Implementing a Communication Model to Enhance Patient-Centered Care

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Abstract

Background: Family involvement is essential in providing patient-centered care. It is very challenging to adapt into the health-care system. Our project aims at implementing a culturally tailored communication model to systematically involve a family in patient care.

Materials and Methods: A multidisciplinary team was established to implement our previously developed communication model. We used rapid plan–do–study–act (PDSA) cycles of improvement to test the set of interventions to incorporate learned lessons into the project activities. The communication model was implemented in stages starting from the emergency department (ED) and expanding to different hospital units. Result: Fifteen PDSA cycles were conducted in the ED, intensive care unit, and inpatient wards. A clear algorithm on how to appoint the most responsible family members was developed and points of communication with the family were identified. Educational materials were developed for patients and families in addition to staff education about the program. There was a strong acceptance of the concept from families and staff, and the process is being implemented into our electronic health records.

Conclusion: Our communication model was well accepted by patients, their families, and our staff. The plan is to automate the process for sustainability by making it an integral component of the electronic medical records and to introduce it throughout our system.

Keywords: Communication model, family-oriented care, patient-centered care, involving the family in patient care

Introduction

Patient-centered care is a widely endorsed concept in health care as an important domain of quality care.[1] However, what is patient-centered care? How is it implemented and how is it evaluated are very challenging questions and span over a wide range of possibilities that are usually contextual.

The most critical point in this concept is to have the patients involved in shared decision-making process about their health. This involvement in decision-making varies based on individual patient characteristics such as education, gender, social status, medical conditions, societal and cultural issues, and the prevailing health-care system culture and leadership.[2-5]

A critical component of shared decision-making is the right of the patients to involve others, caregivers, or family members, to help them make decision or support them through the process.[6-10] Although a large body of literature about the need and value of involving family members in patient care is available, there are numerous challenges to do that practically.[11-15]

In our institution, numerous complaints were raised by patients and their families related to communication with health-care professionals, and a task force identified a gap in the communication with the families. In addition, our staff complained of having multiple family members involved, which created friction and increased workload. A communication model was developed to systematically involve the family in caring for the patient.[16]

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The aim of our project is to implement our communication model to facilitate the involvement of patients and their families in the decision-making. This article describes the implementation phase of this model at our facility.

**MATERIALS AND METHODS**

**Settings**

King Abdullah Medical City is a 1500-bed tertiary hospital that provides tertiary care for patients with various diseases in Riyadh, Kingdom of Saudi Arabia (KSA). The patients come from a wide catchment area that covers almost the whole KSA. They are usually accompanied by more than one family member. Most of the relatives accompanying patients are first-degree relatives, but that is not always the case.

**Intervention**

As part of the hospital-wide quality improvement initiative, a multidisciplinary team was charged with piloting and testing the implementation of the communication model using quality improvement methods and tools.

The team used repeated rapid cycles of improvement, plan–do–study–act (PDSA) cycles, to test interventions and incorporate lessons learned from each cycle. Process mapping was used to understand how the family involvement occurs at the beginning of the project. All concerns of patients and families were addressed and incorporated into the process. We evaluated patient and staff satisfaction with the model.

**Communication model**

To facilitate family involvement in patient care, we developed a communication model that brings family members into the care unit in a structured way. The main characteristics of this model are as follows:

1. Keeping the patient at the center of care and communication, thus assuring priority of the patient’s choices and wishes based on the Institute of Medicine Report on the domains of quality of care, which identified patient-centered care as an important domain of quality.
2. Bringing the family members into the care unit through a structured communication process with one family member being appointed as the “most responsible family member” (MRFM) to mirror the “most responsible physician” system.
3. Communicating with the MRFM should be documented at specific points of the patient journey called “mandatory communication points,” which include admission, discharge plan, serious change in patient condition, before implementation of the code status, before any procedure, and on family request.

The project was approved by the institutional review board at the King Abdullah International Medical Research Center to be implemented and evaluated at our institution.

**RESULTS**

Fifteen PDSA cycles were executed to achieve certain goals, which are as follows:

- Evaluate the process of appointing MRFM by registration and nursing staff (one PDSA): In this PDSA, we observed how the patients registered and appointed the next of kin. It helped us understand the process map.
- Evaluate patient, staff, and family acceptance of the concept of MRFM (four PDSAs): In these PDSAs, we tested the process of appointing the MRFM. This helped us refine the forms and the educational materials.
- Test and implement the forms to appoint MRFM in different clinical areas (eight PDSAs): These PDSAs involved expanding the project to different wards including medical and surgical wards and the intensive care unit (ICU). They helped us understand how the process works outside emergency department (ED).
- Track and study documentation of communication history between health-care provider and MRFM (two PDSAs): We monitored the documentation of the encounters between the physicians and MRFMs. This enabled us to understand the communication points and the challenges.

After each PDSA cycle, the team studied the findings and the lessons learned and planned the action step and next PDSA cycle accordingly.

**Pilot phase in emergency department**

The team focused initially on the patients admitted to the ED and evaluated the process of how staff and family interact.

We conducted a survey of 41 nursing staff and family members before we introduced the concept of MRFM. The survey revealed that many nurses did not know if the patients had a family member with them or not. In fact, 73% of nurses did not recognize MRFM and approximately 48% did not know if the patient was accompanied by family members. On the other hand, 96% of the patients reported having family members with them.

Process mapping of the patient flow in the ED was performed. We found that patients came to the ED and registered with the Patient Services department, where information about the next of kin could be obtained; then the patients’ documents were received by the nursing team. The real-life patient registration process was observed by the team members to evaluate how the staff members identify the next of kin, which was required as per the hospital policy. The staff obtained information from the person accompanying the patient without seeking
enough details about the relation with the patient or the expectations and roles for the next of kin.

The communication gap was obvious, and the need to improve it among patients, families, and staff was critical. In the next step, we tested the model in one unit of the ED and then expanded to all units of the ED, later to the ICU, and finally to the inpatient wards.

As a result of the assessment work and the PDSA cycles, the team identified multiple lessons that were listed into different categories that were related to patients, families, staff, and the process.

**Lessons about patients**

There was a general acceptance of the concept from most patients initially, which improved further as the project evolved. Concerns and issues raised were addressed. These are summarized in Table 1.

A few patients raised concerns about the authority of the MRFM, especially regarding the legal power outside the hospital. This was resolved by clarifying the roles of MRFM by being the health-care partner only in the hospital, with no legal status outside this scope. This was clearly stated in the descriptive document of the MRFM roles. The right of the patient to cancel or change the MRFM was also highlighted. There was a need to develop educational material for the patient and the family about the role of the MRFM, especially as a health-care partner (proxy) and with no other legal implication outside the hospital. Bilingual educational materials were also developed to explain these issues. Initially, a few patients wanted to appoint more than one family member, but the purpose of the concept to facilitate communication with family was explained, emphasizing the importance of streamlining the communication through one family member and involving others, if needed.

The initial implementation process requires patients to be alert, oriented, and capable of appointing the MRFM. However, we encountered patients who could not make the decision (confused, altered mental status, or minor). We needed a process for appointing the MRFM in these situations, taking into account the laws regarding the next of kin hierarchy [Figure 1]. Two separate forms were developed to appoint the MRFM for patients who can (Form A) and cannot (Form B) make the decision [Figure 2].

**Lessons about family involvement**

A few family members raised concerns about having only one family member appointed as the MRFM, which may keep them out of the loop, but when the team explained the process and the role of the MRFM, all family members accepted the idea.

Occasionally, the MRFM was difficult to reach by the hospital staff. This issue was addressed by having more than one phone number for the MRFM (mobile, landline, and work phone numbers). An emergency contact number of a second person was also introduced. Social services were involved to reach out for the next of kin for comatose or confused patients or difficult-to-reach MRFMs.

| Component | Challenge | Intervention |
|-----------|-----------|-------------|
| Patients  | Concerns about the authority of the MRFM, especially the legal power outside the hospital Request to appoint more than one MRFM Patient cannot make decision to appoint the MRFM (confused, altered mental status, or minor) Need to have adequate knowledge and standard information about the new concept | Clarified the roles of MRFM by being the health-care partner only, no legal status outside the hospital Explained the purpose of the concept is to facilitate communication with family Developed a process and a form for appointing the MRFM while taking into account the laws regarding the next of kin hierarchy Stated in the description document of MRFM roles Highlighted the ability of the patient to cancel or change MRFM Bilingual educational materials were developed explaining versus issues encountered |
| Family    | Concerns that appointing one MRFM may keep the rest of family out of the loop Difficulties in reaching the MRFM occasionally | Teams explained the process and the role of the MRFM and the role of communicating with family Obtaining more than one phone numbers to the designee MRFM (mobile, landline, and work phone number) Introducing an emergency contact number of a second person Involving social services in reaching out for the next of kin for comatose or confused patients or difficult-to-reach MRFM |
| Staff     | Lack of knowledge among nurses and Patient Services staff Need for physician involvement Language barrier was identified, as most nurses do not speak fluent Arabic, the language of the patients | Held educational programs for our staff Doctors were informed and educated about the project An Arabic-speaking staff member was assigned to translate for the nurses |

MRFM = most responsible family member
Lessons about staff involvement

All nurses and Patient Services department staff in the ED were trained and educated on the project details. All 20 Patient Services staff members were trained on how to guide the patient to appoint the MRFM and communicate with the nursing staff. Nurses usually meet the patient and the MRFM in the ED, and facilitate communication with doctors to ensure that documentation in the communication form is correct; 250 nurses were trained on the process.

Doctors were also informed and educated about the project to enhance compliance and communication with the MRFM in the departmental meetings.

A language barrier was identified as most nurses do not speak fluent Arabic, the language of the patients. Therefore, an Arabic-speaking staff member was assigned to communicate with the patients and their family and translate for the nurses.

Lessons about the process

The team recognized the need for two separate processes for patients who were able to make a decision and those who were unable [Figure 1]. Forms to appoint the MRFM were modified accordingly. Form A was for patients who were able to make a decision, and Form B was for patients who were unable to make a decision because of mental status or being a minor [Figure 2].

A survey conducted in the ED after implementation of the MRFM forms showed that the staff and patients were highly satisfied (100% and 90%, respectively) with the improved communication process.

Discussion

Our project revealed the great need for a communication model with wide acceptance of its implementation by the patients, their families, and staff. This was a result of all realizing the importance of communication in lieu of having extended family in a complex health-care system. Although there are other models or programs to involve families in patient care, these programs are focused on special populations. Our model is different as it targets all types of patients in societies that may have large extended families and aims to involve the family systematically.

A paucity of communication models is reported in the literature for adult patients. There are some reports about geriatric, end-of-life, or psychiatric patients. These approaches are used for a particular setting and on many occasions, when the patient’s ability to make decision
is in question. For example, Workman[17] reported a communication model for end-of-life care for hospitalized patients and highlighted the points to be discussed at each stage of the disease but did not address the flow of the information to and from the family, which was the MRFM in our model, which could be used for all patients not just for end-of-life care.

There were concerns that the staff and patients may not accept the idea; however, the cooperation during the project from all involved was very impressive. Furthermore, the survey of our staff, patients, and their families revealed a high satisfaction rate with involving the family, and this finding was described by other authors in the past[9,19].

Of course, the societal and organizational culture may have an influence on the success of implementation of this model in other settings, and therefore, the potential variation among communities should be taken into account. Nevertheless, as our model is adaptable according to patients’ needs and circumstances, it will accommodate for variations at individual or societal level.

Implementing family-centered care has many challenges, and therefore, it requires organizational and managerial support with team-coordinated and multilevel approach.[11,14,15,19] The team realized the importance of the process of patients appointing the MRFM themselves and created proper algorithm forms and documents to do so.

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**Figure 2:** Form to identify most responsible family member (MRFM) for patient who is able to make decision (Form A) and the one who cannot make decision (Form B).

| **FORM A: Patient able to take decisions** | **FORM B: Patient is not able to make decision** |
|------------------------------------------|------------------------------------------|
| **1-** After talking to the health care team representative and patient’s approval I am willing to be the liaison between the family and the medical team as well as participate in making decisions related to patient’s care & health which may include but not limited to the following: | **1-** After talking to the health care team representative, I am willing to be the liaison between the family and the medical team as well as participate in making decisions related to patient’s care & health which may include but not limited to the following: |
| • Signing consent forms as per hospital policy | • Signing consent forms as per hospital policy |
| • Update the family on patient’s medical condition after patient’s approval | • Update the family on patient’s medical condition |
| • Attending family conferences to discuss patient’s status & treatment plan | • Attending family conferences to discuss patient’s status & treatment plan |
| • Making health related decisions on behalf of the patient if delegated by patient or patient was unable to | • Making health related decisions on behalf of the patient |
| Be available and easy to reach | Be available and easy to reach |

| **2- Name:** | **2- Name:** |
|----------------|----------------|
| **Relation to patient:** | **Relation to patient:** |
| **Contact information:** | **Contact information:** |
| Mobile 1: Work phone: | Mobile 1: Work phone: |
| Mobile 2: Home Phone: | Mobile 2: Home Phone: |
| Email: | Email: |
| Signature: | Signature: |
| Date: Time: | Date: Time: |

**Figure 2:** Form to identify most responsible family member (MRFM) for patient who is able to make decision (Form A) and the one who cannot make decision (Form B).
Incorporating the model into the electronic health record (EHR) system will likely make its application easier, but it certainly does not mean that there will be no new challenges identified after going live with its implementation. Therefore, monitoring the compliance with the model and addressing any new challenge is a must.

Finally, measuring the impact on other outcomes such as length of stay or readmission or other measures should be planned to assess the long-term impact and wide use of the model.

**Dissemination and Sustainability**

The project was expanded to the ICU and the inpatient ward to further refine the process and tools. After completing the pilot component of the project, the team recommended incorporating the forms into the new EHR system acquired by the hospitals. A process map has been designed, and a plan to introduce the model into the new system is underway.

**Conclusion**

There was a general acceptance of the communication model among patients, their families, and staff with high satisfaction rates. Our goal is to implement the model in the EHR system for sustainability.

The model is adaptable for individual patients and is easy to implement in various settings and health-care sectors.

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**Conflicts of interest**

The authors disclosed no conflicts of interest related to this article.

**References**

1. Institute of Medicine (US) Committee on Quality of Health Care in America. Crossing the quality chasm: A new health system for the 21st century. Washington, DC: National Academy Press; 2001.
2. Scholl I, Zill JM, Härter M, et al. An integrative model of patient-centeredness—A systematic review and concept analysis. *PLoS One* 2014;9:e107828.
3. Luxford K, Safran DG, Delbanco T. Promoting patient-centered care: A qualitative study of facilitators and barriers in healthcare organizations with a reputation for improving the patient experience. *Int J Qual Health Care* 2011;23:510–515.
4. Reed P, Conrad DA, Hernandez SE, et al. Innovation in patient-centered care: Lessons from a qualitative study of innovative health care organizations in Washington state. *BMC Fam Pract* 2012;13:120.
5. Hernandez SE, Conrad DA, Marcus-Smith MS, et al. Patient-centered innovation in health care organizations: A conceptual framework and case study application. *Health Care Manage Rev* 2013;38:166–175.
6. Kuo DZ, Houtrow AJ, Arango P, et al. Family-centered care: Current applications and future directions in pediatric health care. *Matern Child Health J* 2012;16:297–305.
7. Mazor KM, Gaglio B, Nekhlyudov L, et al. Assessing patient-centered communication in cancer care: Stakeholder perspectives. *J Oncol Pract* 2013;9:e186–e193.
8. Nayeri ND, Mohammadi S, Razi SP, et al. Investigating the effects of a family-centered care program on stroke patients’ adherence to their therapeutic regimens. *Contemp Nurse* 2014;47:88–96.
9. Ewart L, Moore J, Gibbs C, et al. Patient- and family-centered care on an acute adult cardiac ward. *Br J Nurs* 2014;23:213–218.
10. Bokhour BG, Fix GM, Mueller NM, et al. How can healthcare organizations implement patient-centered care? Examining a large-scale cultural transformation. *BMC Health Serv Res* 2018;18:168.
11. Easson E, Giacco D, Dirik A, et al. Implementing family involvement in the treatment of patients with psychosis: A systematic review of facilitating and hindering factors. *BMJ Open* 2014;4:e006108.
12. Mazor KM, Beard RL, Alexander GL, et al. Patients’ and family members’ views on patient-centered communication during cancer care. *Psychooncology* 2013;22:2487–2495.
13. Davidson JE, Powers K, Hedayat KM, et al.; American College of Critical Care Medicine Task Force 2004–2005, Society of Critical Care Medicine. Clinical practice guidelines for support of the family in the patient-centered intensive care unit: American College of Critical Care Medicine Task Force 2004–2005. *Crit Care Med* 2007;35:605–622.
14. Haesler E, Bauer M, Nay R. Factors associated with constructive staff-family relationships in the care of older adults in the institutional setting. *Int J Evid Based Healthc* 2006;4:288–336.
15. Coyne I, O’Neill C, Murphy M, et al. What does family-centred care mean to nurses and how do they think it could be enhanced in practice. *J Adv Nurs* 2011;67:2561–2573.
16. Jazieh AR, Volker S, Taher S. Involving the family in patient care: A culturally tailored communication model. *Global J Qual Saf Healthc* 2018. (in press).
17. Workman S. A communication model for encouraging optimal care at the end of life for hospitalized patients. *QJM* 2007;100:791–797.
18. Stone S. A retrospective evaluation of the impact of the Planetree patient-centered model of care on inpatient quality outcomes. *HERD* 2008;1:55–69.
19. Reid Ponte P, Peterson K. A patient- and family-centered care model paves the way for a culture of quality and safety. *Crit Care Nurs Clin North Am* 2008;20:451–464.