A MICROSSTEM ASSESSMENT: COMMUNICATION - THE FOUNDATION FOR
PATIENT SATISFACTION

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A professional paper submitted in partial fulfillment
of the requirements for the degree

of
Masters of Nursing

in
Clinical Nurse Leader

MONTANA STATE UNIVERSITY
Bozeman, Montana

November 2015
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The intent of this project was to focus on improving communication between total joint patients and care team with the aim to improve patient satisfaction. Communication between patient and care team is a large factor that can shape a patient's care experience. A tool to improve communication between patients and their care team was implemented to address expected outcomes and improve patient satisfaction. This tool was a question prompting sheet that was used during the post-operative, inpatient period to help address patient specific questions and concerns, increase and improve communication with the care team and create a higher level of patient satisfaction. The tool created additional opportunities for direct patient communication related to their specific questions and concerns which created the ability to address the individual patient concerns.
INTRODUCTION

In the United States, a surgical procedure such as total knee and total hip arthroplasty is increasingly becoming needed for an aging baby boomer population, currently ages 59-67. Over the next two decades, total knee arthroplasty (TKA) and total hip arthroplasty (THA) are projected to escalate by 600% and 200%, respectively (Lau, Gandhi, Mahomed S., & Mahomed N., 2012, p. 349). Although these procedures have predicable outcomes, Gandhi, Davey and Mahomed (2008) reported that patient discontent in relation to post total joint arthroplasty is anywhere between 8-30%, and hypothesize that this could be even higher because a percentage of patients may not disclose their dissatisfaction with care received during hospitalization.

Total joint patients are among a unique population in healthcare in that a preoperative period exists. Most admissions to the hospital are emergent and unplanned, often the result of an accident or illness. However, total joint replacement is an elective and planned procedure which treats the pain and disability associated with chronic degenerative joint diseases such as arthritis. One might assume that effective treatment of medical problems related to arthritis such as a reduction in pain and improved functional mobility would lead to higher scores in patient satisfaction with these patients, but that is not always the case. As indicated from the research done by Gandhi, Davey and Mahomed (2008), despite good functional and clinical outcomes, patient satisfaction can be low.
It is vital that total joint arthroplasty patients have a high quality of care that can be reflected in their patient satisfaction scores. Patient satisfaction is an important quality indicator, equal to other measures like clinical effectiveness and cost efficiency. Nelson, Batalden and Godfrey (2007) determined that “the highest quality healthcare systems are those not only focused on science and compassion for quality, but the ones that are able to anticipate and provide each patient with their unique wants and needs” (p. 179). The information that is being monitored from healthcare systems in the United States has evolved. “With the effectiveness of medical care being increasingly measured both economically and clinically, patients’ opinions have become increasingly important” (Lau, Gandhi, Mahomed, S., & Mahomed, N., 2012, p. 350). The healthcare industry has become focused on the whole patient experience, not just good outcomes and low readmission rates. Patient satisfaction scores are being considered when determining funding or reimbursement (Lau et al., 2012), making it an even more important focus for each healthcare institution.
BACKGROUND & PURPOSE

Location of Project

Benefis Health Systems is a tertiary 4 healthcare system, located in Great Falls, Montana. Located within the Benefis facility is a 20 bed Orthopedic/Neurology in-patient unit. This unit annually discharges on average 1,814 patients per year, averaging 35 new admissions per week. Four hundred and thirty (430) of these patients were admitted for total joint replacement in 2013. Among the 1,891 patients, it is estimated that 80% are admitted for elective procedures, including total joint replacement. The purpose of the proposed improvement project is to assess gaps within the current level of care and move to improve within those areas to increase patient satisfaction. The focus of the intervention is based on the findings within the 5P’s microsystem assessment, which was conducted to get an overview of the Ortho/Neurology unit and total joint patients. A 5P’s microsystem assessment is utilized to get an overall look at a specific unit within a healthcare system. The microsystem assessment creates an opportunity to look into a specific area and see opportunity for developments that can aide in positive transformation for the area (ASHP Foundation, 2012). This includes purpose, patient, professionals, process and patterns. A root cause analysis proceeded and identified an areas of focus for the intervention. The literature review aided in identifying gaps and creating recommendations based on the area of focus of patient satisfaction.

Team members within this improvement project were physicians, physician assistants, registered nurses, certified nursing assistance, care coordinators, care
navigators and all other team members directly involved in helping with patient care or preparing the patient to safely discharge.
CURRENT PATIENT SATISFACTION SCORES

Although the Orthopedic/Neurology unit has successfully been ranked as the 2nd highest patient satisfaction in the hospital, patient scores have continued in the same range. Benefis Health Systems strives to improve patient satisfaction rates not only because this will encourage patients to seek care at their facility, but also because of their vision to be the best healthcare system in Montana (Benefis Health System, 2013). High patient satisfaction rates also help the hospital remain competitive among other Montana hospitals offering similar services.

The leadership team at Benefis health system have implemented several strategies to enhance patient satisfaction such as utilizing a white board in each patient room to write important information including: next pain medication dose and time it is available, activity status, diet, physical therapy session times, goals for the day and names of staff responsible for the care of the patient that shift. They also engage in hourly rounding, using the 5 P’s (as described above), and before leaving the room, ask the patient if is there anything else that can be done for the patient. They continuously track patient satisfaction data using National Research Corporation (NRC) Picker to evaluate the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) scores. Rolling averages of patient satisfaction for the Orthopedic/Neurology unit at Benefis Health Systems for up to January 2015 NRC scores show many areas are above the benchmark goal averages; however, they have not continually increased along with some scores such as those related to physical comfort (Appendix A).
Benefis Total Joint Program

At Benefis Health Systems, a total joint program has been implemented to improve patient satisfaction, patient outcomes and improve quality of care. Benefis is committed to these improvements by assigning each total joint patient to a nurse navigator who tracks the patient from the scheduling of the surgery to post discharge. A navigator is the patient’s primary contact for any questions or concerns. Patients attend an educational session that provides information about how to prepare for surgery, what to expect at the hospital, as well as what to expect upon discharge and at home. Patients are given a binder which has information regarding pre-operative preparation procedures, maps of the hospital campus showing where to check in, appointment times, checklists and reminders. A care plan and physical therapy (PT) exercise plan are also incorporated in the binder to be used when the patient is in the hospital. The navigator rounds daily on patients to answer any questions and assist in any discharge needs that vary from equipment to facility transfer, if needed. A post discharge follow-up is completed with a phone call, and patients continue to contact the navigator on an as needed basis. Given the large amount of education and information, total joint patients have an opportunity to become well prepared and often verbalize feeling so. Despite this, patient satisfaction for the total joint arthroplasty patients has not improved.

Nursing Activity

A recent survey (Figure 1) was completed during a microsystem assessment to identify the percentage of time the staff spent daily doing the following tasks: report,
direct patient care, phone calls, documentation, completing forms, paging physicians, and interruptions. On average, the nurses felt they spent 19% of their time with direct patient care. This can account for just over 2.28 hours a day. Over one half of their time was spent performing other activities listed. Direct one-on-one time with care team members during rounds averages 10 minutes for a total joint patient.

Figure 1. Inpatient Unit Activity Survey

Concerns within the Current State

The care team including the providers, navigator and nursing staff are working within significant time constraints. Results from the microsystem assessment indicate the nursing staff have very little time for direct patient care and care rounds--and average of 10 minutes per patient. Most patients during this time are tired, without family present, are in pain and groggy as a result of fatigue and pain medication. The limited time
providers and staff have with a patient creates a small window of opportunity for communication. Patient satisfaction scores from the HCAHPS show an area for improvement regarding communication (Appendix A and Appendix B). For the aim of this project, only questions that pertain to topics that have a potential for improvement will be monitored. The top questions showing these concerns are related to patient satisfaction and communication and involve respect for patient preferences, information and education.

These question are presented in the patient satisfaction scores shown in Appendix B:

- How would you rate your hospital stay 0 – 10 (0 being the worst, 10 being the best)
- Did my doctors explain things in a way I could understand?
- Did my nurses explain things in a way I could understand?
- Did my doctors treat me with courtesy and respect?
- Was I discharged with information about my diagnosis?
- Did staff treat me with courtesy and respect?
- Did my nurses listen carefully to me?

Patients are unable to ask and to have all their questions answered within the brief amount of time the care team and patient have together. Even with the added patient interactions associated with care team hourly rounding, pre-op education, and review of the total joint binder, some patients still report they cannot effectively communicate their questions and concerns to members of the care team.
Aim of the Project

Further efforts are needed to improve total joint patient satisfaction, particularly in the areas of communication and attitudes that convey respect for the patient. The process targeted for improvement begins when the patient is scheduled for a total joint replacement and ends when the patient is discharged home from the hospital. It is important to address communication gaps because patient satisfaction ratings are important indicators of the quality of care and have not risen despite previous efforts for improvements.

Specific Aim: Post intervention NRC Picker’s item scores for joint patients will increase by 10% post intervention.
LITERATURE REVIEW

Concept of Patient Satisfaction

Quality Care

Patient satisfaction has become a factor for determining quality of care in the hospital setting. The basis of quality in healthcare are “patient safety, clinical effectiveness and the patient’s experience” (Hamilton, Lane, Gaston, Patton, MacDonald, Simpson & Howie, 2013, p. 5). The patient’s conclusion of their experience is a way to address both strong and weak points within the care process. Overall happiness with an experience is not merely classified by safety and successful outcomes, but by the overall experience from the patient’s viewpoint. Patient satisfaction is more than an opinion; it is a way to measure the quality of care given by the healthcare staff (Lau et al, 2012) and how the patient perceives their care experience. Patient satisfaction in the acute care setting is a primary focus of healthcare facilities to develop and maintain higher standards. Patient satisfaction is also being utilized to identify needed areas of improvement. Not only is patient outcome data such as length of stay, cost, and core measure compliance being monitored, so is patient satisfaction data.

Growing Total Joint Program

Total joint arthroplasty is a common procedure with relatively good and predictable outcomes. Joint arthroplasty is a surgical option for a patient with a degenerative joint that has failed to be treated with alternate or more conservative therapies such as physical therapy, over the counter (OTC) pain medication, prescription
pain medication, injections and arthroscopy. The goal of a total joint program is to enhance the patient experience, increasing satisfaction related to their stay and outcomes. It is anticipated that the patients who have a positive experience will recruit many more patients who chose a specific facility for similar procedures. Poor patient satisfaction can generate many negative outcomes including a decline to seek out further care and poor recommendations about a facility to others (Harris I., Harris A., Naylor, Adie, Mittal & Dao, 2012).

**The “Modern Era” Patient**

One reason for a lower level of patient satisfaction is the change in perception of what is a good or satisfactory experience. “Just as techniques used in total joint arthroplasty have evolved, embracing improvement in fixation techniques and bearing surfaces, the patients for whom these devices are designed have changed as well” (Mason, 2008, p. 146). Healthcare is ever-changing, and along with changes associated with technology, the patient has changed as well. As other areas of healthcare have progressed and changed, concurrently what has worked in the past to satisfy a patient needs to be molded into what works for today’s patient. Mason (2008) discusses the preoperative needs current patients that present for care are demanding such as a quicker recovery, desiring to return to a higher level of sport activity and an earlier discharge from the hospital. Because of this, patients of today who are in need of joint replacement live in a different world and have different expectations than patients needing joint replacement 20 years ago.
Additionally, with more access to information, patients have the ability to educate themselves on the pros and cons of total joint replacement. Issues also arise because of direct to consumer marketing, when patients are provided with non-evidence based ideas. Patients are presented with information regarding a “quick fix”, such as a specific prosthesis guaranteed to improve outcomes, or the company that sells the newest and best prosthesis. Mason (2008) points out that even though the modern patient has access to unlimited sources of data regarding healthcare, the average patient will not be able to decipher what is accurate and will continue to seek treatments that are perceived as quick and easy. This influx of information can directly affect patient satisfaction by creating a perception of what the experience could be like and predispose them with unrealistic expectations.

Factors of Patient Satisfaction

Patient Expectations

It is the care team’s responsibility to have a conversation with patients about their expectations and goals in relation to total joint replacement. Healthcare experts are in a position to be able to mold a patient’s outlook and goals in a constructive manner (Tejada, Escobar, Herrera, Garcia, Aizpuru & Sarasuesta, 2010). Patient education, conversations with the patient and family, giving patients reliable sources of information and presenting them with clear options can all contribute to a healthy perception of total joint surgery and recovery. Providing a total joint patient with realistic expectations will likely contribute to higher patient satisfaction scores. If a patient understands what to
expect, their goals will be more reasonable, making their desired outcomes within reach. “Realistic expectations help patients develop attainable aims about their recovery and the support strategies to achieve them” (Tejada et al., 2010, p. 447). Impractical anticipated outlooks can set a patient up with goals that are unattainable, leaving them displeased. “Patients with unrealistic expectations may become discouraged and fail to reach their maximum potential” (Tejada et al., 2010, p. 447)

Lau et al (2012) found that the principal factor related to unhappiness occurred when patient expectations were not met. Similarly, a focus in managing patient expectations may help lessen the number of discontented patients (Gandhi et al., 2008). Communication between the care team and patient creates a situation where a plan is made that is both recommended by the healthcare professional and patient. It is likely that when a proposal is established that is accepted by both parties, compliance increases, satisfaction increases and patients are more likely to perceive their care and outcomes as acceptable. (Judson, Detsky & Press, 2013).

Psychological Factors

Past outcomes based on satisfaction in relation to total joint arthroplasty have been based on assessments that are measurable by the care providers such as pain level, functional scores, range of motion and postoperative endurance. Little research has been conducted on the psychological aspect of patient satisfaction. It is possible that “patient satisfaction may also be affected by factors that seem unrelated to the surgical intervention itself, such as the patient-surgeon relationship and the process of care, both in hospital and after discharge” (Gandhi et al, 2008). In a study based on physiological
factors and patient satisfaction, Gandhi (2008) et al. concluded that a patient’s mental health status prior to surgery is an important aspect to look at when trying to understand a patient’s level of satisfaction or dissatisfaction after joint replacement surgery.

**Patient vs. Surgeon Satisfaction**

Total joint arthroplasty often improves mobility, decreases pain and increases the patient’s quality of life. However, 18-30% of TKA patients and 7-11% of THA patients reported that they remain unsatisfied with the results of their surgery (Harris et al., 2012). The role of expectations is vital in shaping satisfaction, and there is evidence that before a procedure, a patient may have higher expectations than the surgeon. This situation of unmet expectations that result may clarify the disagreement between patient and surgeon (Harris et al., 2012). If a patient has unrealistic predictions that are not addressed, their perception and expectations of their future care and outcomes may not be reached.

**Preparing Patients**

Many initiatives such as those from the Agency for Healthcare Research and Quality (AHRQ) and the Joint Commission are encouraging patients to communicate with their care team. It is hoped that increased communicate will result in better understanding and higher patient satisfaction. In 2011, AHRQ developed the “Questions Are the Answer” campaign to help encourage patients to be active in their care (AHRQ, 2014). Similarly in 2002, the Joint Commission created Speak Up, which is based on the significance of asking questions and receiving answering during the care process (Judson et al, 2013). These programs focus on encouraging the patient to increase their
communication during the short time they have in face to face opportunities with the care team.

Likewise, it is the care team’s responsibility to take time during a hospital stay to provide education and resources to the patient based on their specific needs and diagnosis. Patients often leave a healthcare facility without information they need regarding their diagnosis such as treatment options, surgical education, contact numbers (Kinnersley, Edwards, Hood, Cadbury, Ryan, Prout, Owen, MacBeth, Butow & Butler, 2009). It is not necessarily an issue of failing to provide a patient with information; it is a problem with providing a patient with the correct amount and type of information. Patient’s comments vary from not having the right information, not having enough information, to feeling apprehensive or incapable of asking the correct questions involving their concerns. (Kinnersley et al, 2009). In a study to determine factors of patient understanding, patients who were identified to not ask questions voiced poor confidence in themselves to ask the right questions or perceived question asking to be an unsuccessful way to get answers (Baker, Crockett, Uus, Bamford & Marteau, 2007). Patients need to be reassured and educated on the importance of asking questions. Past ideas to address this issue include providing education to the care team staff, or provide direct information to the patient to help and encourage them to ask questions. Two ways to educate patients include giving patients something specifically for writing questions on such as a titled sheet of paper and include question prompts and coaching examples of other patients’ questions. (Kinnersley, 2009).
It is recognized in the literature that patient satisfaction is highly linked to achievement of outcomes and either meeting those perceived outcomes or not (Hamilton, Lane, Gaston, Patton, MacDonald, Simpson, & Howie, 2013). In order to come onto the same “page”, it is imperative to have improved communication between the patient and care team. Each conversation with a patient can be an opportunity to provide the patient information on what to expect and will in turn help give the patient realistic expectations and the questions and concerns they may have. This can be done by helping the patient ask questions and by giving them the tools to do so (Judson et al., 2013; Kinnersley, et al., 2007). This will empower the patient to ask the questions that concern them, and create the opportunity for the conversation to happen.

Healthcare initiatives have begun to create methods to aid the patient in starting the communication with healthcare team. For example, The National Patient Safety Foundation has created the “Ask Me 3” initiative. This was developed to help assist patients in asking questions that worry them and was designed to encourage patients to become active members of their healthcare team (National Patient Safety Foundation, 2014). The program encourages patients to ask their healthcare providers three questions (NPSF, 2014):

1. What is my main problem?
2. What do I need to do?
3. Why is it important for me to do this?

By giving patients a generic list of ideas, they can create their own questions based on what they and their families are most concerned about. This eliminates the need
for the healthcare professional to assume or guess which questions a patient may have and will help create questions based on each individual patient’s needs.

Barriers discussed by Judson et al. (2013) include *white coat silence* and time pressures. The healthcare world is difficult for patients to understand and move through (Judson et al., 2013). White coat silence or “a reluctance to vocalize questions” can be a massive contributing factor in relation to communication concerns for the patient and care team relationship. On the care team side, “encouraging patients to ask questions, providing adequate answers, and ensuring comprehension requires time – a fixed resource that is already in short supply” (Judson et al, p. 2325, 2013). Another barrier is time: consult visits in the hospital and office are short and one-on-one time with the care team and patient is limited.

If the care team is unable to answer the patients’ questions or provide them with the correct information, negative consequences may follow. “Providing information is important because it is a determinant of patients’ satisfaction, compliance recall and understanding” (Kinnersley et al., 2009, p.3). Without adequate information that is focused on the specific concerns and needs of the patient, the patient can be a safety risk related to non-compliance due to lack of understanding.
Patient satisfaction is directly impacted by communication and improvement in this area will likely reflect in increased patient satisfaction scores. In the past, communication improvement has been focused on the healthcare provider, but it can also be focused on the patient and encouraging them to ask questions as well. (Judson et al, 2013). As indicated, there are barriers for effective communication that include a lack of time, something that is highly complex to address, and will not be addressed in this project. But, there are also areas in relation to preparing the patient by providing tools to help engage them in conversations with the healthcare team that will likely aid in realistic expectations, proper education and higher patient satisfaction.

Methods

Design Purpose & Overview

The literature review revealed common areas for concern related to patient satisfaction and communication. Such areas include: patient perception regarding outcomes and goals of surgery, lack of time for communication between patient and care team, need for education of staff regarding effective question asking, need for education and coaching for patients to enable question asking, and patient fear of question asking. These topics are the focus of the proposed intervention. To ensure steady and successful change, the PDSA model will be used to develop and implement the intervention.
Plan, Do, Study, Act

Plan, Do, Study, Act or PDSA is a model used to test an implementation and can be used continuously to monitor change and improvements (Nelson, Batalden & Godrey 2007). The benefits of the PDSA action model include providing steps to follow to create controlled change, usefulness for small interventions, and delivering quick results (Nelson et al., 2007). Each step provides a building block for the next step, and ensures uninterrupted flow for the project. The “plan” phase includes establishing what issue is being tested, who is testing it, when it will happen, if any education needs to take place prior to the intervention, what data is used to base the need from, addressing potential obstacles and determining the length of time for the intervention (Nelson et al., 2007). A literature review is an important part of the planning phase. The “do” phase includes the actual implementation and data collection and the “study” phase is when the data is analyzed (Nelson et al., 2007). The final phase, “act”, is deciding if the data from the intervention warrants continuous use, or if further changes need to be explored. The PDSA cycle is designed so that if needed, the cycle could begin again at the “plan” phase to re-address any additional areas of interest (Nelson et al., 2007). An example of the PDSA cycle can be found in Appendix D.

When considering using any plan, such as the PDSA cycle, Nelson et al. (2007) suggest always having an aim statement (or goal) and always creating a measurable outcome to evaluate if the intervention was successful or not. Another suggestion is to designate someone to manage the intervention and provide reminders during the intervention to others involved in the intervention (Nelson et al., 2007).
The specific aim for this project is: to improve total joint patient satisfaction.

Measure 1: 90% of patients will voluntarily participate in the intervention.

Measure 2: Post intervention NRC Picker’s item scores for joint patients will increase by 10% by the end of the 30 day implementation period (February 2015) see Appendix C.

Plan: Instruments for Improved Communication. The intervention for this improvement project was a patient prompting question sheet that was used specifically in the hospital for the total joint patients. The intention of the sheet was to have general question topics that could potentially be applicable to all patient settings. The document was designed to prompt the patient and family to ask questions, and to help them refine their specific questions.

The prompting sheet was a physical document given to the patient upon admission to the room. It was printed on colored paper to stand out and placed on a clipboard with a pen to ensure it could be easily seen and used. This created easy access for both the patient and care team. This also gave patients the ability to write down questions they have throughout the day, instead of relying on recalling them during their time with the care team members. This was designed to be especially helpful to those who are having a hard time formulating their questions, as well as those who are having issues recalling their questions. This tool was used to promote more effective communication between care team and patient, making good use of valuable time the care team had to spend with the patient and family. It could also assist any member of the care team to focus on questions of subjects that the patient and family were most
concerned about. The template for the question prompting tool can be found in Appendix C.

**Plan: Protection of Human Rights.** Patient privacy is a main concern with any project implementation and data collection. The methods for this proposal were submitted to the Institutional Review Board (IRB) for review and approval was obtained prior to initiating the project. The goal of the IRB board is to ensure that any research conducted takes into consideration patient confidentiality and ensures the risk is minimal (United States Department of Health and Human Services, 2012). Also, this approval requires proper collection of data without identifiers of a patient's healthcare information as well as maintaining confidentiality. Patients were identified by name and date of birth when transferring to the Ortho/Neurology unit where the document was included with the welcome letter. Patient identifiers were not used on any data collection. Patients participating in the project were assigned numbers and data collected per patient was entered under the assigned number. Implementation occurred with all total joint patients going through the total joint program, during the implementation period of 30 days.

**Do: Data Tracking.** The first area of data collection was the question prompting sheets. They were collected upon the patient’s discharge and verified as to having no patient identifiers on them. This tool was helpful in establishing if the patient utilized the questions prompting sheets to enhance communication, as well as what types of questions patients and family were asking.
The second form of data collection was a compilation of patient information. This data was used to find trends as to which types of patients were engaging in enhanced communications, and what questions were specific to each group. The demographic information that was compiled and compared were age, sex, and surgical procedure (total knee vs. total hip replacement).

Additional data was collected 2 weeks post intervention and involved patient perceptions of care received and satisfaction. This was done by utilizing questions from the HCAHPS and conducting a survey via telephone. The evaluation of the project focused on comparing pre-intervention baseline patient satisfaction scores obtained through HCAHPS with post-intervention patient satisfaction scores following the implementation of the questions prompting sheets.

The HCAHPS is a standardized survey tool that is used nationwide to gather data on patient responses to previous care. Leadership at CMS have carefully evaluated this tool as a dependable and respectable survey (CMS, 2012). These scores are publically reported, and in the future will be used as justification for reimbursement. Benefis Health Systems currently uses this tool to track patient satisfaction data. This tool is sent to a random sample of patients anywhere from 2 days to 6 weeks post discharge. There are no patient identifiers on the survey, making each response anonymous. Of the 27 questions involved in the survey, the questions that were the focus of this project involved “respect for patient preferences” and “information and education”. These questions directly relate to the open communication between patient and care team, which was the main focus for implementing the question prompting sheet. They represent patient satisfaction in relation
to exceptional communication and successfully answering patient’s questions and concerns. A list of the HCAHPS questions and scores that were updated and monitored post intervention are in Appendix B. The questions listed in Appendix B are the questions the patients were asked 2 weeks post-op. Pending patient acceptance to willingly answer these six questions, this was done during a follow-up phone call. Averages of the HCAHPs item scores were calculated and compared to the item scores that were reported prior to implementation of the project. The care navigator made the follow up phone call. Since the care navigator will already had relationship with the patient, this was a continuum to role of the navigator in the patient’s hospital experience.
RESULTS

Study: Results

The first step to success was to have good participation in the project by setting a goal that ninety percent of patients would use the question prompting sheets. Twenty-three patients were invited to participate in the study: 2 patients refused to participate and 2 other questionnaires lost (patients were discharged over the weekend and the sheets were misplaced) (N=19). Without knowing if the two lost sheets were used or not, the percentage of patients that used the sheets was 82%. (Figure 2).

![Question Prompting Sheets](image)

Figure 2. Question Prompting Sheets

To measure patient satisfaction, a goal was made for the post intervention NRC Picker’s item scores for joint patients to increase by 10% by the end of the 30 day implementation period, February 2015. Nineteen patients agreed to the survey during the
follow up phone call. All items on the HCAHPS demonstrated a 10% improvement or more with the exception of “Did your doctors treat you with courtesy and respect?” This pre-intervention level was already high at 93.8% and continued to improve to 100%, increasing 6.2%. (Figure 3)

![Patient Satisfaction: Select HCAHPS](image)

**Figure 3.** Patient Satisfaction: Select HCAHPS

Questions asked by patients using the question prompting sheets were asked in 7 of the 8 categories, with the highest amount of questions coming from the following categories: Home (Will I need help at home? Do I need home health? What should I monitor at home?), Physical Therapy (How often will I need therapy? What are my expected outcomes/goals?), and Equipment (Do I need equipment for walking? Do I need
equipment to help bathing?). A total of 52 questions were asked, averaging to 2.7 questions per patient (19 total patients in the intervention). Questions were asked from patients in all age groups, and from both THR and TKR patients. (See Figure 4).

Figure 4. Question Prompting Sheets Breakdown
DISCUSSION

Act: Implications for Practice

Eighty two percent (82%) of patients were interested in using the question prompting sheet as a tool. This intervention could be distributed to all patients regardless of diagnosis to help aide them and the care team in effective communication regarding their outcomes, questions, and concerns and create a mutual understanding of goals and expectations, all of which could be an important factor of patient satisfaction.

Two to three additional questions per patient created at least two more opportunities for communication to talk about the patient’s questions or concerns. Each question asked and answered created potential for increased patient satisfaction in a variety ways including mutual understanding of expectations, increased awareness, and increased understanding. Some examples of questions asked by patients using the questions prompting sheet were “How do I arrange physical therapy, if necessary?” “What are my restrictions?” “When will I get my walker?” “Will I get supplies from the hospital for the first few days?” “Why can’t I stay in the hospital longer because I have no one at home to help me move around and get me stuff?” “How long should I expect swelling?” “When can I take a bath?” “Will you show my wife how to do dressing changes?” “Can I use crutches or do I have to use a walker?” Implementation of the questions prompting sheet throughout the postoperative period creates the opportunity for the conversations that can identify concerns that the care team can address prior to a patient becoming disappointed.
Responses were returned from a variety of age groups indicating that age is not a determinant from a patient wanting to use a tool for communication. This further supports the idea that the question prompting tool could be used in different services lines for patients of all ages.

It is uncertain what the total joint patient score was prior to the intervention, since that data could not be extracted from the entire patient population from Ortho/Neuro. Although, following this intervention, the patient satisfaction was increased significantly, as discussed previously in Figure 2. By distributing the question sheet to all patients, it could create an opportunity to increase patient satisfaction scores for a whole unit.

Limitations

Previous HCAHPS scores are a random sample of all Ortho/Neuro patients. It is anonymous, and the surveys cannot be tracked to a specific patient, making anyone unable to see which responses are from what types of patients. There are no identifiers to the responses, not even a diagnosis code. Therefore, the representation of prior intervention scores were not only total joint patients, but a random sample of patients on the Ortho/Neuro inpatient unit. The post interventions scores were asked and recorded for only joint patients via a follow up phone call 2 weeks after discharge. Because of this, two separate groups of patient scores are being compared. The increase may not be a true indication of how positive outcome of the questions prompting survey was.

Staff could have been aware of the improvement project and been particularly conscious of interactions with patients. The care these patients may have received could
have been different when compared to the pre-intervention period and therefore created some bias that may have skewed the post-operative satisfaction data. The post-operative survey was conducted via telephone with the navigator and patient; this may have created responses that were not as non-biased as compared to an anonymous survey. This situation of data collection could have created higher scores in the post-operative total joint patients who received the intervention and follow-up survey by creating a situation in which they may not have answered honestly.

In order to implement the project, purchased items included: colored paper, pens and clip boards. Cost (approximately $40.00) is important to consider on a large scale if this intervention was to be used for a larger population.

The questions prompting sheets were made using English and 12pt font. Any patient whom does not speak English as their primary language, patients who have diminished used of their hands or who may have poor sight, would not be able to utilize the question sheets as well as other patients may be able to given the language barrier, font size, and need for writing.

Recommendations

The Clinical Nurse Leader (CNL) has been developed to address the many changes and concerns within the healthcare microsystems. The CNL works within a microsystem and is responsible for outcomes for a specific group of clients within a unit or setting (AACN, 2007). They are often the connection between leadership and staff and are able to implement interventions as part of an improvement project or goal, and record findings and report back to a leadership team (Monaghan, 2011). As a member of the
care team, CNLs work amid inter-disciplinary lines to introduce EBP, evaluate progress and in turn become a co-coordinator or care (Monaghan, 2011). The Veterans Health Administration (VHA) energetically embraced the role of the CNL in their facilities and has tracked data to show the success of the role for their health systems (Monaghan, 2011). Successes recorded are numerous including higher nursing hours per patient per day, decrease one on one time for patients with dementia, decreased patient cancellations for planned procedures, increase in discharge teaching, and a decrease in ventilator acquired pneumonia (Monaghan, p.---, 2011). Because of the positive impact of the CNL role, the VHA has assured to employ CNLs in each of their facilities by 2016 (Monaghan, 2011). The CNL role can be linked to many patient and facility successes and is focused on the improvement process as a whole, with a focus on the patient. Patient satisfaction is one of many areas that could be address in a highly effective and efficient way by the CNL.

Further research interested in patient satisfaction should be established. Not only has it proven to be a multi-factorial issue, it has recently been raised as a major concern of medical facilities in terms of reimbursement and funding.
REFERENCES CITED


Kinnersley, Edwards, Hood, Cadbury, Ryan, Prout, Owen, MacBeth, Butow & Butler. (2007). Interventions before consultations for helping patients address their information needs, *Cochrane Database of Systematic Reviews, (3)*, pp. 1-82


APPENDIX A

PATIENT SATISFACTION QUESTIONS
## Catalyst Questions by Units - Feb 2014 to Feb 2015

<table>
<thead>
<tr>
<th>Question</th>
<th>NRC Average</th>
<th>Ortho Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did everything to help your pain</td>
<td>79.3</td>
<td>60.1</td>
</tr>
<tr>
<td>Drs explained things understandably</td>
<td>75.6</td>
<td>76.9</td>
</tr>
<tr>
<td>Drs listened carefully to you</td>
<td>75.0</td>
<td>61.0</td>
</tr>
<tr>
<td>Got help as soon as verified</td>
<td>82.0</td>
<td>62.2</td>
</tr>
<tr>
<td>Help going to bathroom as soon as wanted</td>
<td>59.6</td>
<td>68.6</td>
</tr>
<tr>
<td>Nurses explained things understandably</td>
<td>74.8</td>
<td>72.9</td>
</tr>
<tr>
<td>Nurses listened carefully to you</td>
<td>75.7</td>
<td>72.8</td>
</tr>
<tr>
<td>Pain well controlled during stay</td>
<td>51.1</td>
<td>61.0</td>
</tr>
<tr>
<td>Quiet around room at night</td>
<td>59.2</td>
<td>61.4</td>
</tr>
<tr>
<td>Room hospital</td>
<td>71.6</td>
<td>70.6</td>
</tr>
<tr>
<td>Received info re symptoms to look for</td>
<td>50.0</td>
<td>91.2</td>
</tr>
<tr>
<td>Room kept clean during stay</td>
<td>72.5</td>
<td>76.6</td>
</tr>
<tr>
<td>Staff described med side effects</td>
<td>50.0</td>
<td>61.9</td>
</tr>
<tr>
<td>Talked about how you would need</td>
<td>84.6</td>
<td>80.7</td>
</tr>
<tr>
<td>Told what medicine was for</td>
<td>77.6</td>
<td>62.5</td>
</tr>
<tr>
<td>Treated with courtesy/respect by Drs</td>
<td>80.5</td>
<td>66.6</td>
</tr>
<tr>
<td>Treated with courtesy/respect by Nurse</td>
<td>86.5</td>
<td>83.3</td>
</tr>
<tr>
<td>Would recommend hospital to family</td>
<td>74.3</td>
<td>63.5</td>
</tr>
<tr>
<td>IP-A: Care coordinator provided needed home care instructions</td>
<td></td>
<td>61.3</td>
</tr>
<tr>
<td>IP-A, DS: Excellent freshness/appearance</td>
<td>62.2</td>
<td>66.2</td>
</tr>
<tr>
<td>IP-A, DS: Right temperature</td>
<td>59.1</td>
<td>60.6</td>
</tr>
<tr>
<td>IP-A, DS: Staff courteously/respect</td>
<td>87.2</td>
<td>86.7</td>
</tr>
<tr>
<td>IP-A, GAN: Doctors washed/deseinanced hands</td>
<td>73.6</td>
<td>70.0</td>
</tr>
</tbody>
</table>

**Legend:**
- Green: score is equal to or greater than the NRC Average
- Yellow: score is less than the NRC Average
- Warning: n is below 100
APPENDIX B

FOCUS QUESTIONS
### Catalyst Questions by Units - Jan 2015 to Feb 2015

<table>
<thead>
<tr>
<th>Question</th>
<th>BIC Average</th>
<th>Ortho Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICAHIPS: Drs explained things understandably</td>
<td>75.6</td>
<td>65.5</td>
</tr>
<tr>
<td>ICAHIPS: Drs listened carefully to you</td>
<td>75.6</td>
<td>70.0</td>
</tr>
<tr>
<td>ICAHIPS: Nurses explained things understandably</td>
<td>74.8</td>
<td>68.3</td>
</tr>
<tr>
<td>ICAHIPS: Nurses listened carefully to you</td>
<td>75.7</td>
<td>68.8</td>
</tr>
<tr>
<td>ICAHIPS: Rate hospital</td>
<td>71.6</td>
<td>66.7</td>
</tr>
<tr>
<td>ICAHIPS: Treated w/courtesy/respect by Drs</td>
<td>86.5</td>
<td>93.3</td>
</tr>
<tr>
<td>ICAHIPS: Treated w/courtesy/respect by Nurses</td>
<td>85.5</td>
<td>70.1</td>
</tr>
</tbody>
</table>

- **Green**: score is equal to or greater than the NRC Average
- **Yellow**: score is less than the NRC Average
- **Red**: sample size is under 50

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APPENDIX C

QUESTION PROMPTING SHEET
~ WELCOME ~

To increase and improve team communication, we encourage you and your family to write down any questions you may have throughout the day.

Many patients have questions about the following:

Hospital Stay (How long will I be here? When would be the best time for my family to come visit?)

Home (Will I need help at home? Do I need home health? What are important things to monitor at home?)

Physical Therapy (How often will I get therapy? What are my goals?)

Equipment (Do I need any equipment for walking? Do I need any equipment to help with bathing?)

Dressing Changes (Am I able to do this correctly by myself? How long do I need to do these? Where do I get supplies?)

New Medications (Will I have any new medications? How long will I be on new medication?)

Restrictions (Is there anything I am not supposed to do? How long until I am able to walk, run, lift, etc.?)

Other Questions

Thank you for being an active part of your care!
APPENDIX D

PLAN, DO, STUDY, ACT MODEL
(The Scottish Primary Care Initiative, 2010).