

Users' experience with healthcare services: practices from Tuscany hospitals

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Abstract

Measuring and monitoring healthcare services' user experience is crucial to understand what to improve and what works. Many healthcare organizations collect data about user experience, but their use is rare, particularly in the daily practice for service quality improvement actions. Our aim is to collect and analyse practices of using patients' experience data.

The research is performed between 2021 and 2022 and is based on a multiple case study within the real-world setting of patient-reported experience measures (PREMs) Observatory in Tuscany (Italy). We collected information about data use through mixed methods (survey, explorative workshop, interviews). The cases show a PREMs use for accountability and transparency, service improvement, and patient experience improvement. Facilitators are mainly related to professional, organizational and data-related factors.

This study shows that PREMs-based actions can support healthcare organizations in improving services and co-creating sustainable solutions with users.

The literature emphasized barriers in using patient data. This research identifies and provides preliminary evidence about cases of "positive deviance". Sharing practices encourages knowledge exchange and allows professional-level processes of value co-creation.

Key Words

user experience; patient-reported experience measures; practices; healthcare services; multiple case study

Introduction

In healthcare setting, to collect users' voice is used PREMs (Patient-Reported Experience Measures) survey as a tool that allows to capture the patient's point of view of hospitalization experience: hospital reception, relationship with professionals, comfort, overall evaluation and satisfaction (Coulter et al., 2009).

However, despite an amount of evidence about what matters to patients and despite several organizations collect user experience and satisfaction, the use of these data to give a strategic and managerial value to the information collected (Taylor & Cronin, 1994) is still a challenge. The literature emphasizes the presence of barriers in the data use from healthcare services' users:

- Professional - i.e., time and resources available for hospital staff to data collect and analyze)
- Organizational - i.e., traditional culture or staff resistance to patient-centeredness approach) (Davies et al., 2008);
- Data-related - i.e., survey results that were not frequent or timely (Reeves & Seccombe, 2008) and data visualization by system or hospital level and not by ward.

Research Questions

Our aim is to understand how the data could be used and to collect practices of using patients' experience data, and thus providing preliminary evidence on how to shift from data collection to data use. Particularly, our focus is based on (i) the processes of data uptake into the practice (ii) determinants of use (iii) the actors of the user-data uptake level of the organizations (iv) main uses of this kind of data (v) data used to improve the quality of hospital stay.

Conceptual Framework

In service marketing, the intersection between service quality and customer satisfaction and experience have been studied by management and marketing scholars, also in the healthcare sector. These two constructs are independent but are closely related, implying that an increase in one is likely to lead to an increase of the other (Sureshchandar et al., 2002).

Measuring customer satisfaction for identifying the determinants of service quality is a key activity for organizations, since allows to identify and reducing gaps (i) between management perception of customers' expectations and service quality specifications; (ii) between service quality specifications and actual service delivery; (iii) between service delivery and external communications to the customer (Baron et al., 2018).

Actions aimed at reducing gaps into the above-mentioned categories should be based on customer feedback on their experience with services, how service quality is perceived by consumer and what way service quality is influenced (Grönross, 1984).

According to Meuter and colleagues (2000), measuring customer experience and understand how customers evaluate services is necessary for identifying the determinants of service quality, for enhancing satisfaction and loyalty (Berry et al., 2015) and for measuring the impact on organizational performance.

Often, organization are focused on short-term performance, on productivity and efficiency and not on long-term customer satisfaction, experience and value (Parasuraman et al., 1991).

Method

We used a cases study – mixed methods design (CS-MM) (Guetterman & Fetters, 2018). The choice to use this method stems from the possibility of conducting an in-depth analysis of the use of patient-reported data within a real-world context (i.e., Tuscany hospitals) (Yin, 2014).

The different nature of data using required multiple types of data, so we used mixed methods within the cases study: qualitative data (e.g., explorative workshop and interviews) and quantitative data (e.g., survey).

The present research is performed between July 2021 and June 2022, but the collection of data use practices is still ongoing.

For the analysis we use a similarity-based approach to compare data and test the similarities and/or differences between cases study (Maxwell & Miller, 2008), using categorization strategies. For this reason, after collection of practices and data referring to them, we categorized practices using specific criteria: (i) processes and (ii) determinants of data-uptake; (iii) organizations' actors/level involved; (iv) purposes and (v) transformative impact of data-uptake.

The setting of the study is the regional healthcare system of Tuscany region (Italy) that adopted the PREMs Observatory. In Tuscany Region since 2017, a methodological revolution was implemented in the collection and the return of patient data, thanks to the collaboration with the Management and Healthcare Laboratory of Sant'Anna School (Pisa, Italy). The traditional survey has become a permanent Observatory on the hospitalization experience. The big data collected by this system allows a multi-level and real-time reporting of patient data on web-platform for professionals (De Rosis et al., 2020a). With this methodology, it's possible to achieve larger data collection and information as it's a web-based method and thus it's possible to reach and increasing number of patients.

Preliminary findings

We identified several cases study, with different purposes of use (point-iv): evaluation of organizational models, accountability, measurement of external events' impact, staff motivation, service re-design, patient-experience improvement. The preliminary results refer to three practices.

The process of data-uptake (point-i) was different, in terms of typology of patient-feedback used (i.e., qualitative/quantitative data, topic), and approach to the data use (critical or positive). Among the determinants (point-ii), those shared among all three cases were related to cultural factors and skills/competences. We detected a not-rhetoric attention to the patient-perspective, by the managers and managerial staff, and by professionals of who use these data. The three practices were implemented at different level of the organizations by different actors (point-iii), with the constant presence of a PREMs representant (from the managerial staff). Finally, while two actions present transformative purposes, measures of the impact (point-v) were not identified, if not a generic monitoring of data from the same source (PREMs).

In this first phase, the cases were mainly selected trying to maximize the differences in the level of action (point-iii) and the typology of objective (point-iv). The settings of the selected cases are different, but they serve the same population. Because of the sensitivity of the data, the names of the healthcare organizations and professionals interviewed are anonymized.

Case Study	Generic Name	Organisation
1	HO1	Local Health Authority
2	HO2	Teaching Hospital
3	HO1b	Local hospital directly managed by HO1

Table 1. Selected cases and type of organisation

The HO1 decided to publicly show on its website the real-time updated results of the patient-reported measure about satisfaction with the hospitalization service. The reporting of these results is possible by the means of API-based web services, which make interoperable the information systems of the health care organizations with the Management and Healthcare

Laboratory ICT system. The objective of this action is the public accountability of the HO1 performance in the patients' perspective. The audience of the action is composed by all citizens, including current and future patients, their caregivers, the hospital staff. The decision of using PREMs for this purpose was facilitated by a very positive performance of the HO1 in terms of patient satisfaction with hospitalization. This practice was adopted for spreading the positive feedback of patients, also for an indirect impact on the motivation of the HO1 personnel.

The HO2 decided to use data from PREMs for improving the quality of hospital stay. The managerial staff of the General Director analyzed nearly 1000 comments reported by patients. By reading and categorizing stories, staff identified negative comments about noise in the wards. Starting from the comments they defined two actions:

- 1) definition of a specific letter signed by the General Director to be sent to the wards. The wards were divided into better and worse. For the bests, they sent a letter of thanks. For the worsts, they sent a letter to motivate professionals paying more attention.
- 2) promotion of an awareness campaign to face noise.

The objective of this action is the service quality improvement or maintenance, starting from the patients' perspective. This action was aimed at selecting good practices in terms of noise management, and at starting a process of good behaviors sharing from positive cases. The audience of the action is composed by the personnel, patients and caregivers attending the wards. The impact of the action will be measured using the same source of data, the PREMs Observatory, both quantitative data and qualitative comments of patients.

HO1b has early started using data for monitoring the general patients' perception of the hospital stay and use them for solving problems communicated by patients, at a ward level. By reading the patients stories, they found a comment reported a negative experience, focussing on a clear lack of attention and violation of privacy. After reading this story, the ward staff immediately intervened to protect future patients charging the organization of the department.

The objective of this action is to solve a concrete problem highlighted by patients, to avoid creating inconvenience to other patients, and, indirectly, to anticipate a formal complaint. The target of the action are future patients, but indirectly also the professionals since they were responsible for the organization of spaces and equipment location in the ward.

Discussion

In all cases study, the use of data was possible thanks to the data availability on a web-based, real-time updated platform reporting PREMs. This has broken down some data-related barriers/practical barriers reported in literature, so facilitating their constant availability, consultation, and interpretation.

At system level, we collected a case of PREMs use for accountability action, through the public sharing of results of patients' satisfaction. Transparency and openness can be achieved by providing the citizens with information about what organization is doing, which promotes increased accountability.

At the organizational and hospital level, we collected two case studies where organizations and professionals used PREMs survey data to improve the quality of services and ameliorate patients' hospitalization experience. The case study from HO2 was also interesting since they also selected good practices, symbolic rewarded them with a formal letter of the General Director and disseminated them in the hospital

In all case studies, the key determinants are linked to professional and organizational factors, the presence of structured teams, their experience and skills to understand and analyze the results (Davies and Cleary, 2005), the presence of a representative person in the managerial staff and/or of a team working on PREMs; the clear link between the adherence to the PREMs

Observatory and the possibility of informing quality improvement actions. These aspects facilitate the shift from the patient experience data collection to the data use for the patient experience.

Conclusion

Our work explored how hospitals use patient feedback to guide quality improvement and consolidate practises. The multiple cases study show how PREMs-based actions are addressed strategically in some Tuscany hospitals and departments and the processes are widespread from system to ward level. The originality of the project is related to the fact that the collection of user experience data is not the endpoint but begins to be considered the starting point for improving the quality of services.

Limitations and Further Research

The limitations of our research relate to number of cases story reported and about the cases categorization.

Further study is needed for completing the categorization of the cases and to go deeper inside different kind of practices.

Another point to deepen in the future is how to evaluate the effects of actions analysed in the case studies, especially the impact of sharing and disseminating positive feedback both on people and on the healthcare professionals' perception of the hospital.

Managerial Implications

With a view to furthering the development of PREMs and promote their use in the healthcare sector, our aim is to motivate, thanks to cases collected, professionals and managers to review their current practice in using different kinds of patient feedback, to ensure that information and discussions lead to appropriate actions and decisions to improve and assure the quality of care and hospitalization experience (Lee et al., 2018). According to Yin (1993), the cases study are research tools that clearly points to their use as a teaching and learning method. For this reason, case stories, mentioned above, propose to be examples of practices that which can also be repeatable by other hospitals and departments. Attention to patient's voice can enhance staff's ability to learn and identify which are the practices to improve. Patients' representations of experience may offer clues that professionals can then interpret to identify the source of problems or gaps. Access to this information becomes a key starting point for understanding the origins of problems and developing corrective and ameliorative actions.

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