



USERS' EXPERIENCE WITH HEALTHCARE SERVICES: PRACTICES FROM TUSCANY HOSPITALS *

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Abstract

Purpose of the paper: 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.

Methodology: The research is performed between 2021 and 2022 and is based on a multiple case study within the empirical setting of patient-reported experience measures (PREMs) Observatory in Tuscany (Italy). We collected information about data use through workshops with professionals. After our initial selection of three cases, we investigated, with in-depth interviews, the processes of PREMs use in the real-world setting, in managerial practices.

Findings: The three 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.

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

Originality/value: 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.

Type of paper: Multiple case study

Keywords

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

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1. Background

In service marketing, the intersection between service quality and customer/consumer satisfaction have been widely 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 in another (Sureshchandar et., 2002).

Measuring customer/consumer satisfaction for identifying the determinants of service quality is a key activity for firms and 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/consumer feedback on their experience with services. The aim of collecting empirical data about user-reported experiences is to understand people's expectation and whether service processes are responsive to people needs and well-being (Tremblay et al., 2015) and, consequently, to ensure user satisfaction. ISO (2015) has published that customer focus is one of quality management principles that can provide beneficial value for organization and, additionally, many research showed that customer satisfaction provides a lot of benefits to the organization, but, despite this, some hospitals still have inflexibility and traditional hierarchical structures regarding quality improvement (Rahman and Osmangani, 2015).

In healthcare setting, to collect users' voice is used PREMs (Patient-Reported Experience Measures) survey as a tool that allows to capture, like a photograph, the patient's view of what happened during the health care visit, considering the standard dimensions of hospitalization experience (Coulter et al., 2009): satisfaction, hospital reception, the relationship with professionals, hospital comfort, the overall evaluation and other aspects of hospitalization.

However, despite a substantial amount of evidence about what matters to patients and despite several healthcare organizations collect user experience and satisfaction with healthcare services, the use of these data for reducing eventual gaps and to be more responsive is still a challenge. Feedbacks do not of itself lead to quality improvement action (Coulter, 2016), and, according to Park and colleagues (2016), the provider cannot assume what is important for the users: some patients may prefer the utilitarian and functional aspect of hospitalization, i.e., receive the right treatment for their disease; other patients may give greater importance to the social and emotional value, i.e., the relationship with the medical and nursing staff, the management of pain, fears and anxieties, the involvement in the treatment path. In addition, it is necessary to collect measures of expectations, perceptions, performance, level of satisfaction, quality of service in relation to its context. In this way it is possible to give a strategic and managerial value to the information collected (Taylor and Cronin, 1994).

Therefore, the hospital must be able, not only to capture the patient's preferences and expectations, but also to take them into account in the overall evaluation of the services offered, the modification/revision of these and in the identification of improvement priorities.

The literature emphasizes, for a long time, the presence of several different barriers in the use of data from healthcare services' users, and the need of research in respect to additional impeding factors (Gleeson et al., 2016).

Barriers that an organization may face in using user experience data can be divided into:

- Professional barriers: time and resources (e.g., money spent collecting PREMs) available for hospital staff to data collect and analyze. Daily priority is focused on visits to patients and way of working and not on the measurement of the quality of care and for quality improvement initiatives. Additionally, another obstacle is the lack of experience and training to understand and analyze the results (Davies and Cleary, 2005);

- Organizational barriers: traditional group culture or staff resistance to patient-centeredness approach, customer needs and expectations collection and quality improvement actions (Davies et al., 2008);
- Data-related barriers/practical barriers: survey results that were not frequent or timely - i.e., too long a time between filling out the questionnaire and viewing the results (Reeves and Seccombe, 2008) and data visualization by system or organizational/hospital level and not by specialty or ward.

Our aim is to understand how the data could be used more effectively and to collect and analyze practices of using patients' experience data, and thus providing preliminary evidence and insights on how to shift from data collection to data use. Particularly, our research questions are:

- What are the processes of data uptake into the practice?
- What determinants of use?
- Who are the actors of the user-data uptake? At what level of the organizations?
- What are the main uses of this kind of data?
- How were data used to improve the quality of hospital stay?

Thanks to the service delivery with user orientation approach, organizations can create customer-valued service for increasing customer satisfaction (Wan-I et al., 2010). Understand what factors cause customer satisfaction, what variables modify satisfaction and experience, how these variables can be managed, and for which segments improvement activities can be designed are the main questions managers must ask themselves (Almsalam, 2014).

2. Methodology

We used a multiple-case study design within a qualitative approach and developmental evaluation methodology. The choice to use a qualitative approach comes from the possibility to investigate multiple levels and to analyze contexts, perceptions, behaviors, and experiences of PREMs usefulness and actionability and use.

The present research is performed between July 2021 and June 2022.

Firstly, we collected cases study about data use through 23 explorative workshops with professionals and field observations. According to Lain (2017), workshops foster "engagement" through collaborative discussions and "constructive feedback" between participants and researchers. Table 1 reports the number of meeting and the number of attendants for each health organization (HO), categorized as Local Health Authorities (LHAs) and Teaching Hospitals (THs). The workshops were held in the hospitals and were organized as follow:

- presentation and discussion of quali-quantitative data about patients' experience and satisfaction with practitioners;
- Identification of complaints and gaps to be improve and/or good experiences reported by patients;
- Sharing of quality improvement actions to be valued and disseminated.

Table 1. Workshops held between July 2021 and June 2022 in Tuscany healthcare organizations

Healthcare organization	Organization type	Meeting (number)	Participants (number)
HO1	TH	1	5
HO2	LHA	9	Mean: 25 (min 10 max 40)
HO3	LHA	5	Mean: 16 (min 7 max 25)
HO4	TH	1	15

HO5	LHA	4	Mean: 20 (min 10 max 30)
HO6	TH	3	Mean: 30 (min 15 max 45)

Secondly, we categorized practices. The categorization of practices has used the following criteria (see also Table 3):

1. hospital or ward's performance referred by patients (i.e., data were used for addressing a critical aspect or for spreading or valuing a positive aspect)
2. typology of patients' feedback used (i.e., quantitative vs qualitative data)
3. organizational level of activation (where the action was born) (i.e., regional health system, healthcare organization, department/ward within the hospital/HO)
4. organizational and application level of action (where the action is expected to impact) (Barbazza et al., 2021) (policy and system - macro level, organization, and networks - meso level, process of care in the wards - micro level)
5. target (internal vs external stakeholders)
6. objectives of the patient-data-driven action realized (i.e., performance monitoring, quality improvement, accountability)
7. organizational processes adopted (i.e, professionals who have activated the process, phases, levers)
8. identification of impact measures in the internal and external context of the hospital

Finally, for open-ended interviews, the professionals involved were PREMs Observatory referents from the managerial staff of the hospitals and other hospital personnel working on quality or communication. The researchers will conduct around 25 interviews, at least three for each selected case study, until the research arrives at the point of 'theoretical saturation' for each practice analyzed. Three interviews and a focus group were conducted, lasting respectively between 20–30 minutes and one hour. The interviews with professionals, were aimed at gathering information to analyze the selected practices and discuss about (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.

Table 2. Participants to the interviews/focus groups

Healthcare organization	Organization type	Interviews	Focus Groups	Participants (number)	Participants (prof. background)
HO2	LHA	2	///	1	Managerial staff (PREMs ref.)
HO6	TH	1	///	2	Managerial staff (PREMs ref. and a resident)
HO2b	Local hospital directly managed by a LHA	///	1	6	Nurse coordinator, 4 nurses and 2 doctors

2.1. Setting

The setting of the study is the regional healthcare system of Tuscany region (Italy) that adopted the PREMs Observatory.

Tuscany Region has a long-running experience in surveying patients. 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 – Institute of Management of Sant'Anna School (Pisa, Italy). The traditional survey has become a permanent observatory on the hospitalization experience of adults and pediatric patients that includes: a continuous web-based administration, 39 closed-ended questions and five narrative sections, following the patient's pathway (hospital reception, hospital stay, hospital discharge, and

follow-up care). Closed-ended questions allow benchmarking of patient data within a shared performance evaluation system, with public disclosure of aggregated anonymized data.

Open-ended questions allow to collect more information and stories about five topics: hospital reception, relationship with the hospital staff, ward's comfort and environment, positive and negative comments on hospitalization, and professionals and practices that made a positive difference during hospitalization.

The big data collected by the continuous system allows a multi-level and real-time reporting of quantitative patient data and of feedback from narrative sections 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. The key innovation of patient-reported data is to obtain detailed and specific information on patient experience alongside standard measures and traditionally reported patient data.

Two Italian regional healthcare systems effectively joined the PREMs Observatory, with 7 public healthcare organizations in Tuscany and 4 in Veneto, and respectively 41 and 19 public hospitals, in 2022. Overall, the number of discharged patients who adhered to the survey were 209,307 in Tuscany and 99,540 in Veneto, while the completed questionnaires were respectively 57,517 and 32,433 (update: 15 July 2022).

3. Preliminary findings

During the first phase of the study (workshops), researchers collect 18 case studies of data use. 3 case studies were initially selected and analysed for the purposes of this research work, by using the above-mentioned criteria.

The cases were mainly selected trying to maximize the differences in (i) the level of action (criterion 3), and (ii) the typology of objective (criterion 4). The settings of the three selected cases are different, but they serve the same population of citizens:

- HO2 is a Local Health Authority;
- HO6 is a Teaching Hospital;
- HO2b is a local hospital directly managed by HO2.

The following Table 3 summarized the analysis of the three cases initially selected.

Table 3. Categorisation of cases study selected

Criteria	Hospital		
	HO2	HO6	HO2b
Performance	Positive	Mainly negative	Negative
Typology of feedback (data)	Quantitative	Qualitative and quantitative	Qualitative
Level of activation	Healthcare organization	Project referents	Ward
Level of action	Policy and system (macro level)	Organization and networks (meso level)	Process of care in the wards (micro level)
Objectives	Accountability	Hospitalization environment improvement	Practice performance improvement
Target	External and internal (general citizens)	External (Patients) and internal (professionals)	External (Patients)

Organizational processes adopted	<ul style="list-style-type: none"> - PREMs referents engaged ICT system - Publication of the overall evaluation results of the experience on the website via API 	<ul style="list-style-type: none"> - Appointing of residents with project knowledge and evaluation and analysis skills - Involvement of professionals in all wards - Implementation of nudge action - Awareness campaign activation 	<ul style="list-style-type: none"> - Manager convened a discussion with staff after reading stories - Awareness of the negative event/practice
Identification of impact measures	-	Ex-post evaluation by monitoring patient storytelling and quantitative data	Evaluation by monitoring patient storytelling

The analysis of three selected case studies was based on interviews and is presented in the following paragraphs.

3.1. “Patients’ experience data use for accountability. The case from HO2”

The HO2 is a Local health Authorities that directly manages 14 local hospitals. In 2021, the HO2 had 98,533 hospitalizations, of which 78,615 ordinary hospital stays, and 19,918 day-hospital stays, while 44,611 were surgical hospitalizations and 53,922 medical ones. HO2 joined the PREMs Observatory, by collecting patient-reported experience measures of hospitalization, in October 2018. Overall, nearly half of the total discharged patients were enrolled in the PREMs Observatory (+18% with respect to the regional average rate). Almost 21,000 questionnaires were collected, including almost 25,000 narrative comments.

The HO2 decided to publicly show on its website the real-time updated results of the patient-reported measure about satisfaction with the hospitalization service. The data are collected with the following question of PREMs survey: “*How do you evaluate the overall care received in the ward?*”. Data are provided as percentage of discharged people selecting each of the five answer options (from “*Excellent*” to “*Vary bad*”), and as trend over time, both of the above-mentioned responses and of an index given by the mean of all the option answers (where excellent is 5 and vary bad is 1). The real-time 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 (De Rosis et al., 2020a).

The objective of this action is the public accountability of the HO2 performance in the patients’ perspective. The audience of the action is composed by all citizens, including current and future patients, their caregivers, the healthcare professionals and the employees in general.

The choice of data publication derives from:

“The great opportunity provided by the PREMs Observatory to demonstrate transparency and openness toward the citizenship. Italian healthcare organizations are invited to hear the voice of patients by the Italian law, and we want to demonstrate we are both hearing patients and increasing accountability. This is not the first action in this direction since we also shared PREMs during a public event with the citizens and patients’ representative committees” (referent for the PREMs Observatory of the HO2).

The decision of using PREMs for this purpose was facilitated by the very positive performance of the HO2 in terms of patient satisfaction with hospitalization. This practice was adopted for spreading and valuing the positive feedback of patients, also for an indirect impact on the motivation of the HO2 personnel.

“The public disclosure of PREMs was positively accepted by professionals, also because they are very positive. We all needed a positive message after the psychological and physical burden of the pandemic. I also observed that my colleagues from other healthcare organizations appreciated this initiative and asked me information on how to do the same” (referent for the PREMs Observatory of the HO2).

The process of using PREMs in the HO2 has started with the continuous and careful work of the PREMs referent for the HO2, who is part of the managerial staff of the General Director of the HO2. PREMs are usually consulted and monitored by the referent and shared with the referents of each local hospital directly managed by the HO2. Among the facilitators of the process, the researchers identified the following:

- Skills and competences of the PREMs referent, in terms of data interpretation and data visualization
- Cultural factors, in terms of attention to the patient perspective, by the managers and managerial staff of the HO2

No indicators have been identified for measuring the impact of the public disclosure of the PREMs.

3.2. “Using PREMs to improve the quality of hospital noise. The case from HO6”

The HO6 is a Teaching Hospital. In 2021, the HO2 had 47,692 hospitalizations, of which 37,799 ordinary hospital stays, and 9,893 day-hospital stays, while 27,206 were surgical hospitalizations and 20,486 medical ones. The HO6 joined the PREMs Observatory in July 2018. Overall, more than 15, 000 questionnaires and more than 20,000 stories were left by the patients discharged by the HO6.

The HO6 decided to use data from PREMs for improving the quality of hospital stay, in particular the patients’ comfort related to the noise in the wards. The managerial staff of the General Director of the HO6 analyzed patient stories from April to September 2021, for a total of 984 open-ended comments. By reading and categorizing stories, hospital staff identified negative comments about noise in the wards: environmental noise, noise coming from tools and machineries, noise coming from air conditioning system, but especially noise coming from other patients with their tablet and smartphone and noise from professionals’ chatter: *“Noisy and disrespectful nursing staff”, “The ventilation system of the room was very noisy day and night”, “It would take a little more silence at night, especially ask patients to lower the level of the ringtone of mobile phones”*. Starting from the narrative comments left by patients in the questionnaires, they defined two parallel actions:

- 1) For the noise coming from the hospital staff, they defined a specific letter signed by the General Director and targeted to the ward managers. The wards were divided into two groups: the best wards in the patients’ perception of the noise, and the wards who received mostly negative comments about noise. For the bests, they sent a letter with the following message: *“Your unit is among the ten with the best level of silence, so it is essential to keep this result constant over time for a better quality of the inpatient environment”*. For the worsts, they sent a letter with the following message: *“Critical issues have emerged in relation to noise in the wards; therefore, it is essential for everyone to contribute to improving the inpatient environment”*.
- 2) For the noise coming both from patients and hospital personnel, they decided to promote an awareness campaign to face noise during hospital stay. In all wards, posters and flyer were distributed, citing *“Silence helps the care. Silence depends on everyone. We respect few simple rules. We speak in a low voice; We silence the ringer of the phone; We avoid using the speakerphone on the phone; We use headphones”*.

The objective of this action is the service quality improvement or maintenance, starting from the patients’ perspective. For the best performers among wards, another goal was to thank, value

and motivate the personnel. This action was also aimed at selecting practices in terms of noise management, and at starting a process of good practices / behaviors sharing and learning from positive cases. The audience of the action is composed by both internal stakeholders, the hospital personnel, and external stakeholders, patients and caregivers attending the wards.

The choice for defining and implementing this action derives from:

“...the need of improving the patients’ experience. We started from what was recognized as important by patients, as well as by us, since the importance of providing a quiet, peaceful and restful environment is key for reaching health outcomes. And we also started from noise because decreasing noise is easily achievable with a more polite behavior of everyone, both patients, caregivers and professionals. We are all responsible for a good experience with the hospitalization, for what concern some comfort aspect as the noise.” (Referent for the PREMs Observatory of the HO6).

The decision of using PREMs for this purpose started from a general negative performance of all hospitals in the PREMs Observatory in the comfort of the hospital stay with relation to the noise, which was additionally analyzed and categorized by the managerial staff of the HO6.

“It was surprising how polite and precise were the patients’ comments. We were able to identify if the noise was caused by the small talks during the change shifts of nurses and doctors, or by some doors, or by the medicine cart, and so on... If every ward would read the comment every week, they would have all information for providing a better service or experience to patients.” (Resident of the HO6).

“We should also consider that some problems are not addressable by the wards directly. For example, the noise produced by the ventilation system is an issue to be addressed at the level of the general management of the facility.” (Referent for the PREMs Observatory of the HO6).

The process of using PREMs in the HO6 depends on the presence of a referent from the managerial staff of the General Director of the HO6, and the presence of a group of professional residents appointed as part of the team working on PREMs. Among the facilitators of the process, the researchers identified the following:

- Skills and competences of the PREMs referent, in terms of project knowledge, evaluation and data analysis.
- Personal interest of the residents, who could use PREMs also for scientific publications and thesis.

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. Some early results of the action were described by the PREMs referent during the interview and by the hospital personnel during the workshops.

For environment noise, some wards were able to identify the source of problem and delete it (e.g., thanks to the open comments of respondents discharged from the department of obstetrics, it was possible to recognize an annoying sound from a specific door. After these complains, professionals decided to insert a gasket to cushion the closing of the door, avoid noise and improve the hospitalization experience).

3.3. “Using patient data in the daily routine for quality improvement actions: anticipating a complaint in the HO2b”

The HO2b is a local hospital directly managed by the Local Health Authority HO2. It is a little hospital located in a so-called “inner-area” (an island). In 2021, the HO2 had 2,369 hospitalizations, of which 1,926 ordinary hospital stays, and 443 day-hospital stays, while 583 were surgical hospitalizations and 1,786 medical ones. HO2b joined the PREMs Observatory, in March 2019. Overall, 3,906 discharged patients left their contact for participating in the survey, of which 624 completed the questionnaire.

HO2b has early started using data for monitoring the general patients' perception of the hospital stay and use them for solving problems and criticisms communicated by patients using the open-ended questions, at a ward level. During the interview, the hospital personnel story started from reading the following comment: *"The women's bathroom on the ward is also used as storage for wheelchairs [...]. Of course, it is an awkward experience if you are using the services or washing up!"*. The comment reported a negative experience, focussing on a clear lack of attention and violation of privacy. After reading this story, the hospital manager and the nurse coordinator convened a discussion with the ward staff. The hospital personnel understood this comment could anticipate a formal complaint. The ward staff immediately changed the organization of the ward bathroom, placing the wheelchairs in another room.

"When I read the comment, I was very worried and surprised. Worried because its content is like a formal and serious complain. Surprised because of the politeness of the comment, and because I cannot explain why we haven't thought about it before!" (Nurse).

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 healthcare professionals since they were responsible for the organization of spaces and equipment location in the ward.

The choice of data publication derives from

"...the clear necessity to immediately solve a problem that could prejudice the privacy of several patients. This kind of problem can be quickly translated into a formal complaint with potential legal consequences and costs for the hospital. This channel of communication provides us up-to-date information that can be used for anticipating problems, for improving service quality and for tightening the relationship with patients", (nurse coordinator of the HO2b).

The process of using PREMs in the HO2b was facilitated by some factors identified by the researchers:

- The leadership of the nurse coordinator who has been a champion in spreading among the hospital staff his high consideration for the patient voice
- The standard use of PREMs during the monthly meetings of the hospital staff, as input for discussion and check of the quality
- The constant support of the managerial staff of the General Director of the HO2
- Being a little hospital, with a limited number of patients and a close group of professionals

No specific indicators have been identified for measuring the impact of the action, if not the monitoring of data and comments from the PREMs Observatory.

4. Discussion / Practical Implications

In the present research, we used "collective cases study" to study multiple cases simultaneously to generate a still broader appreciation of using patient data (Crowe et al., 2011).

We collected 18 cases of patient-data use and analyzed three cases at the moment. 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. The attempt is to build and on knowledge the

user service experience and show why this patient's storytelling support healthcare quality improvement.

In all cases, the use of data was also possible thanks to the data availability on a web-based, real-time updated platform reporting PREMs (De Rosis et al., 2020a). This has broken down some data-related barriers/practical barriers reported in literature (Reeves and Seccombe, 2008), so facilitating their constant availability, consultation, and interpretation.

At system level, we collected a case of PREMs use for accountability action, through the open and public sharing of results of patients' satisfaction with hospitalization. Transparency and openness can be achieved by providing the citizens with information about what organization is doing, which promotes increased accountability. Currently, there is mixed evidence on the impact of public disclosure on population behaviors, particularly in healthcare sector (De Rosis et al., 2020b). Nevertheless, the public disclosure of information is important for «making visible» the results of public participation into survey for evaluating (and possibly improving) healthcare services, closing a virtuous circle among the various stakeholders in healthcare (De Rosis et al., 2019). Most of the time the patients' voice is gathered, the goal is to spot what goes wrong. However, patients are also able to report what worked well in the care pathway. In this case, the HO decided to share these data also because of the positive narrative they provide, and the need for people and healthcare personnel of hearing also positive stories. Thanks to PREMs survey is also possible to identify practices and professionals that make a difference in positive way into the ward and hospital. According to the positive deviance approach (Borghini et al., 2021), the focus is on performance and process that lead to positive results, positive examples of healthcare system, positive experience and then positive feedbacks. Further research should be done on the impact of sharing and disseminating positive feedback from robust patient survey, both on people and on the healthcare professionals' perception of the hospital.

At the organizational and hospital level, we collected two case studies where healthcare organizations and professionals used PREMs survey data to improve the quality of services and ameliorate patients' hospitalization experience. The case study from HO6 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, with the aim of activating mee-too processes (Thaler and Sunstein, 2008). According to Borghini (2019), it is necessary to leave the "naming and shaming" approach to embrace the "naming and faming" approach, who can identify and enhance the best practices within hospitals. In addition, we want to apply "*learning from excellence*" perspective, which aims to identify and retain the value of all excellent or positive experiences that can be reported and shared within and outside the hospital. Sharing good practices encourages knowledge exchange and allows professional-level processes of value co-creation. In addition to professional exchange, we consider it is important greater and more effective collaborations between professionals/practitioners and researchers/academics to generate rigorous and relevant knowledge, interdisciplinary collaboration, dialogue and innovation (Sharma and Bansal, 2020).

In all case studies, the key determinants are linked to professional and organizational factors, not barriers as reported in literature (Davies and Cleary, 2005; Davies et al., 2008), but facilitators. The presence of structured teams, with time and responsibility for monitoring and valuing PREMs was key. Their experience and skills to understand and analyze the results are also key facilitators (Davies and Cleary, 2005), demonstrating the need for training professionals on this matter. In fact, the attention to the patient perception is key for minimizing staff resistance to patient-centeredness approach. The presence of a reference 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 are additional organizational factors facilitating the shift from the patient experience data collection to the data use for the patient experience.

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. In addition to this, information reported by patients can also encourage an ongoing dialogue between staff and patients (Schlesinger et al., 2015).

The last two case studies show that PREMs survey data can be used for quality improvement actions, also in the day-by-day practice. Thanks to the patients' contribution is possible to enhance and promote the transformation of healthcare system towards patient-centeredness (Nuti et al., 2017).

4. Conclusions

Our work explored how hospitals use patient feedback to guide quality improvement and consolidate some practises. The multiple cases studies show how PREMs-based actions are addressed strategically in some Tuscany hospitals and departments and the processes are widespread from system to ward level. Our intent is to highlight how these practices can support healthcare organizations in improving services and co-creating with users innovative and sustainable solutions.

The limitations of our research relate to number of interviews, and case stories reported. 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/impact of actions analysed in the case studies. According to Deming (1950), it is possible to use PDCA Cycle approach (Plan-Do-Check-Act) for the implementation of practices in the data use and for continuous process control and improvement in healthcare organisations.

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