Partnering with patients in quality improvement: towards renewed practices for healthcare organization managers?

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Abstract

Background Around the world, many healthcare organizations engage patients as a quality improvement strategy. In Canada, the University of Montreal developed a model which consists in partnering with patient advisors, providers, and managers in quality improvement. This model was introduced through its Partners in Care Programs experimented in several quality improvement teams in Quebec, Canada. Partnering with patients in quality improvement brings about new challenges for healthcare managers. Although this model is recent, little is known about how managers contribute to implementing and sustaining it using key practices. Methods In-depth multi-level case studies were conducted within two healthcare organizations which have implemented a Partners in Care Program in quality improvement. The longitudinal design of this research enabled us to monitor the implementation of patient partnership initiatives from 2015 to 2017. In total, 38 interviews were carried out with managers of different levels (top-level, mid-level, and front-line) involved in the implementation of Partners in Care Program. Additionally, seven focus groups were conducted with patients and providers. Results Our findings show that healthcare managers are engaged in four main types of practices: 1-designing the patient partnership approach for it to make sense to the entire organization; 2-structuring patient partnership to support its implementation and sustainability; 3-managing patient advisor integration in quality improvement to avoid tokenistic participation; 4-evaluating patient advisor integration to support continuous improvement. Designing and structuring patient partnership are based on traditional management practices usually used to implement quality improvement initiatives in healthcare organizations, whereas managing and evaluating patient advisor' integration require new daily practices from managers. Our results revealed that managers of all levels, from top to front-line, are concerned with the implementation of patient partnership in quality improvement. Conclusion This research adds empirical support to the lack of evidence on daily managerial practices used for implementing patient partnership initiatives in quality improvement and contributes to guiding healthcare organizations and managers when integrating such approaches.

Background

In Western Europe and North America, patient engagement has become central to healthcare quality improvement efforts [1-5]. Several healthcare institutions promote patient engagement as a promising strategy to enhance healthcare quality and safety [5-7]. Within healthcare organizations (HCOs), patients and their families can be engaged in direct care and quality improvement (QI) activities and structures [8, 9]. Engaging patients in QI is a way to bridge the gap between expected quality by patients and intended quality, traditionally defined by both managers and providers. Many HCOs started to engage patients as part of their QI activities and structures [10, 11]. In Canada, this movement spread out since accreditation bodies and governments defined new guidelines, standards and policies that make patient engagement a core strategy to achieve high quality in healthcare settings [12-14].

In HCOs, several models exist to integrate the perspective of patients in QI. First, patient engagement occurs in varying degrees: consultation, collaboration and co-construction or partnership (8, 9). Patients

can be engaged in different activities related to QI: defining quality criteria for care and services [15]; co-designing care processes [16] and developing projects to improve the quality of care and services [17]; providing feedback on the quality of care and services [18]. Finally, patient engagement in QI can take place within QI interdisciplinary clinical teams and managerial committees or projects [19].

In Canada, the University of Montreal (UofM) developed a patient partnership (PP) model in QI. This model was introduced through its Partners in Care Program (PCP), experimented in several interdisciplinary QI teams [20, 21]. The PCP draws upon the philosophy of improving the quality of care by introducing patient advisors (PAs) into QI committees. PAs are volunteers – with patient experience or experience as patient's family member – who share their experiential knowledge with providers and managers to provide direct input on care and services [19]. One of the objectives of the PCP is to co-construct QI projects and activities with patients, providers and managers. This program was financed by the Quebec Ministry of Health and Social Services and created by the Collaboration and Patient Partnership Unit (CPPU) of the UofM Faculty of Medicine [22]. A QI committee works according to a Plan-Do-Study-Act method based on improvement cycles which must be completed according to an action plan. The QI committee is supervised by a program manager and the team's medical chief and has one or two institutional collaboration leaders (ICL). ICLs are providers or managers external to the team, who are responsible for supporting PA integration. Finally, a patient coach, with prior PA experience, is assigned to newly integrated PAs.

Although PP in QI initiatives have been implemented recently, little is known about practices used to implement them in different organizational and clinical settings [23-26]. PP studies broadly focus on identifying contextual and organizational factors associated with PP implementation, without understanding what managers actually do in practice at different levels of HCOs [27]. Partnering with patients in QI introduce new challenges within HCOs. The integration of a new actor "the PA" within QI teams is challenging and can result in tokenistic involvement without real contribution from the PA [19]. In addition, as any innovative initiative introduced within HCOS, PP in QI requires special efforts from managers to support its implementation and sustainability.

Hence, the main goal of this research is to study key managerial practices to implement PP in QI and has two main objectives: 1-describe the deployment of the PP program in two different clinical areas; 2-identify managerial practices at different management levels used to implement PP in QI.

Theoretical framework

We built a theoretical framework based on two pieces of literature: managerial work within HCOs and organizational change management (see **figure 1**).

To analyze the PP implementation process, we relied on studies by Mintzberg [28] and Cloutier and Denis [29], and focused on four sets of managerial practices: 1-*Design practices* refer to managerial efforts to establish new beliefs systems, norms and PP interpretative schemes; 2-*Structuration practices* correspond to managers' work to formalize the roles of actors involved in PP implementation, as well as

establish the goals, rules, and principles for organizing PP and allocating corresponding resources; 3- *Operational practices* consist of daily managerial actions to manage patient integration within QI teams; and 4- *Evaluation practices* consist of evaluating PP.

Several change phases were studied, inspired by well-known organizational change management frameworks from Kotter [30] and Rogers [31]. *Initiation* refers to identifying and communicating the need for change, building a guiding coalition, defining a strategic vision of change. *Deployment* corresponds to the implementation of operational activities. *Sustainability* refers to the capacity to maintain change over time.

Figure 1: Managerial practices for PP implementation in QI

Methods

We conducted in-depth multi-level case studies within two HCOs in Canada (Quebec) that have implemented the PCP. The longitudinal design of this research enabled us to monitor the implementation of PP from 2015 to 2017.

Case selection

The cases correspond to recently implemented programs (<2 years) that aim at partnering with patients in QI. The two cases were selected based on the most-different case selection procedure described by Gerring [32]. Specifically, we followed a maximum variance sample strategy [33] to choose cases with the following characteristics: occurring in different HCOs and locations (urban vs. rural) and within different clinical settings (mental health and oncology). Aside from the above differences, PCPs were implemented identically in both cases, with methodological support from CPPU and within voluntary clinical teams.

Data collection methods

38 in-person interviews (20 in case 1 and 18 in case 2) were carried out with managers involved in the implementation of PP in QI at three different management levels (see **table 1**).

Table 1: Data collected for each case and data collection period

Interviews were conducted lasted between 40 to 60 minutes and took place during three data collection periods [23, 28]. Top-level management includes the CEO (chief executive officer), the executive management, and the board of directors. Mid-level management includes various positions of senior and middle managers working within an administrative or a clinical department. Finally, front-line management comprises program managers in charge of supervising clinical teams. We also conducted focus groups with patients and providers during two data collection periods (2015, 2017) to gain a wider perspective on the involvement of patients in QI activities and interactions with managers and providers. Semi-directed interview guides were adapted and used for both interviews and focus groups (see **additional file 1**). All interviews were conducted and transcribed in French, then translated into English by

a professional translator. We also continuously collected management documents related to the implementation of PP. This study was approved by the University of Montreal Health Sciences Research Ethics Committee (certificate #14-127-CERES-D).

Data analysis

To analyze qualitative data, three successive phases combining a deductive and inductive analysis were conducted [34] using QDA Miner Lite software: 1-data codification and categorization based on a priori template of codes [35]; 2-identification of new codes and categories following a data-driven analysis [36]; 3-formulation and validation of our findings with key stakeholders. The first three interviews were coded independently by two reviewers (NC, MPP). Divergent codifications were discussed until both reviewers reached a consensus leading to a coding tree. Case stories were written to synthesize PP models and the implementation process focusing on managerial practices (NC). For data verification and refinement purposes, we presented our case studies during two knowledge transfer activities (2015, 2016) intended for HCO managers who had participated in the study (NC, MPP). In 2017, we finally summarized and sent overall results to key managers for each case and incorporated their feedback into our final results (NC).

Results

Our findings are presented in two sections. For each case, we present a brief synthesis of the implementation of PP initiatives from initiation to sustainability phases. Then, we focus on key managerial practices used to implement PP in QI.

1. Implementation of PP initiatives in our two cases

Both cases have implemented the PCP in 2013 within voluntary clinical teams and benefited from methodological support from the CPPU during the first year. HCO 1 implemented the program in the ambulatory mental health hospital services unit (case 1), and HCO 2 experimented it in its breast cancer unit. **Table 2** provides a summary profile of each case.

Table 2: Summary profile of the cases

Case 1 - Mental health.

Initiation. In 2013, the CEO decided to experiment the PCP in two clinical teams, including in the ambulatory mental health hospital services team. After experimenting for a year, executive management decided to initiate a large-scale partnership approach in the HCO. To do so, executive management introduced the partnership approach into the HCO's strategic orientations and modified its code of ethics to recognize the importance of patient partnership practices. The department of research and professional practices was made responsible for the PP; a QI senior and a middle QI manager were in charge of PP initiation and deployment as part of their functions, while a PA was hired to help the middle manager structure and deploy PP activities. Together, they formed a joint management/patient team.

Deployment. The joint team worked on a logical model to specify objectives associated with the integration of PA within QI and on a reference framework to clarify the definition of partnership concepts. To coordinate and support the integration of PP in QI teams, the team standardized a process consisting of five steps: 1) PA request from a manager or a provider; 2) verification of the appropriateness of the request; 3) identification, recruitment, preparation of PAs, QI teams' training; 4) contact of PA by the manager or provider to explain the QI project and the role of PA; 5) assessment of PA's participation within the QI project. In parallel, the joint team gave presentations of the PP approach at all levels of the HCO and developed explanatory documents to encourage managers and providers to integrate PAs in QI activities and teams. In mental health, the QI team completed two QI cycles with two PAs without support from the CPPU to adapt the ambulatory services' physical activities to patient needs.

Sustainability. In 2015, a provincial healthcare system reform led to merging Quebec HCOs at the regional level. HCO 1 was merged with eight other HCOs. The CEO decided to continue the PP approach in the newly merged HCO and included PP into its strategic objectives. The CEO also appointed the quality department to be responsible for the PP while three QI managers were put in charge of the PP as part of their functions. From 2016 to 2017, they worked on the PP's deployment plan which included objectives, strategies to promote PP in QI, and the role of clinical and quality department in the deployment of PP. By the end of 2017, around 200 PAs had been involved in various QI activities, and the mental health team completed seven improvement cycles with PAs.

Case 2-Oncology

Initiation. In 2011, the CEO decided to launch six major projects on collaborative practices within the HCO, which included the PCP. This collaborative approach with patients was integrated into the strategic plan of the HCO. A strategic committee was set up to plan and monitor the development of the collaborative practices projects while four clinical teams were identified to run the PCP. The responsibility of the program was placed under the governance of the Department of Multidisciplinary Services which supports best professional practices. Hence, a senior and a middle manager were in charge of PP and implementing the PCP as part of their functions.

Deployment. In order to support the four QI clinical teams who decided to experiment with the PCP, the Department of Multidisciplinary Services created a community of practice. By the end of 2013, the breast cancer team completed its first improvement cycle for developing patient educational activities on life after breast cancer treatment. The oncology program manager and the middle manager in charge of PP identified PAs to co-construct and coordinate these educational activities with providers. These activities covered various topics such as sexuality, nutrition, stress, and monitoring side effects and were integrated into the services offered within the oncology program.

Sustainability. In 2015, after HCO 2 merged with seven other HCOs, the new CEO decided to include citizen and patient partnership as part of the organization's guiding values, which were adopted in the code of ethics. While restructuring, two departments (public health department then the quality department) were successively responsible for the PP. Moreover, one of the merged HCOs had already

implemented an approach based on citizenship and recovery models in mental health, with patients involved at all levels and in a range of activities [37, 38], whereas HCO 2 only integrated PAs in QI activities. The existence of two different PP approaches hindered the adoption of a harmonized model. In 2017, the quality department and three senior quality managers were appointed to oversee the PP in the HCO. The middle manager from the Department of Multidisciplinary Services in charge of the PP maintained a supporting role for the coordination of PP activities. The oncology program extended PA involvement within a QI committee in charge of improving the continuum of cancer care and services. By the end of 2017, more than 10 PAs had been involved within the oncology program.

2. **Managerial practices for the implementation of PP**

When implementing PP in QI, managers used four main types of practices: 1-designing the initiative so that PP make sense to the entire HCO; 2-structuring the initiative to support PP implementation and sustainability; 3-managing PA integration in QI to avoid tokenistic participation of PAs.; 4- evaluating PA integration in QI to support continuous improvement of the PP.

Designing the PP for it to make sense to the HCO

Designing the PP consists in making sense of the PP initiative relative to the entire HCO, creating a shared vision of the PP among managers, providers and PAs. In cases 1 and 2, top (CEO, executive management) and mid-level managers (in the department in charge of PP) integrated the PP approach in the code of ethics, positioning PP as one of the guiding principles of care and service. In both cases, the vision of the PP was influenced by external requirements on patient engagement in HCOs, including Canadian accreditation standards and orientations of the Quebec Ministry of Health and Social Services. Top and mid-level managers were the main drivers when designing a PP model that fostered its initiation (cases 1&2) and sustainability in a context of organizational change (case 1). In both cases, top-managers had to maintain an organizational vision of PP and reframe it to suit new organizational structures and responsibilities. In case 2, following the merger, the lack of a clear vision from top-level managers and insufficient alignment between top-level, mid-level and front-line management regarding PP compromised the sustainability of the PP model.

We're in a strategic blur, a dense tactical fog, and operationally, we all do our own thing with the little resources we have […] what we lack is a common project, support from upper management (Mid-level manager, case 2)

Case 1 used a range of design practices. First, mid-level managers developed a reference framework of the PP model which clarifies the definition of partnership concepts. Furthermore, the mid-level manager in charge of PP, as well as the CEO, in tandem with a PA, gave several presentations of the PP approach to different clinical and management committees. The promotion of PAs' role and contribution in QI help raise awareness about the added value of PAs and encourage QI teams to involve PAs. In this regard, managers, in co-leadership with PAs, acted as ambassadors and disseminators of the partnership approach.

We received training on the concept of patient partners with all managers. Patients came to share their stories; we, as care staff, do not always have the patients' perspective about services we provide. It raised awareness among all managers. Then, the quality team started including patients, so everyone was on the same page, ready to welcome them (program manager, case 1)

Additionally, case 1 succeeded in ensuring the transfer of PP experience and knowledge among managers. Continuity among mid-level managers overseeing PP was determinant in the context of a merger to help sustain a vision of the PP model. One of the mid-level managers previously involved in deploying PP in the former HCO was able to share her knowledge and experience on PP with her team.

Structuring the PP to support its implementation and sustainability

Top and mid-level managers played a key role in structuring the PP initiative to ensure its successful implementation and facilitate its sustainability over the long term. By structuring the PP, managers act as entrepreneurs to determine how to structure the PP model. In both cases, executive management led PP integration into the strategic goals of the HCOs and appointed a department in charge at the mid-level to oversee the PP as a core function to the governance structure. In case 1, the PP has been defined to contribute to high quality of care and services.

That year, we integrated the partnership into the strategic objectives of our new organization. Our objective was to bring continuous quality improvement and patients as close as possible. Therefore, we want to place the whole notion of partnership at the heart of care and service quality (CEO, case 1)

In cases 1 and 2, different departments (best professional practices and quality departments) have been successively responsible for implementing the PP initiative. Structuring the PP also required mid-level and front-line managers to organize the coordination of PP activities within the HCOs. In case 1, the coordination of PP was centralized in the quality department where mid-level managers structured a five-step process for PA involvement in QI, from recruitment to evaluation activities. On the other had, in case 2, the coordination of PP was less formalised and was shared between the breast cancer program manager and the mid-level manager.

In both cases, the mergers destabilized the coordination of PP. In case 2, in the absence of effective governance of the PP at top and mid-level management, several mid-level and program managers – previously involved in coordinating PP activities in their former HCO – have created a community of practice to foster the harmonization of PP practices (e.g., PA recruitment, PA satisfaction assessments) in all clinical programs.

*[…] as part of our partnership office, to better coordinate our actions, exchange tools and methods developed as much in hospital X as in hospital Y. We try to harmonize, we revised the patient request form and the patient satisfaction form (*program manager, case 2)

In case 1, mid-level managers questioned the future role of the quality department regarding the coordination of all PP activities. As the number of PAs involved in QI has significantly increased in the

merged HCO, mid-level managers experienced challenges in maintaining personalized support for recruited PAs. They suggested that clinical programs could also take part in the coordination of PP, for instance, by creating a list of potential PAs, as well as PAs recruitment and preparation.

Having personalized management for patient banks seems hard to maintain in such a large territory. I'm eager for us to think about this, because if we manage to reach 150 patients, I'm not sure that all patients will receive the same relationship and involvement quality (Mid-level manager, case 1).

Furthermore, structuring the PP required middle managers to secure funds to compensate PA participation in QI activities (travel expenses, parking tickets, lunch), to ensure the recognition of PA involvement in QI and encourage their ongoing participation. In case 2, mid-level managers questioned the sustainability of PA participation in QI activities in the absence of funding to compensate their work.

For highly involved people, who do more than volunteer, it would be fair to be able to remunerate them, but for now, we lack the structure and funding that enable us to do this. We have a budget from the X Foundation which allowed us to compensate patients who participated in activities, but this budget is running dry (Mid-level manager, case 2)

Managing PA integration to avoid tokenistic patient involvement

Managing PA integration in QI activities requires managers to select, recruit, prepare and coach PAs; train providers/managers and support their collaboration with PAs. These practices represent renewed practices that managers developed over time to ensure the successful integration and involvement of a new actor (the PA) in QI teams. This range of new practices differ from their usual daily work, some of which being adaptations of usual human resource practices geared towards a rather "unusual" human resource (the PA), especially in terms of selection, recruitment, preparation and training and coaching. These practices are carried out by mid-level and front-line managers, and result from a new type of relationship between managers and patients, who interact on a regular basis for QI purposes.

Selecting, recruiting and preparing PAs

Selection, recruiting and preparing PAs are new practices that managers developed over time to ensure the successful integration of PAs in QI teams. In case 1, managers systematically verified the appropriateness of involving PAs in a QI team before starting the selection process, to make sure that the QI project reflects patient concerns and that PAs will add value. In both cases, program managers, in collaboration with providers, identified of potential PAs was made by, while mid-level managers handled recruitment and preparation of new PAs. In case 1, the middle-manager benefited from support from an expert PA in those activities.

For both cases, PA recruitment was made through face to face interviews based on a set of core skills expected from PAs provided by the CPPU. Those skills were: having experienced services related to the QI committee; a stable health condition; effective communication; availability to participate in several meetings. In both cases, PAs were trained on PP principles and objectives, as well as PA roles and

responsibilities in a QI team. In case 2, providers reported the need to clarify PA roles and responsibilities, for instance, regarding access to and handling of confidential information.

Preparation is provided to new patients; it's a must. X and team did that. Because patients arrive in good faith, yes, but sometimes there are things that are important for them to know. Like, the extent of their role. At least the notion of information confidentiality (program manager, case 2).

Supporting collaboration between PAs and QI teams

The integration of PAs in QI teams required daily efforts from mid-level and front-line managers to support and stimulate collaboration among PAs, providers and/or managers. During PCP experimentation, ICLs helped program managers act as PP facilitators and helped ensure that PAs and QI teams mutually understood their roles and responsibilities. Meanwhile, the program manager also had to facilitate compromise when setting QI objectives to satisfy concerns and expectations of PAs, providers and managers.

There is certainly a gap between my perceptions and concerns as a manager and those of professionals and patients. Our challenge is to find an objective that will connect everyone's interests, particularly those of patients if we want them to be involved (program manager, case 2)

In both cases, mid-level managers set rules to facilitate PA participation and integration in teams: involvement of at least two PAs in QI teams; and assignment of a patient coach who holds PA experience for newly recruited PAs. Program managers faced issues related to continuous PA involvement in QI committees. In case 1, the program manager struggled with high PA turnover within the committee for several reasons (medical condition, work).

Finally, one particular issue was raised by the program manager in mental health regarding PA support once their involvement ends. For patients with mental health issues, participating in QI teams as a PA also represents a step towards recovery, therefore ending their involvement could be badly experienced if their exit is poorly prepared and supported by the team.

For patients, project or team involvement means a lot for their recovery as it becomes a benchmark for therapeutic success or failure, even though it is a collaborative relationship. I believe that PAs should be supported at the end of their involvement or shepherded in terms of what the end of their involvement means (providers' focus group, case 1)

Team training

For both cases, during PCP experimentation, QI teams were first trained on partnership concepts and methods by the CPPU. A specific effort was made to explain the roles and responsibilities of new team members, including PAs and ICLs.

A major success factor is the thorough work that goes into preparing providers and patients before getting started, with help from the CPPU (top-manager, case 1)

At the end of PCP experimentation, cases adopted different practices to ensure continuous QI team training. In case 1, the joint management/patient team systematically provided individual training for QI teams interested in partnering with PAs as well as explanatory document containing information on PP principles, benefits and process to be followed for PA integration.

We always provide a training tandem: a Quality Advisor and a PA for new PAs and teams that want to engage PAs. This tandem is a must! (Mid-level manager, case 1)

In case 2, the mid-level manager created a community of practice, gathering all QI teams that partnered with PAs. This community helped share experiences, practices, methods and issues related to PA integration, as well as develop a charter on good PP practices and methods.

Evaluating PA integration in QI to support continuous improvement

In case 1, mid-level managers collected data to report on PP integration in QI activities. Collected data included: number of PA requests in QI; types and number of departments, programs or clinical teams involving PAs in QI; and different PA involvement purposes.

On the other hand, in order to ensure continuous improvement of the PP, evaluating PP in QI mainly consisted in assessing the PA integration process by understanding how PAs and QI teams experienced their partnership. In both cases, this informal practice was carried out by program managers who inquired about PA satisfaction in terms of team integration and participation and potential areas of improvement. They regularly shared PA feedback during team meetings and, in turn, providers shared their own PA partnership experiences.

We have meetings with patients and professionals to assess participation – what went well and what went less well – so that everyone provides their opinion (program manager, case 2).

In case 1, since the coordination of PP was centralized in the quality department, the role of mid-level managers was to evaluate the PP. The formal PA involvement assessment process relied on three main types of data: PA satisfaction with regard to their participation; PA benefits gained from their partnership experience; QI team member perceptions regarding PA contributions and PA partnership challenges.

A sum-up of the findings is presented in **additional file 2** and a graphic presentation of the main conclusions is provided in **figure 2.**

Figure 2: Synthetic presentation of the main findings

Discussion

Limits and strengths of the study

One of our study's limitations was the impact of HCO mergers following the provincial health system reform, which hindered research on the sustainability of PP initiatives in a stable organizational context. However, it turned out to be an opportunity to understand how managers, at different levels within HCOs, contribute to maintain and adapt or not a PP model in a context of organizational change. Additionally, our research focused on PP implementation in QI, which is a specific model of patient engagement in QI. Finally, our study was limited to two different cases and HCOs. Future research should be undertaken on HCO management practices for the implementation of a broader range of patient engagement initiatives and within various clinical and organizational settings.

To our knowledge, this is the first study that focuses on key practices of HCO managers when implementing PP in QI. Thanks to our framework, we showed that managers are engaged in four main types of practices: 1-designing the PP for it to make sense to the entire HCO; 2-structuring the PP to support its implementation and sustainability; 3-managing PA integration in QI to avoid tokenistic participation; 4-Evaluating PA integration in QI to support continuous improvement. The two first types of practices are based on traditional practices, usually used by managers to implement QI initiatives in HCOs, whereas managing and evaluating PA integration require new daily practices that managers did not necessarily rely on before. Our results also revealed that managers, of all management levels, are concerned with the implementation of PP in QI, from top to front-line managers [39].

Designing and structuring the PP: how managers adapt usual QI implementation practices

Our research indicates that top and mid-level managers were the main drivers that determined the way in which PPs were designed and structured within HCOs. These managerial practices helped initiate PPs and sustain them over time. In fact, most practices used by managers to implement PPs are usually adapted from those used to implement QI initiatives within HCOs.

The literature on QI underlines key elements that ensure successful implementation of QI initiatives within HCOs, including: the adoption of QI frameworks [40-42]; the promotion of QI initiatives [43, 44]; and the capacity to transfer QI knowledge among managers [45]. Creating a shared vision of QI is one of the main spheres of activities specific to quality management in HCOs (28). Our study shows that managers played an important role in designing PPs to create a shared vision of the model. To do so, they integrated PP into their codes of ethics (cases 1&2), developed a reference framework of the PP model (case 1), promoted PA contribution in QI (case 1), and ensured that PP implementation knowledge and experience was shared among managers (case 1). HCO managers acted as the main drivers of cultural change toward PP in QI. Cases 1&2 illustrate how commitment from top-level managers and aligning the vision across management levels can influence the sustainability of an initiative [42, 46], especially within the context of a merger (25). They also acted as PP ambassadors and disseminators in order to encourage QI teams to integrate PAs.

QI implementation studies also recognize the key role of HCO managers in setting QI goals [47], centralizing QI goals and tasks as a core function of the governance structure [48], and supporting QI initiatives via adequate resource allocation [49-52]. These key practices were used by top and mid-level managers to support PP implementation and its sustainability over time. Structuring PPs included a broad range of practices, namely: integrating PP initiatives into the HCOs' strategic goals (cases 1&2), appointing a department in charge of PPs (cases 1&2), developing a logical model, specifying goals, targets, strategies to deploy PPs (case 1), providing sufficient funds to compensate PAs (cases 1&2). In that regard, top and mid-level managers act as entrepreneurs to set out the course of change, and as resource allocators to support change and make it achievable [28, 53].

While managers adapted usual QI practices to support the implementation and sustainability of PP initiatives, they also faced new challenges that need to be addressed in the future and have not been studied so far. As PA involvement is growing within HCOs, managers called for better reflections regarding the coordination of PP activities, the future role of clinical departments, as well as the allocation of dedicated resources to ensure ongoing PA involvement in QI activities [54].

Managing and evaluating PP in QI: towards renewed practices for healthcare managers

Our study shows that mid-level and front-line managers were engaged daily to deploy PP in QI, which consisted in managing and evaluating PA integration in QI teams. Those practices included: selecting, recruiting and preparing PAs; supporting collaboration among PAs, providers and managers; team training and PA integration assessments. These range of practices result from a new type of relationships between managers and patients, who interact on a regular basis for QI purposes. Managers had to develop renewed practices to ensure successful integration of a new actor (the PA) in QI teams, avoid tokenistic PA involvement and support continuous improvement of their involvement. This range of new practices differed from the managers' daily work, and some practices were viewed as adaptations of usual human resources practices for a rather "unusual" human resource (the PA), especially in terms of selection, recruitment, preparation, training and coaching.

Moreover, several studies on factors enhancing patient engagement in QI support some of these findings, including the need for structured methods to select and recruit PAs, to train both PAs and teams [17, 19, 50] in order to avoid tokenistic patient engagement [23, 55]. Program managers are engaged daily in facilitating PA integration in QI teams and supporting collaboration between PAs and other QI team members. Their role as facilitation agents for PP is a determinant one. Identifying clear roles and responsibilities for PAs [5, 23], choosing the right PAs relative to the QI mandate, assigning a patient coach to PAs [19, 54] can foster effective PA integration and involvement in QI teams. In mental health, specifically, program managers must continuously support PAs, as being involved in QI teams may also represent a step towards patient recovery.

Lastly, managers are engaged in evaluating PA integration in QI. In case 1, mid-level managers formally assess PP activities by collecting process (satisfaction and experience) and structural indicators. In both cases, program managers evaluated PA and team satisfaction and experience through regular feedback.

This informal evaluation with all team members is essential to reflect and suggest ways to continuously improve PPs [19]. Managers must also measure the impact of PP on quality, which represents a challenge for any patient engagement initiative in QI [5, 56, 57].

Managers' contribution to expanding PA involvement in QI within HCOs

Our findings shed light on how HCO managers contribute to shaping and expanding PA involvement in QI over time within HCOs. Both study cases initially experimented two similar programs at the clinical level. Thanks to managerial efforts, PA involvement expanded beyond clinical QI teams, especially in case 1, in which top-level managers cooperated with mid-level managers to successfully develop a shared vision of a large-scale PP model in QI. This resulted in PA integration within various HCO organizational committees, projects, programs and QI areas (37). Mid-level managers were able to share their PP vision with front-line managers and QI teams while helping them achieve PA integration in QI activities thanks to structured processes. In case 2, mid-level managers, in collaboration with front-line managers, also integrated PAs in QI activities within the oncology program, namely in the development of educational activities for all patients treated for cancer. As suggested by the literature related to quality improvement, cooperation among managers – across different management levels – is a critical element to implement, expand and sustain PP initiatives within HCOs (36, 37).

Conclusions and implications for HCO managers

This research adds evidence on the daily work of HCO managers for implementing PPs in QI and contributes to guiding HCO managers through the integration of patient engagement initiatives.

Implementing PP requires renewed practices for HCO managers, which can be challenging. While external requirements encourage HCOs to partner with patients in QI, managers need to be supported through specific training on best practices for managing PP and various forms of patient engagement in QI. The Faculty of Medicine of the University of Montreal has recently developed an online course on PP, which is offered to different medical sciences and health administration programs to help managers work with PAs [58]. While this initiative is interesting, exhaustive training should also be offered in academic institutions, such as in public health schools, nursing schools, and schools of management.

List Of Abbreviations

CEO: Chief Executive Officer; PCP: Partners in Care Program; CPPU: Collaboration and Patient Partnership Unit; HCO: Health Care Organization; PA: Patient advisor; PP: Patient Partnership; QI: Quality improvement; UofM: University of Montreal; ICL: Institutional Collaboration Leader.

Declarations

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Ethics approval and consent to participate

This study was approved by the University of Montreal Health Sciences Research Ethics Committee (certificate #14-127-CERES-D). All interviews and focus groups participants received, read, understood and signed a consent form to participate in the study.

Availability of data and materials

The data (quotes) generated during the current study are available from the corresponding author on reasonable request. Some data (selection of quotes) are shared in the results section.

Consent for publication

Not applicable

Competing interests

The authors declare that they have no competing interests.

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Author contributions

NC is the main author of the manuscript. All authors contributed to at least some component of the study and manuscript. NC shaped all aspects of the study design, with feedback from MP. NC and MP contributed to the collection of data. NC analyzed all the material with support and feedback from MP. NC wrote the first draft and MP, DPG gave substantial feedback. All authors read and approved the final manuscript.

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Tables

Table 1: Data collected for each case and data collection period

Type of data	Cases	Period 1 (2015)	Period 2 (2016)	Period 3 (2017)	**Total**
Interviews with managers	Case 1 (mental health)	Top-level (3) Mid-level (4) Front-line (2)	Mid-level (2) Front-line(1)	Top-level (3) Mid-level (3) Front-line (2)	**20**
	Case 2 (oncology)	Top-level (3) Mid-level (3) Front-line (2)	Mid-level (2) Front-line (1)	Top-level (3) Mid-level (2) Front-line (2)	**18**
Total					**38**
Focus groups with patients and providers	Case 1	Patients (1) Providers (1)		Patients (1) Providers (1)	4
	Case 2	Patients (1) Providers (1)		Patients (1)	3
Total					**7**

Table 2: Summary profile of the cases

Characteristics of the cases	Case 1	Case 2
Type of HCO	**HCO 1** Integrated university health and social services center	**HCO 2** Integrated university health and social services center
Location	Rural setting	Urban setting
Initial models of PP	PCP	PCP
Clinical settings	Mental health	Oncology
Clinical units	Ambulatory hospital services in mental health	Acute services, breast cancer
Composition of QI teams	Program manager, psychiatrist (medical chief), psychologist, occupational therapist, nurse, two PAs, two ICLs	Program manager, radiation oncologist (medical chief), oncologist surgeon, psychologist, two PAs, one ICL
Examples of QI activities with PAs	**At clinical team-level**: improving patient pathways within mental health ambulatory services; assessing daytime hospital services; adapting physical activities to patient needs **At other levels:** developing an information platform for waiting times; kaizen to review process and tools for recruiting PAs; facilities development projects	**At clinical team-level:** developing educational activities on life after breast cancer; integrating PAs to facilitate pre-surgery classes for breast cancer, developing strategies to promote educational activities on breast cancer **At other levels**: developing educational activities for patients with cancer, improving the cancer care and services continuum

Additional File Legend

Additional file 1: Selection of interview questions with managers (pdf)

Additional file 2: Managerial practices used at different management levels to implement patient partnership in quality improvement (pdf).

Figures

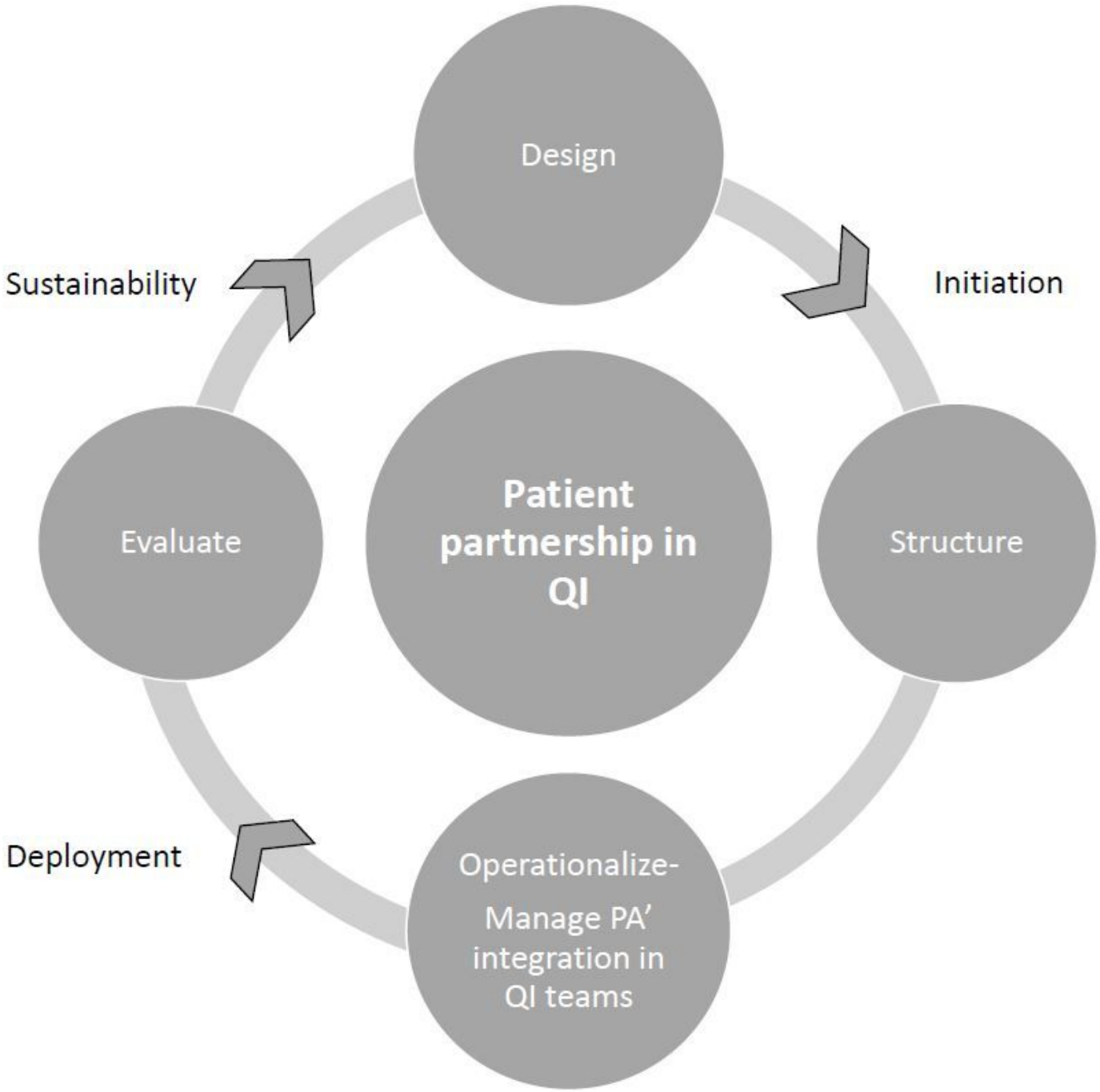

Figure 1

Managerial practices for PP implementation in QI

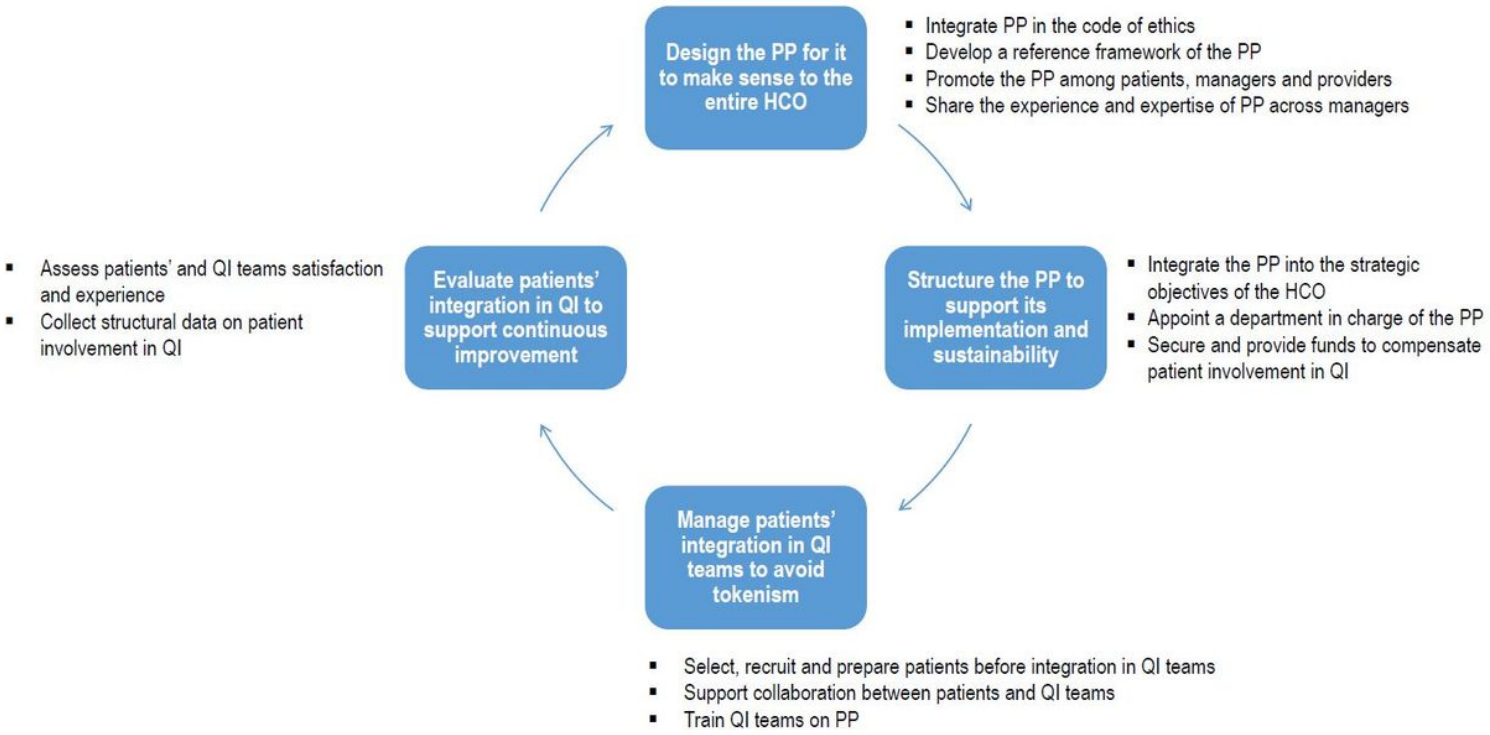

Figure 2

Synthetic presentation of the main findings

Supplementary Files

This is a list of supplementary files associated with this preprint. Click to download.

- supplement1.pdf
- supplement2.pdf