerable populations such as autistic patients, elderly individuals, and those undergoing surgery or rehabilitation. Reports highlight neglect, poor communication, and the need for better support in recovery pathways.

Comparative overview of the prevalence of themes in patient feedback, distinguishing between comments focused on “*Good Experience*” (green bars) and “*Improvement Needed*” (red bars) provides to the following key observations (Figure 14):

Strongly positive themes. *Dedication, compassion & professionalism of staff* stands out overwhelmingly as the most positively perceived area, with more than twice as many positive comments as negative ones. Patients consistently highlight the kindness, attentiveness, and professionalism of both nurses and doctors, often describing their experience as “exceptional” even under difficult circumstances. *General quality of care and experience* also leans positive, with slightly more favourable than critical feedback. While some patients praise the overall medical service and outcomes, others raise concerns about variability in standards or coordination, indicating that consistency still needs attention despite generally high approval.

Themes with more emphasis on improvement. *Communication with and between staff* received more improvement-focused feedback than praise. This theme reveals breakdowns not only in how staff talk to patients (e.g., bedside manner, updates, clarity), but also in how teams coordinate among themselves, particularly during handovers or discharge planning. *Waiting time & conditions in A&E* was cited more frequently in complaints than in positive experiences. Long queues, uncomfortable physical conditions, and lack of updates or prioritization left many patients feeling frustrated and undervalued during vulnerable moments in the emergency department. *Environment and facilities* shows a similar trend, with patients more often pointing out outdated wards, lack of ventilation, or unhygienic bathrooms. *Food quality and options* also drew more critique than praise. Patients described meals as lacking variety, freshness, and nutrition, with some commenting on cold dishes or insufficient accommodation for dietary restrictions. These critiques underline how hospital food is not only about sustenance but also part of the patient’s dignity and comfort. *Hospital service responsiveness* appears more often in improvement-related feedback as well. Patients reported frustrations over delays in imaging or treatment, uncertainty about procedures, and inconsistent weekend or emergency coverage, all pointing to structural inefficiencies. *Staffing and working conditions*, while somewhat balanced, still skews slightly toward negative sentiment. Comments often expressed empathy for overworked healthcare workers, but also concern that staff shortages and burnout can compromise the quality and safety of care. *Privacy and mixed gender issues in the ward* generated relatively few comments overall, but more improvement-oriented ones. Patients noted discomfort with shared gender spaces, lack of curtains or soundproofing, and limited personal space, especially during intimate procedures or overnight stay.

Balanced Themes. *Care in specific contexts* (e.g., for vulnerable groups or during surgery) received a relatively even distribution of praise and critique. These cases are often highly individualised, with both positive and negative stories revealing gaps in personalised care planning. *Treatment and prescription*, *Care during COVID*, and *Information provision* each received a small number of comments, with improvement notes slightly outnumbering praise. This points to focused areas of concern around clear communication, consent, and responsiveness, especially in fast-paced or high-risk situations. *Pain management*, *Adequacy of explanation*, *Dignity and respect*, and *Use of financial resources and burdens* were mentioned infrequently, but almost exclusively in a critical light.

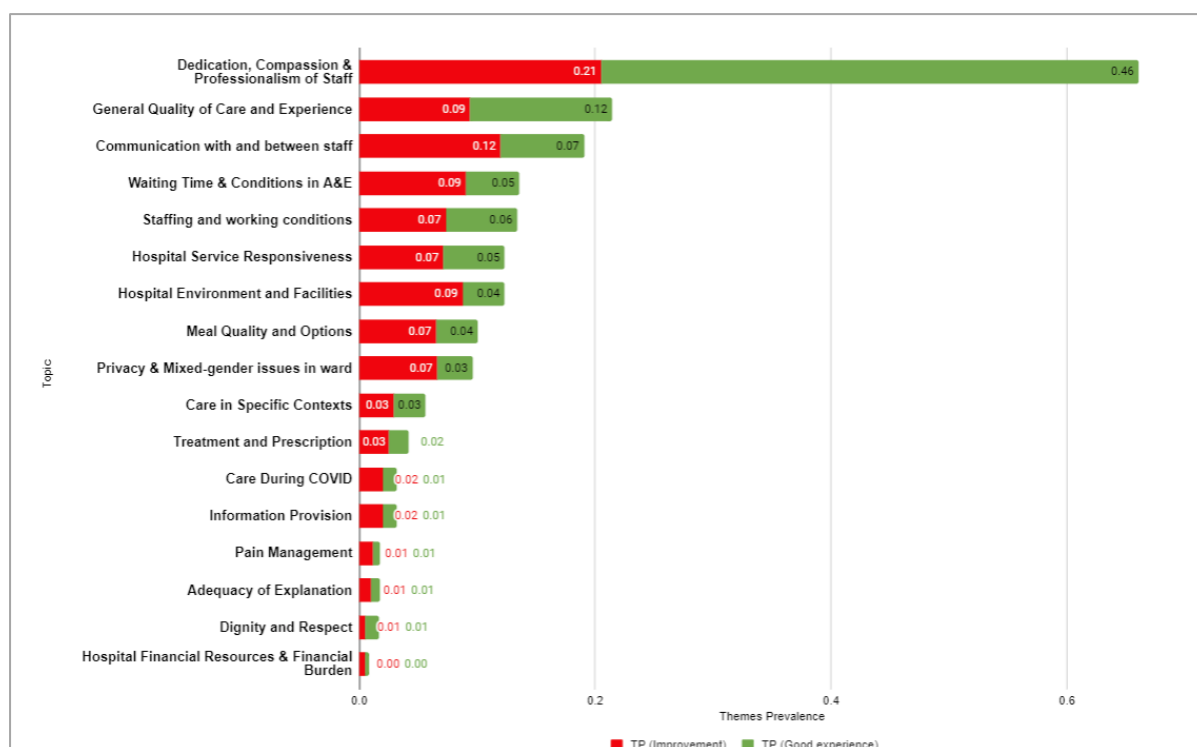


Figure 14. Prevalence of Major Themes for Period (2017-2022)

Based on our methodology, the longitudinal analysis revealed clear trends in patient experience over time by measuring differences in the prevalence of key themes across “Need Improvement” and “Good Experience” responses. By applying t-tests across biennial intervals (2017–2022), we identified which themes have shown statistically significant trends of *probable improvement* and *probable decline*, and also themes with *no clear trend* (relatively stable), helping to pinpoint how patient experience evolved.

Themes with positive trends (Probable Improvement)

This group of themes reflect aspects of care where the balance of positive and negative feedback in the timeframe of 2017 and 2022 shifted in a more favourable direction, which suggests gradual improvements in the period. Two key trends have been observed: (1) either the negative aspects became less frequently reported, or (2) were described with less severity, or prior concerns were mentioned alongside notable improvements. While no themes fell into the category of “already-positive experiences becoming more positive”, three themes previously marked by negative feedback gradually improved from 2017 to 2022.

- *Privacy and mixed-gender issues in the wards* – patients expressed concerns about overcrowding, shared spaces among male and female patients, and limited privacy during medical care or personal routines.
- *Hospital environment and facilities* – patient comments consistently highlighted challenges like inadequate ventilation, overheating during warmer months, and poor conditions of bathrooms and toilets. Other issues include nighttime noise, insufficient ward renovation, and overall ward cleanliness.
- *Hospital service responsiveness* – this theme encompasses issues such as waiting times for emergency treatment, delays in imaging procedures like MRIs, and slow responses during nights or weekends.

These shifts could indicate that while challenges persisted, patients increasingly noticed and valued the efforts made to improve hospital care environments and responsiveness.

Themes with negative trends (Probable Decline)

This group of themes reflects areas where the balance between positive and negative feedback in the timeframe of 2017 and 2022 has worsened, suggesting a gradual decline in perceived service quality. Two distinct patterns could be observed: (1) traditionally positive aspects that received less praise than before; and (2) areas previously criticised attracted even more negative sentiment, pointing to deepening structural issues.

- *General quality of care and experience*, although largely positive, showed signs of eroding trust and satisfaction. These include patient satisfaction with received care and treatment, hinting at issues with system reliability.
- *Staffing and working conditions* appear to be worsening, particularly in emergency departments and inpatient wards. Patients reported encounters with overstretched nurses, long response times, and a visible lack of available personnel, despite recognising the dedication of individual staff.
- *Communication with and between staff* was a prominent concern. Feedback revealed persistent breakdowns in discharge planning, lack of updates on care plans, and coordination failures between nurses and doctors. Negative experiences were also linked to poor bedside manner and insufficient communication with patients' families, especially when cognitive or accessibility challenges are involved.
- *Pain management* remained a sensitive point. Comments cited delays in receiving relief, inadequate assessment, and a lack of responsiveness to pain-related needs, especially in post-surgery or during long hospital stays.
- *Treatment and prescription* processes were another area of concern. Patients reported errors or delays in medication administration, along with misdiagnoses and adverse reactions due to insufficient attention or system errors. These experiences undermine patient confidence and can have serious health consequences.
- *Healthcare resource management and financial burden* also drew criticism. Themes include frustration over inefficient use of funds, perceived misallocation of staff versus administrators, and increasing out-of-pocket costs that create anxiety about affordability and fairness.

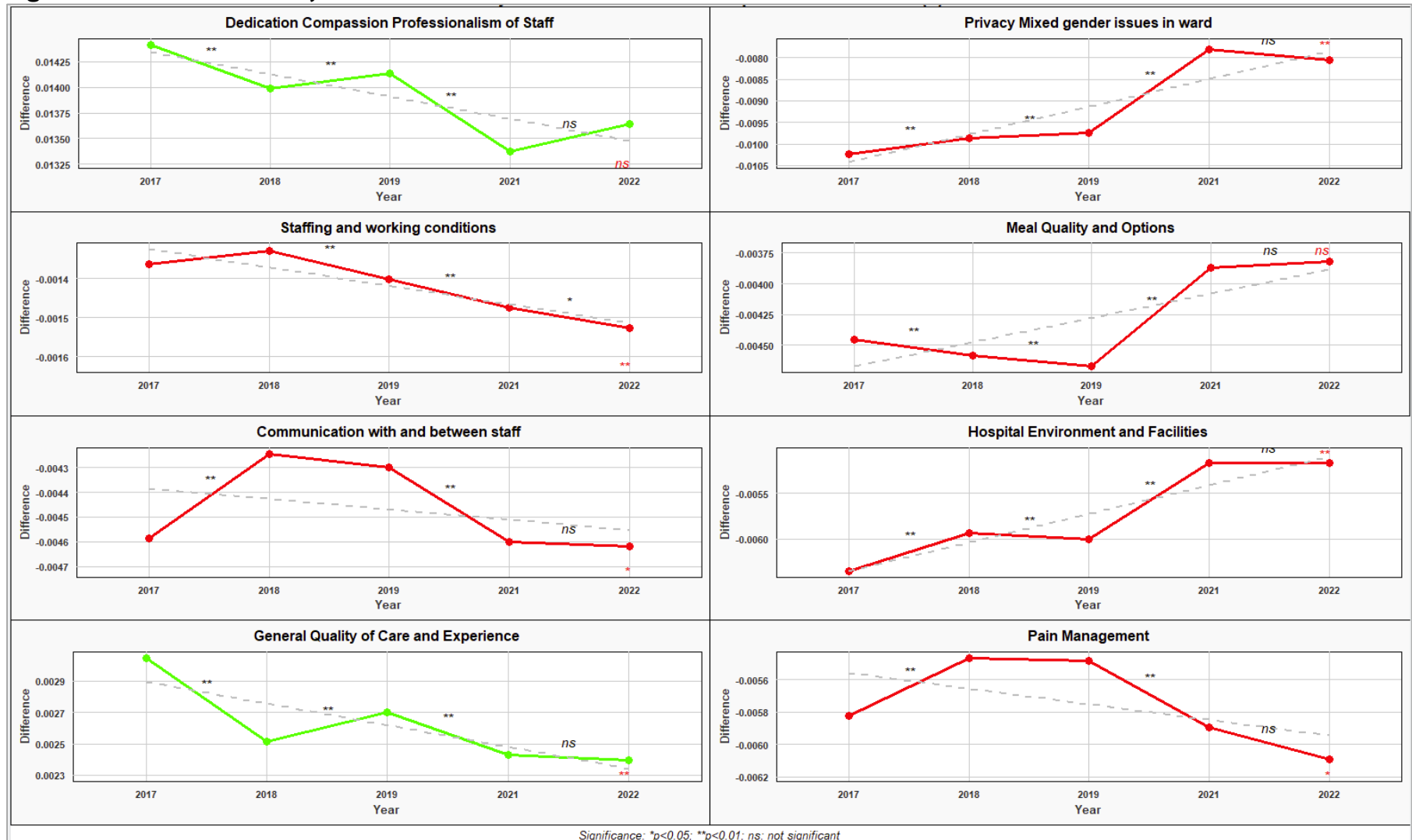
Themes with no clear trend

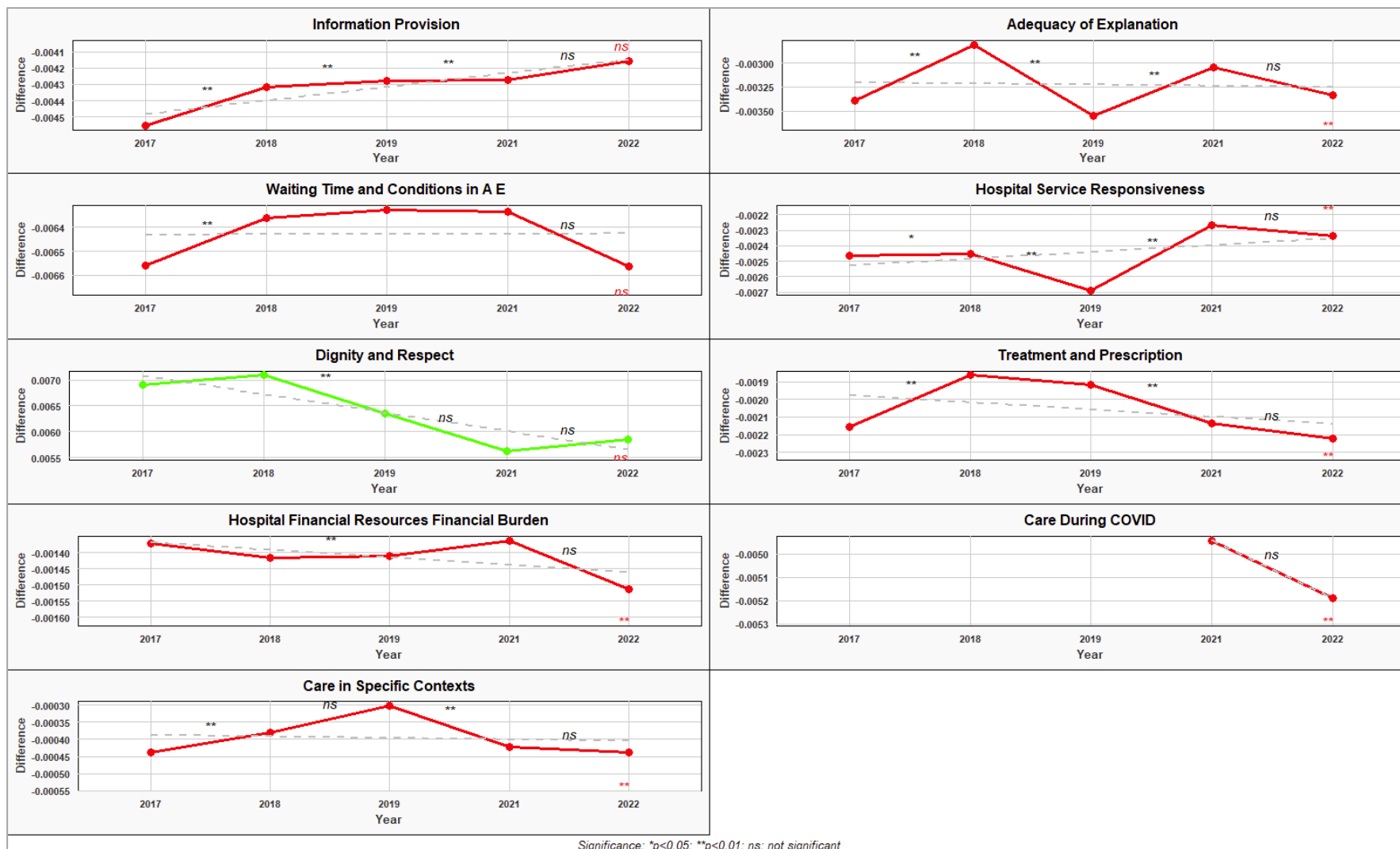
Several other themes exhibit no clear upward or downward trend from 2017 and 2022. They remained relatively stable in perception, though not necessarily free of problems.

- *Dedication, compassion & professionalism of staff* continue to be viewed positively. Despite systemic challenges, many patients consistently express deep appreciation for the empathy and commitment of hospital staff, often emphasising their kindness and attentiveness even under pressure.
- *Dignity and respect* remained a stable area, with feedback indicating that patients generally feel treated with humanity and consideration, though this is not universal.
- *Meal quality and options*, while not improving significantly, maintained a consistently critical tone. Complaints focused on poor variety, taste, temperature, and a lack of accommodation for dietary needs, with minimal signs of progress over time.
- *Information provision* was a persistently weak area. Patients often cited unclear aftercare instructions and a lack of guidance during discharge, though sentiment around this theme did not noticeably worsen, nor improve.
- *Waiting time at the ED* was a major source of dissatisfaction, with no significant shift in perceptions. Patients report long delays, overcrowded conditions, and poor communication while waiting for admission or treatment, especially during peak times.

We note that the possible effect of the COVID pandemic between 2020 and 2022 on hospital care and patient experience was not explicitly considered in the analyses reported here.

- Figure 30. Evolution of Major Themes' Prevalence from 2017 to 2022





Recommendations

The following general recommendations are provided based on the above findings:

A common factor associated with positive experiences in both surveys is the professionalism of healthcare staff even under challenging working conditions. The improvement plans for maternity and acute care services in hospitals should consider ways to incentivise and provide more publicly visible recognition to healthcare professionals, particularly midwives and nurses.

- *Maternity care services* - Breastfeeding, postpartum care, including mental health support, and attention to younger and first-time mothers appear to deserve urgent attention. Survey respondents also suggested that these issues and others should be addressed in future maternity care experience surveys.
- *Inpatient care services* – Providing high-quality meals and consistently delivered catering services across hospitals should be one of the top priorities for improving inpatient care experience. Controlling noise and lighting at night in the wards, along with improving ward hygiene, are also areas that could be easily addressed compared to other identified issues. Mixed-gender wards are particularly associated with negative experiences among female patients. Although trend analyses indicate gradual improvement in this area, ongoing efforts are crucial to addressing this and other aspects of inequitable care. Additionally, aspects of care linked to negative trends, such as communication at discharge, identified as key factors for negative experiences, also require increased attention.

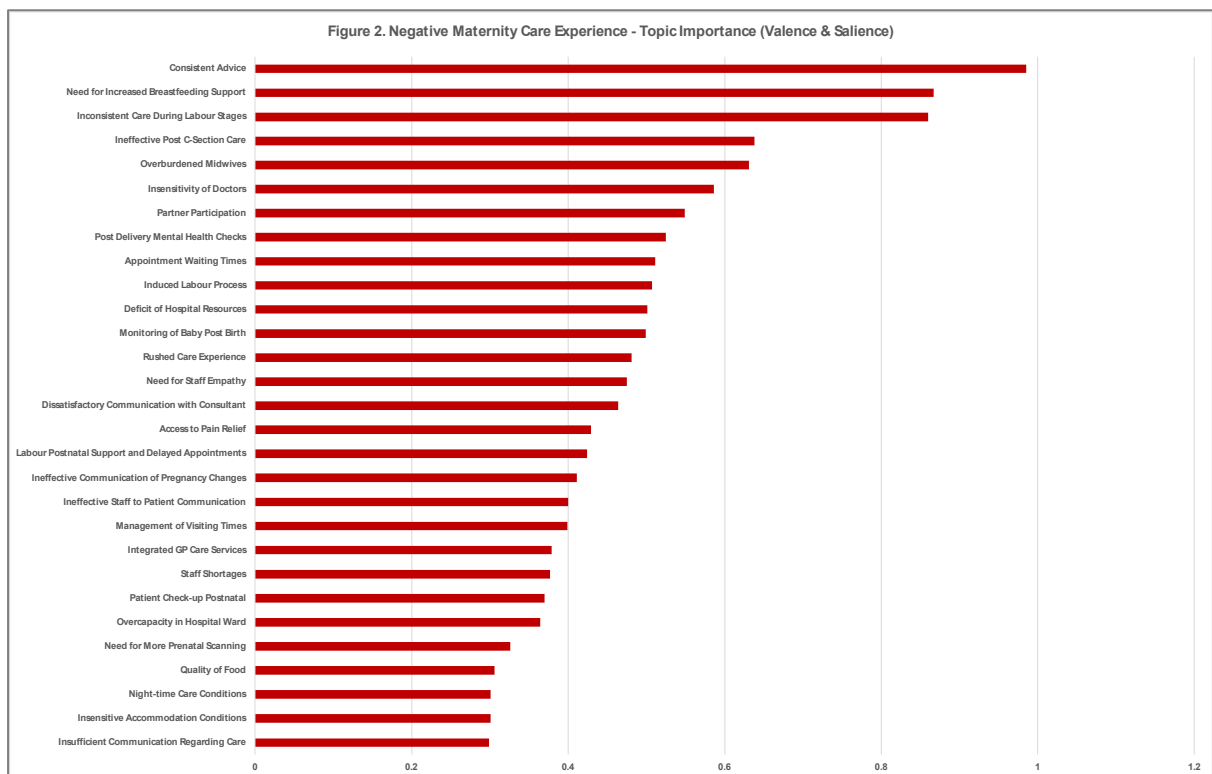
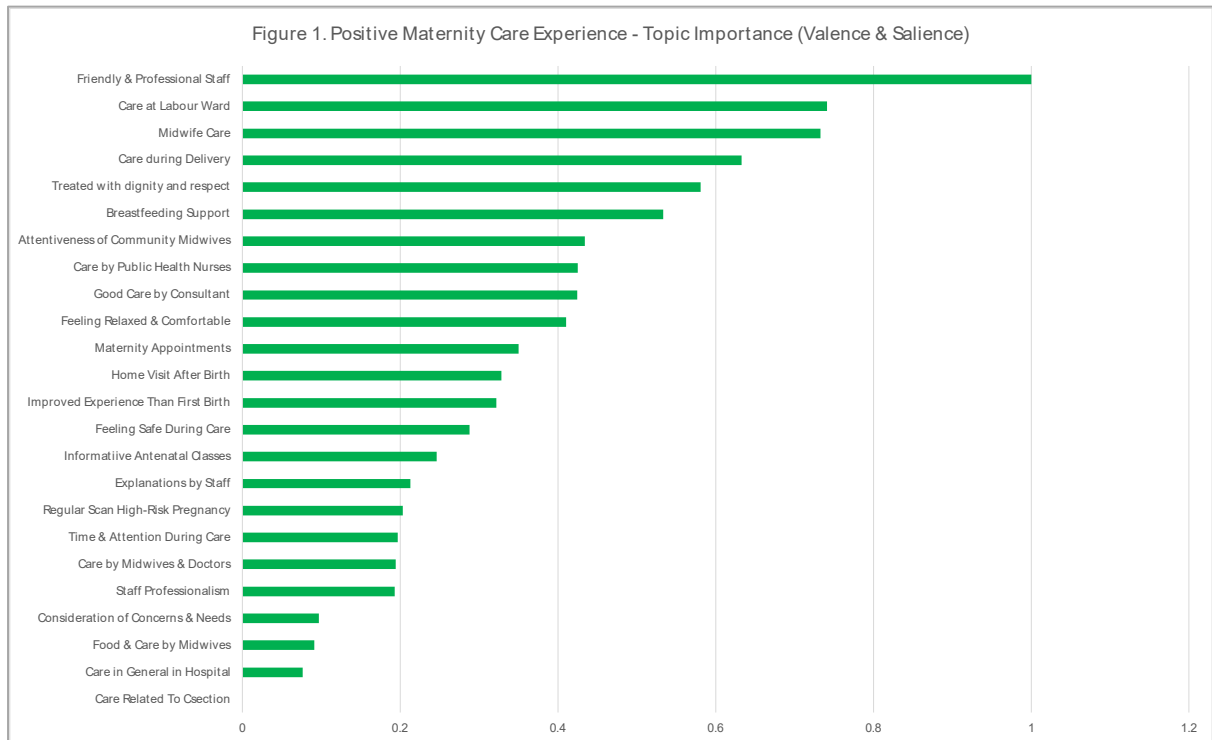
The initial longitudinal analysis indicates that the dominant trends across major themes were negative or stagnant. Notably, traditional factors strongly associated with a good inpatient experience, such as professionalism and staff compassion did not improve in the period 2017 - 2022. It is important to note that during this time period, restrictions imposed due to the COVID-19 pandemic were in place. The inpatient surveys conducted in 2021 and 2022 identified lower ratings across multiple questions relating to staff availability and communication. These areas did improve in the 2024 survey. Nevertheless, our findings highlight the need for a more comprehensive, integrated longitudinal analysis of both quantitative and qualitative feedback from service users as part of a formative evaluation of the NCEP programme. This should be supported by a qualitative study to better understand how evidence from the NCEP and hospital-level surveys is utilised in overall care management and the daily practices of healthcare professionals.

It should be noted that the key factors identified in this report will impact different sociodemographic groups of service users in varying ways. The influence of these factors will also depend on the specific hospital context. Therefore, it is recommended that hospital-level analyses of the results, accessible through the developed dashboard, be used to guide targeted actions within specific hospital settings.

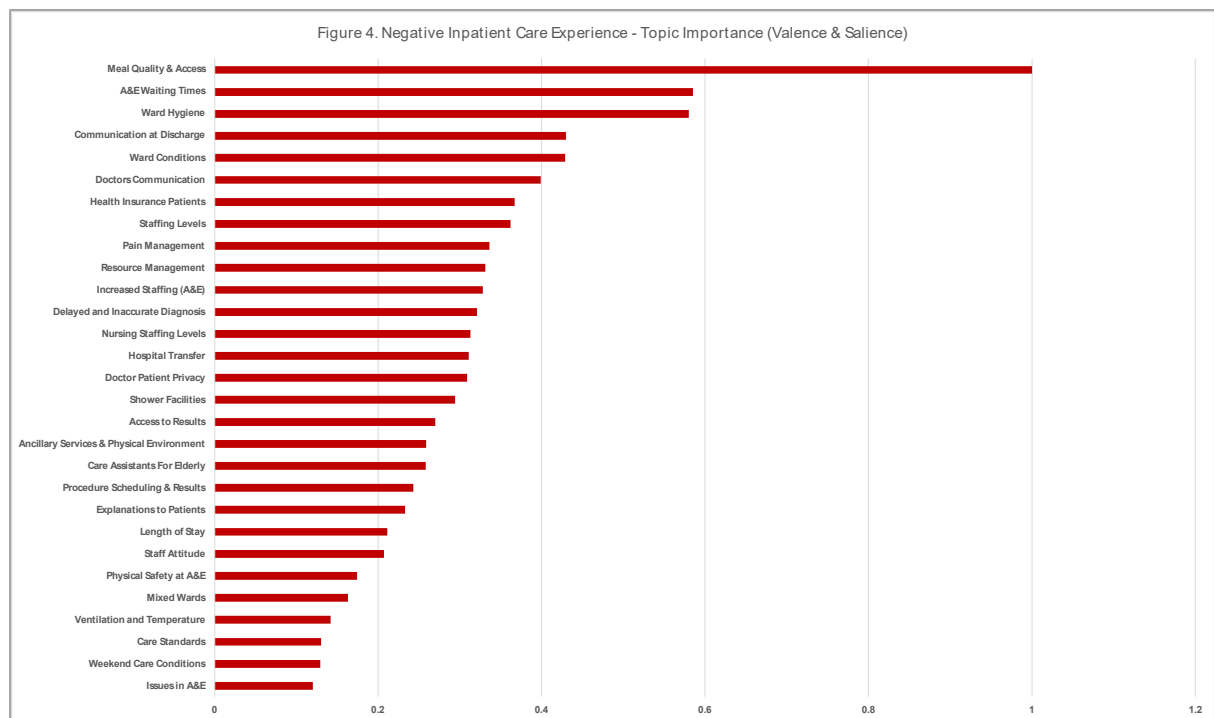
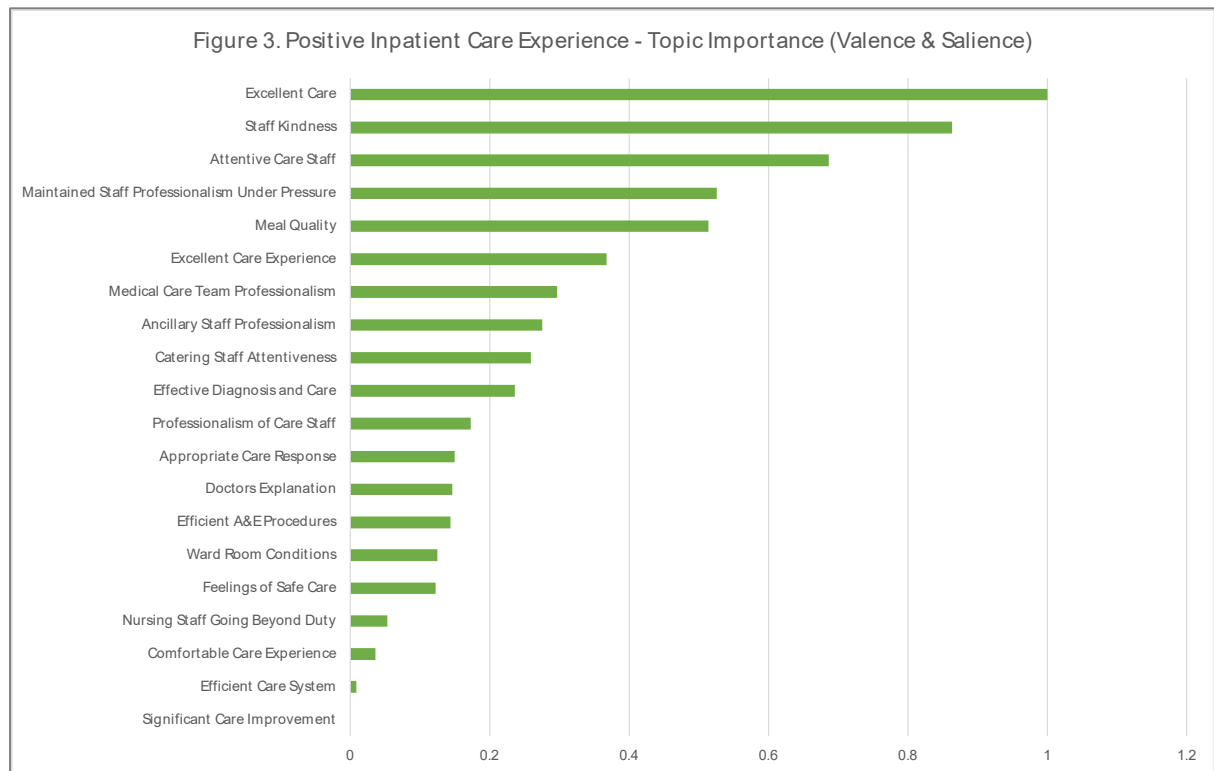
Finally, a comprehensive interpretation and application of these findings should consider the complementary quantitative analyses already published by the NCEP^{iv}. It should also be noted that this report covers data up to 2022; as such, more recent developments in service provision, policy implementation, or user expectations may not yet be reflected in the identified trends.

Appendices

Appendix A – Maternity Care Experience Charts



Appendix B - Inpatient Services Charts



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References

- AHRQ. (2017), "What Is Patient Experience?", *Rockville, MD*, available at: <https://www.ahrq.gov/cahps/about-cahps/patient-experience/index.html>.
- Blei, D., Carin, L. and Dunson, D. (2012), "Probabilistic topic models", *Commun. ACM*, Vol. 55 No. 4, pp. 77–84, doi: 10.1109/MSP.2010.938079.
- Breiman, L. (2001), "Random Forests", *Machine Learning*, Vol. 45 No. 1, pp. 5–32, doi: 10.1023/A:1010933404324.
- Cunningham, M. and Wells, M. (2017), "Qualitative analysis of 6961 free-text comments from the first National Cancer Patient Experience Survey in Scotland", *BMJ Open*, Vol. 7 No. 6, pp. 1–16, doi: 10.1136/bmjopen-2016-015726.
- Hutto, C.J. and Gilbert, E. (2014), "VADER: A Parsimonious Rule-based Model for Sentiment Analysis of Social Media Text", *Eighth International AAAI Conference on Weblogs and Social Media*, p. 18.
- Larson, E., Sharma, J., Bohren, M.A. and Tunçalp, Ö. (2019), "When the patient is the expert: measuring patient experience and satisfaction with care", *Bulletin of the World Health Organization*, Vol. 97 No. 8, pp. 563–569, doi: 10.2471/BLT.18.225201.
- Ojo, A., Rizun, N., Walsh, G., Isazad, M. and Venosa, M. (2024), "Prioritising national healthcare service issues from free text feedback – A computational text analysis & predictive modelling approach", *Decision Support Systems*, Elsevier B.V., Vol. 181 No. March, p. 114215, doi: 10.1016/j.dss.2024.114215.
- Ordenes, F.V., Theodoulidis, B., Burton, J., Gruber, T. and Zaki, M. (2014), "Analyzing Customer Experience

Feedback Using Text Mining: A Linguistics-Based Approach”, *Journal of Service Research*, Vol. 17 No. 3, pp. 278–295, doi: 10.1177/1094670514524625.

Parasuraman, A., Zeithaml, V. and Berry, L.L. (1988), “SERVQUAL: A Multiple-Item Scale for Measuring Customer Perceptions of Service Quality”, *Journal of Retailing*, Vol. 64, pp. 12–40, doi: 10.1002/9781118785317.weom090654.

Schmiedel, T., Müller, O. and vom Brocke, J. (2019), “Topic Modeling as a Strategy of Inquiry in Organizational Research: A Tutorial With an Application Example on Organizational Culture”, *Organizational Research Methods*, Vol. 22 No. 4, pp. 941–968, doi: 10.1177/1094428118773858.

Torres, E.N. (2014), “Deconstructing Service Quality and Customer Satisfaction: Challenges and Directions for Future Research”, *Journal of Hospitality Marketing & Management*, Routledge, Vol. 23 No. 6, pp. 652–677, doi: 10.1080/19368623.2014.846839.

Zakkar, M. (2019), “Patient experience: determinants and manifestations”, *International Journal of Health Governance*, Vol. 24 No. 2, pp. 143–154, doi: 10.1108/IJHG-09-2018-0046.

ⁱ **Generating actionable insights from free-text care experience survey data using qualitative and computational text analysis: A study protocol**, <https://hrbopenresearch.org/articles/5-60>

ⁱⁱ Ojo, Adegboyega, Nina Rizun, Grace Walsh, Mona Isazad Mashinchi, Maria Venosa, and Manohar Narayana Rao.

"Prioritising national healthcare service issues from free text feedback–A computational text analysis & predictive modelling approach." *Decision Support Systems* 181 (2024): 114215.

ⁱⁱⁱ Ojo, Adegboyega, Nina Rizun, Grace S. Walsh, Wojciech Przychodzen, Mona Isazad Mashinchi, Conor Foley, and Daniela Rohde. **"Building confidence and trust in Ireland's National Maternity Services Workforce – What matters most and how?"** *Health policy* 138 (2023): 104947.

^{iv} National Maternity Experience Survey 2020 - **Report on maternity care provided in the community by general practitioners, practice nurses and midwives**, https://yourexperience.ie/wp-content/uploads/2021/04/NMES_Report-on-maternity-care-provided-in-the-community-by-general-practitioners-practice-nurses-and-midwives-1.pdf