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Preoperative Education: A Patient-Centered Care Approach

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Clinical Leadership Theme

The focus of this project relates to the Clinical Leadership Theme of *Clinical Outcomes Management.* The CNL Role Function is *Outcomes Manager*. This project aims to improve the quality and delivery of preoperative education to the Arabic speaking patient population undergoing elective joint replacement surgery at Sharp Healthcare's four acute care hospitals in San Diego, California. The process begins with assessing and comparing the volumes and patient outcomes of the Arabic speaking major joint patient population with total volumes and patient outcomes of the major joint patient population served by Sharp Healthcare. The process ends with development and implementation of a preoperative joint replacement patient education video in the Arabic language. By working on this project, we expect that 80% of the Arabic speaking patients scheduled for elective major joint replacement procedures will meet criteria to discharge in two days or less to a safe home environment with a support system in place, while avoiding hospital readmissions within 30 days of discharge. It is important to work on this now because the Arabic speaking major joint replacement patient population is growing rapidly in San Diego County, and the current process for providing preoperative education to this population is ineffective and costly (Unites States Census Bureau, 2015). As a Center of Excellence in hip and knee replacement surgery, The Joint Commission has mandated a target for discharging 80% of patients undergoing hip and knee replacement surgery in two days or less to the home environment with a support system to meet home care needs.

Statement of the Problem

Educating patients preoperatively and prior to discharge home from the hospital promotes self-care, reduces hospital length of stay, readmissions, and assists patients in the identification of problems early, increasing the chances for intervention and improved outcomes (JBJS, 2012). Poor adherence to home care instructions can lead to post-operative complications and re-

hospitalizations (JBJS, 2012). One of largest barriers to providing effective preoperative education to this institution's Arabic speaking patient population undergoing major joint replacement surgery is the current process of using a third party interpreter to simultaneously translate the 90 minute joint replacement preoperative education presentation from English into Arabic, provided during a one to one education session with the patient. The time required for translation triples the length of the time necessary to provide the same quality of education provided to English speaking patients, which results in the delivery of abbreviated education due to time constraints and exhaustion by both the patient and the educator. Numerous questions by the patient to clarify information interrupts the flow of the presentation, resulting in fragmented education. All written materials providing major joint surgery education have been published in the English language, leaving Arabic speaking patients without educational materials for reference throughout the continuum of care.

The purpose of this project is to address and correct the disparity of access to information between English speaking patients and Arabic speaking patients. Empowering the institution's Arabic speaking patient population with the knowledge necessary for actively partnering in their healthcare and rehabilitation, meeting goals to safely discharge home in two days or less, preparing their homes to create a safe discharge environment, and creating a support system for home care needs will decrease risk for hospital acquired complications, reduce hospital readmissions, and optimize surgical outcomes.

Project Overview

The site for this project is Sharp Healthcare, an institution with four acute care hospitals which have had 15 consecutive years of market share growth, and together own 32.09% of the joint replacement market share (Appendix K) in San Diego, California (OSHPD, 2013). It is

currently estimated that there are 50,000 to 60,000 Arabic speaking individuals residing in San Diego County (Arab American Institute Foundation, 2012). Five of the institution's affiliated orthopedic surgeons are serving San Diego's Arabic speaking patient population, and are scheduling these patients for elective major joint replacement procedures at three out of four of the institution's acute care hospitals. These three acute care hospitals within the organization have been designated by The Joint Commission as Centers of Excellence in hip and knee replacement surgery. This designation is a result of the institution's advanced orthopedic program which employs a patient focused process of coordinating care for major joint replacement patients. All orthopedic practices and protocols are evidence based, are the framework of the program, support the orthopedic clinical pathways, and have produced excellent patient outcomes.

The microsystem of focus for this project is the institution's orthopedic service line and the adult and geriatric major joint patient population it serves. One of the key components of the service line's orthopedic program is the mandatory preoperative joint replacement educational class. All patients scheduled for major joint replacement surgery attend the group educational class two weeks prior to their scheduled surgery. During this class, patients and their care partners receive all education related to their surgical preparation, admission, recovery, pain management, mobility pathway, discharge and home care needs. By initiating the discharge planning two weeks prior to surgery, patients have time to modify their living spaces, creating a safe discharge environment, assemble a support system for home care needs, and psychologically prepare to discharge home in two days or less. Discharging patients in two days or less following joint replacement surgery is a target length of stay that was set by The Joint

Commission Surveyor during the institution's The Joint Commission-Disease Specific Care (TJC-DSC) recertification survey on June 1, 2015.

The preoperative group educational class is coordinated and provided by the orthopedic program manager and senior orthopedic specialists who maintain the role of lateral integrator, coordinating care for orthopedic patients across the continuum. The class is held on a weekly basis at each of the institution's acute care hospitals, and on average is attended by twenty patients who are accompanied by their designated care partner. The educational lectures are presented by the multidisciplinary team, and the class is 90 minutes in length. The education is delivered in the English language and a PowerPoint presentation is used to guide the lecture.

On a weekly basis, a minimum of one Arabic speaking patient is scheduled to attend the preoperative educational class in preparation for major joint surgery. In an effort to ensure the quality of education received by all patients attending the group educational session, talking and interpreting is not permitted, as it is distracting during the presentation and makes learning difficult for the other patients in attendance. For this reason, the current process for providing education to the Arabic speaking major joint patient population is via a one to one educational session provided by the orthopedic program manager or senior orthopedic specialist, using a third party interpreter.

The specific aim of this project is to increase the percentage of the Arabic speaking patient population meeting criteria to discharge to a safe home environment with a support system in place for home care needs in two days or less by July 1, 2016. The specific aim of this project will be the outcome of the global aim, which is to create a high quality preoperative major joint patient education presentation in the Arabic language that is delivered in a cost effective, timely manner. Education of a patient regarding risk reduction for potential post-operative

complications as well as their postoperative home care requirements is a vital component to improving patient outcomes (JBJS, 2012). Educating patients preoperatively and prior to discharge home from the hospital promotes self-care, reduces readmissions, and assists them in the identification of problems early, increasing the chances for intervention and improved outcomes (JBJS, 2012). Poor adherence to home care instructions can lead to post-operative complications and re-hospitalization. According to estimates, 54% of readmissions may be preventable, and inadequate home care education or lack of patient follow up is a common factor in readmission (JBJS, 2012). Lack of compliance with prescribed medications, VTE prophylaxis, wound care instructions, mobility goals and delays in seeking medical attention are some of the primary reasons for re-hospitalization (Centers for Medicare and Medicaid Services, 2015). Section 3025 of the Affordable Care Act added section 1886(q) to the Social Security Act establishing the Hospital Readmission Reduction Program, which requires CMS to reduce payments to IPPS hospitals with excess readmissions, effective for discharges beginning on October 1, 2012 (Centers for Medicare and Medicaid Services, 2015).

Rationale

To determine the need for this project, a root cause analysis was performed (Appendix A). A stakeholder analysis (Appendix E) was performed to identify the individuals who will impact project development and who will be affected by the proposed plan. A SWOT Analysis (Appendix D) was performed to guide the team in project development and identify internal and external factors impacting success. The need for this project was based on the data analyzed by the orthopedic service line during a microsystem assessment (Appendix C). The data analyzed included the Arabic speaking major joint patient population served by Sharp Healthcare, the number of affiliated orthopedic surgeons with Arabic speaking patient populations, patient

volume, time associated with current process for providing preoperative education, costs associated with education provided by nurse educator and third party interpreter, hospital length of stay, and documented reasons for deviation from the major joint mobility pathway in the EMR by discharge planners.

Data supporting the need for this project was abstracted by the data analyst from the Sharp Healthcare orthopedic registry, Merlin database, and the Cerner EHR system. The parameters set for abstracting the data from Merlin and Cerner included; procedure dates falling between July 1, 2014 through June 30, 2015, ICD-9 Codes 81.51, 81.53, 81.54, 81.55, facility, and language. This institution's outcome data demonstrates a strong correlation between attendance at the major joint preoperative patient educational class attended by English and Spanish speaking patients and adherence to the major joint mobility pathway, reduced hospital length of stay and home readiness for discharge (Sharp Healthcare Orthopedic Registry, 2015)

To address the barriers to providing effective preoperative education to our Arabic speaking major joint patient population, a root cause analysis was performed (Appendix A). The institution's orthopedic program manager and senior orthopedic specialists providing preoperative patient education were surveyed and patient outcome data was reviewed. The data compiled revealed that 70% of the Arabic speaking major joint patient population not receiving the preoperative educational lecture and written preoperative education in their primary language, did not prepare their homes for safe discharge, did not develop a support system for post discharge home care needs, did not adhere to the major joint mobility pathway, nor meet the target goal set by The Joint Commission for discharging to home in two days or less.

A review of the surveys (Appendix H) and process map (Appendix B) demonstrated that the current process for providing preoperative education to Arabic speaking patients via a one to

one educational session using a third party interpreter led to a fragmented, abbreviated, costly, and time consuming form of the education provided to English speaking patients. The root cause analysis and nursing surveys performed revealed numerous issues contributing to ineffective communication and education using a third party interpreter for translation. For purposes of clear and accurate interpretation, education is being delivered in short, single concept sentences. Delivery of education using this method often results in a question asked by the patient, which is then interpreted to the educator, who then provides a response, which is then interpreted to the patient, which then often prompts another question. This cycle repeats itself throughout the one to one educational session, causing derailment of the educational lecture and results in delivery of low quality, fragmented education.

The length of time associated with education via a third party interpreter results in exhaustion by the patients who are suffering from painful osteoarthritis and have difficulty sitting for long periods of time. The nursing surveys revealed that the current process for delivering one to one preoperative education to Arabic speaking patients is a three hour session. The patients forced to sit for the lengthy educational setting report increased pain in the arthritic joint and become frustrated and distracted, resulting in requests to leave before all education can be delivered. This results in the delivery of abbreviated education in an attempt to meet the patients' needs for pain management and relief.

The root cause analysis (Appendix A) also revealed that the PowerPoint used by the educator to guide the education is in English, so learning does not occur visually, and Arabic speaking patients are not provided with written educational materials to reinforce education throughout the continuum as are the English speaking patients. In some instances, third party interpretation is provided and arranged by the payer. The nursing audits revealed that Arabic

interpreters arranged by the patients' payers missed the educational appointments 100% of the time, resulting in cancelled educational sessions altogether.

Every unit in each of the four acute care hospitals has a three way interpreting phone. The nursing surveys revealed that the interpreting phones are usually available for use in the one to one educational setting, but not 100% of the time. The interpreting phones are reserved by patients admitted to the units; therefore, if the phones are being utilized for non-English speaking patients on the unit, the one to one educational session must be conducted by calling the contracted interpreting service, and putting the interpreter on speaker phone. This method has been reported by the nurse educators as very ineffective, as the patients complain that they cannot adequately hear the interpreter.

A projected cost analysis was conducted by the institution's orthopedic service line to compare differences between time and costs associated with the current preoperative educational process and the project's proposed process (Appendix F).

The current process for conducting the weekly group educational session in English is a 90 minute lecture provided to 20 patients and their accompanying care partners. Based on the current salaries of the orthopedic program manager and senior orthopedic specialists providing the education, the cost associated with providing preoperative education to a group of 20 patients is $75.00. Total cost divided by the number of patients attending the class is the equivalent to providing education at $3.75 per patient.

The current process for providing preoperative education to Arabic speaking major joint replacement patients requires a three hour one to one educational session provided by the orthopedic program manager using a third party interpreter. The cost for the orthopedic program

manager to provide a three hour educational session totals $150.00. The cost to the organization for use of the contracted third party interpreting service is $84.00 per hour, multiplied by three hours which totals $252.00. In summary, the overall total cost for the organization to provide a one to one preoperative educational session to one Arabic speaking patient on a weekly basis is $402.00. Providing education using this process incurs additional costs of $398.25 per patient when compared to the costs associated with providing the weekly group preoperative educational session.

In creating a PowerPoint with voiceover in the Arabic language, Arabic speaking patients will attend the group educational session and will view the PowerPoint with voiceover on a laptop provided with earbuds while the English version presentation is provided to the group. Interpreting services using the three way interpreting phone will be used only for introductive purposes and closing communications. Time associated with this use of the contracted interpreting company will total ten minutes at $84.00 per hour, totaling $14.00. Total costs associated with providing education to Arabic speaking patients using this process will amount to $17.75 per patient. Implementation of this project will result in a cost savings to the organization of $384.25 per patient each week, which will be an annual cost savings to the organization of $19,981.

The payer sources for the majority of this institution's Arabic speaking major joint patient population is Medicare or Medi-cal Molina. Hospital reimbursement for both hip and knee replacement surgery by Medi-cal Molina is $1430 per hospital day, therefore the longer the length of stay, the greater the financial loss to the institution, as this dollar amount does not cover daily charges (Sharp Healthcare Orthopedic Registry, 2015). Hospital reimbursement by Medicare is a flat fee, regardless of hospital length of stay. Reimbursement by Medicare for a

total knee replacement procedure is $14,898.67 and $14,709.23 for a total hip replacement procedure (Sharp Healthcare Orthopedic Registry, 2015). Medicare's flat fee reimbursement program is incentive for healthcare institutions to achieve earlier discharges (Culler SD et al, 2015).

Methodology

This project will be implemented using a team approach. As the orthopedic program manager, I will champion this project and the system vice president of Ortho/Neuro Services will sponsor this project. The team will include the system senior orthopedic specialists, the orthopedic service line data abstractors, and the senior financial analyst. Ad Hoc members will include the senior consultant for contract services and the manager of workforce support. The objective of the project is to implement a patient-centered care approach to providing cost effective, quality preoperative education to the institution's Arabic speaking major joint patient population. The specific change to be tested is the impact of cost effective, timely, quality, patient-centered preoperative education on orthopedic patient outcomes.

The change theory guiding this project is John Kotter's 8 Step Change Model, a powerful tool for successfully implementing change (Kotter, 2012). The 8 steps for leading change using Kotter's model include;

1. Creating urgency
2. Forming a powerful coalition
3. Creating a vision for change
4. Communicating the vision
5. Removing obstacles

6. Creating short term wins
7. Building on the change
8. Anchoring the change in corporate culture (Kotter, 2012).

The success of developing an Arabic version of the institution's preoperative patient educational presentation will heavily rely on following Kotter's 8 steps to creating change. Creating a sense of urgency and need for this project will create motivation among the team to take initiative (Kotter, 2012). Forming a coalition will create a team approach. Creating a vision for change will align the team goals, and frequently communicating the vision will create momentum. Removing obstacles and barriers will expedite execution of the vision, and creating short-term wins will create a sense of victory and further motivation. Building on the change refers to continuous improvement which will be instrumental in implementation of a high quality product which will then be anchored into the culture and become the new standard (Kotter, 2012). Without knowledge of this change model, this project would be at risk for failing, or at best, would lose its momentum, its focus, and possibly derail from its projected timeline. Successful implementation of this project is important as it will permanently change and advance the healthcare practice for and health outcomes of our community's Arabic speaking patient population.

The projected implementation of the Arabic PowerPoint with voiceover preoperative educational presentation is set for January 1, 2016 (Appendix G). Once the project has been implemented, the new process will be trialed system wide at the weekly preoperative group educational session. The initial three month trial will begin January 1, 2016 through March 31, 2016. On April 1, 2016, post-intervention nurse educator surveys (Appendix I) will be

conducted by the institution's orthopedic program manager to identify the successes, the failures and the areas for opportunity with implementation of the new process, as well as a cost analysis of the new process for providing preoperative patient education to Arabic speaking patient population. Patient outcome data will be collected concurrently and retrospectively by the orthopedic service line data abstractor beginning April 1, 2016 through June 30, 2016 and will include;

1. ICD-9 Codes: 81.51, 81.53, 81.54, 81.55
2. Discharge date: April 1, 2016 to June 30, 2016
3. Facility: All 4 acute care hospitals in system
4. Language: Arabic or Chaldean
5. Hospital length of stay
6. Mobility measures (daily mobility pathway goals) documented in the Major Joint Process Outcomes note
7. Documented reason for admission past third midnight
8. Discharge destination

The predicted outcome of this project is implementation of a high quality educational presentation delivered to the institution's Arabic speaking orthopedic patient population and its positive impact on hospital length of stay, and readiness for discharge to a safe home environment with a support system for home care needs. Due to the complexity of translating patient education from English into the Arabic language, as well as the costs associated, there is probable chance that the product will not be completed in time to go live on January 1, 2016.

The largest obstacle interfering with beginning the translation process is the cost associated with using the institution's contracted medically qualified interpreting service. The cost for written translation is .20 cents per word. This is costly when considering that the PowerPoint is 28 pages in length. The PowerPoint slides, as well as the narrative for the voiceover on each slide must also be translated in addition to the time spent narrating the mp4 file presentation in Arabic. To cut these costs, the team has made the decision to recruit one of the institution's Arabic speaking healthcare providers. This individual is a pharmacist at one of the institution's acute care hospitals and shares the team's goal of improving the care delivered to Arabic speaking patients and will narrate the mp4 PowerPoint with voice over using the translated narration. This process will result in a cost savings to the organization, but may delay the target go live date of the project due to conflicting work schedules with the upcoming holidays.

Predicted results will be compared to the goals set on the project timeline, and will be compared against patient outcome data reflected on the monthly orthopedic dashboard between the dates of April 1, 2016 and June 30, 2016. A cost analysis of the new patient education process will be performed to determine the cost savings achieved by implementing this project.

Data Source/Literature Review

The articles presented in this literature review describe that minority populations will become the majority by 2042, indicating that professional nurses must learn to implement culturally competent patient-centered nursing care, and that providing preoperative education will improve outcomes, decrease hospital length of stay, decrease costs, and reduce readmissions. A search was conducted in the CINAHL database using the PICO search strategy of *Arabic speaking major joint patient population, effective patient education, linguistic barriers,*

and, *decreased hospital length of stay.* Ten articles published between 2012 and 2015 were identified as relevant to the essay and selected for review.

Darnell and Hickson (2014) explain that the US Census projects that the minority populations will become the majority by 2042; therefore professional nurses must provide culturally competent care in multiple settings that will translate into effective outcomes. The authors assert that patient-centered care is successful when both the nurse and the patient mutually agree to health care needs, knowledge, and experiences. The authors further argue that the education department within the healthcare institution needs to develop and integrate cultural diversity awareness programs in order for staff to recognize and demonstrate effective cross-cultural care, and that being a culturally diverse health care provider promotes patient satisfaction and improves health outcomes. By providing visual, written and audible preoperative patient education in the Arabic language, the institution will achieve patient-centered care delivery, demonstrate cultural competence, and improve patient satisfaction and health outcomes.

Panteli, Habeeb, McRoberts, and Portuous (2012) assert that one of the factors found to have a statistically significant effect on increasing hospital length of stay in the total hip arthroplasty patient population was lack of attendance at the pre-admission joint replacement group education session. A quantitative research study was performed. Daily data was collected prospectively in 100 consecutive unselected primary cemented total hip arthroplasty patients by an independent observer. Reasons for delays in discharge and variation from the patient pathway were identified and addressed. The study suggests that managing patient expectations and better preparation of the patients for surgery is an important factor in reducing length of stay which was illustrated by the fact that nonattendance at a patient education joint replacement group was

associated with an increased length of stay. By creating an Arabic version PowerPoint with voiceover, the institution's Arabic speaking major joint patient population will attend the group educational setting and will receive the same quality of visual, written and audible preoperative education as provided to English speaking patients, allowing for better preparation for surgery and decreased hospital length of stay.

Halawi, Vovos, Green, Wellman, Attarian, and Bolognesi (2014) argue that early prediction of hospital length of stay in the total knee arthroplasty patient population will help manage patient expectations and has implications on healthcare costs. A quantitative study was performed, and the primary measure was length of stay, defined as the number of nights from admission to discharge. All patients admitted to the institution between January 1, 2012 and December 31, 2012 with CPT code 27447 (total knee arthroplasty) as the primary procedure were included. The authors assert that factors significantly associated with longer length of stay include lack of caregiver assistance at home and patient expectation of discharge destination. The study further argues that by 2030, the number of primary TKA procedures in the United States is estimated to increase by nearly seven-fold to 3.48 million procedures. In contrast, the number of hospital beds nationwide has steadily decreased since 1975. This demand-supply mismatch in total joint hospital beds combined with nursing shortages implores the need for early and accurate predication of hospital length of stay to ensure efficient and cost-effective provision of health services. Lastly, the authors explain that Medicare's fixed payment system to hospitals based on diagnosis related groups is an incentive to decrease hospital length of stay. The longer patients stay, the more money hospitals lose. Implementing this project will empower the institution's Arabic speaking patient population with the knowledge and communicate the expectation of the patient's mobility and clinical pathway, expected two day

length of stay, and that development of a support system with caregiver assistance at home is part of the admission criteria for proceeding with joint replacement surgery at this institution. Managing patients' expectations prior to admission contribute to shorter hospital lengths of stay and the associated savings in healthcare costs.

Tzeng and Yin (2012) argue that risk factors for inpatient falls include impaired physical functioning, toileting and elimination needs, medication usage, desire for autonomy with mobility, and older age. The authors further assert that a fall may lead to a poorer recovery due to increased fear of falling again, as 30% of patients experience minor injuries and 5% have major injuries. This was a retrospective research design conducted in four acute care inpatient units. This research used the archived fall incident reports over a three year period and included 547 fall incidents between July 1, 2005 and June 30, 2008. The authors assert that evidence based intervention practices must be implemented to prevent patient falls and reduce fall related injuries. Implementation of this project will empower the Arabic speaking major joint patient population with the education provided in the preoperative educational class about their high risk for falls in the hospital, outcomes related to inpatient falls, and explanation of their fall precaution protocol during admission. Preventing inpatient falls will promote shorter hospital lengths of stay and improve patient outcomes.

Edwards, Levine, Cullinan, Newbern, and Barnes (2015) argue that reducing the hospital length of stay and discharging patients to home have been shown to decrease readmissions, improve outcomes, and decrease healthcare costs. This study population comprised of all CMS patients that underwent primary total joint arthroplasty at the institution between 2009 and 2014 and included 1874 patients. The authors assert that preoperative education related to surgery preparation, inpatient expectations, and expectation of a discharge to home with a caregiver

reduce readmissions, reduce costs, and improve patient outcomes. The preoperative education includes surgery preparation, inpatient expectations and expectation of a discharge to home with a caregiver. Providing this education to Arabic speaking patients in their primary language prior to admission will empower them with the knowledge to plan appropriately for a two day hospital length of stay, and to develop a support system for home care needs. Beginning the discharge process prior to admission will allow patients to create a safe discharge environment with a support system which will promote home safety, reduce readmissions, decrease healthcare costs and improve patient outcomes.

Bini and Inacio (2015) prove that a two day hospital length of stay following total knee arthroplasty is not inferior to a three day hospital stay with respect to the risk of a 30 day readmission. The study retrospectively compared the adjusted risk of 30 day readmission following total knee arthroplasty between patients with a 2, 3, and 4 day length of stay using current postoperative protocols. A total of 23,655 consecutive primary knee arthroplasty procedures performed between January 1, 2009 and December 31, 2011 at a large, integrated health care system were studied retrospectively with the main outcome measurement as a 30 day readmission and found no impact of a shortened hospital length of stay. Implementation of this project will promote a two day hospital length of stay and prepare Arabic speaking major joint patients for a safe hospital discharge on postoperative day two without increasing the risk for readmission within 30 days.

The literature reviewed in this essay suggests that this institution must make improvements to its current process for delivering preoperative joint replacement patient education, which is consistent with the aim of this project. According to the literature, minority populations will become the majority by 2042 and institutions must deliver culturally competent,

patient-centered education (Darnell & Hickson, 2014). Attendance by patients at a preoperative joint replacement educational class results in expectation management and better preparation of patients for surgery, which results in decreased hospital length of stay (Panteli, Habeeb, McRoberts, & Portuous, 2012). Providing preoperative education related to surgery preparation, inpatient expectations, and expectation of discharging to home with a caregiver decreases hospital length of stay, reduces readmissions, decreases healthcare costs, and improves patient outcomes (Bini & Inacio, 2015). The literature further suggests that early prediction of hospital length of stay by patients helps with managing patients' expectations and reduces healthcare costs (Halawi, Vovos, Green, Wellman, Attarian, & Bolognesi, 2014). Shorter hospital lengths of stay are a savings to healthcare organizations as the longer a Medicare patient stays, the more money the hospital loses due to the fixed payment system (Tzeng & Yin, 2012). Implementing evidence based practices to reduce inpatient falls will promote patient safety and promote shorter hospital lengths of stay (Edwards, Levine, Cullinan, Newbern, & Barnes, 2015). Current literature proves that a two day hospital length of stay following total knee arthroplasty will not place patients at increased risk for readmission within 30 days when compared to a 3 or 4 day hospital length of stay (Bini & Inacio, 2015). The literature reviewed supports implementation of an Arabic version joint replacement PowerPoint presentation with voiceover which will allow the institution to provide patient-centered, culturally competent education. Implementation of this project will promote patient safety, set inpatient expectations, allow for the patient to develop a support system for home care needs, plan for a safe discharge on postoperative day two, decrease hospital length of stay, reduce healthcare costs, reduce readmissions and improve patient outcomes.

Timeline

A microsystems analysis was conducted by the system orthopedic service line during the two week period beginning September 1, 2015 (Appendix C). Assessment of the microsystem revealed that not all patients served by the service line have access to standard information. The assessment also revealed that the nurse educators do not have access to the technology needed to facilitate a smooth linkage between information and patient care by providing timely, effective access to a rich information environment (Johnson, 2001). Lastly, the team identified that due to language barriers, the service line does not always provide patient-centered care, and are not clear about what patients want and need (Johnson, 2001).

Patient outcome data was collected and reviewed by the orthopedic service line during the one week period beginning September 14, 2015. Data was abstracted from the institution's orthopedic registry by the service line's data abstractor. The data was abstracted by ICD-9 codes: 81.51, 81.53, 81.54, and 81.55 and was modified to only include procedure dates July 1, 2014 through June 30, 2015, Arabic or Chaldean listed as primary language, and occurring at all four of the institution's acute care hospitals. The data was reviewed by the orthopedic program manager and the system vice president of orthopedics and the system senior orthopedic specialists. The data revealed that 70% of the institution's Arabic speaking major joint patient population had a hospital length of stay of 3.0 days or greater. Only 30% of this patient population was compliant with the major joint mobility pathway and meeting criteria to discharge home in two days or less, a goal set by The Joint Commission.

A nursing survey (Appendix H) was created by the project champion and distributed to the system senior orthopedic specialists and orthopedic program manager providing the education and coordinating the patient care throughout the continuum. The surveys were completed and reviewed the week of September 21, 2015 by the orthopedic service line staff.

The surveys revealed that the current process for providing preoperative education to this patient population is averaging three hours in length, and was prohibiting Arabic speaking patients from attending the weekly group educational session. The surveys further revealed that visual, audible and written materials in the patients' primary language were not being utilized for educational purposes, and due to technical and interpreting issues, the quality of education was low. Additionally, the education provided was fragmented and abbreviated, and at times required rescheduling due to lack of access to a three way interpreting phone.

A pre-intervention cost analysis of the process for educating Arabic speaking major joint patients was conducted by the champion of this project the week of September 28, 2015. The cost analysis results were reported back to the orthopedic service line team which created an urgency to move forward with developing a new process for educating this patient population.

The project champion researched the resources and options for translating the preoperative patient education from English to Arabic during the one week period beginning October 5, 2015. Concurrently, an analysis of the technological methods for creating the presentation was conducted by the project champion. Following extensive research, all options and associated costs were presented to the system vice president of orthopedics. The vice president and project champion determined that the most cost effective process for developing education to be presented visually, audibly and in written form is a PowerPoint with voiceover presentation in the Arabic language which will also be printed and provided to the patient for note taking and used as a reference for education throughout the continuum.

The champion of this project created the verbiage for each PowerPoint slide and conducted a word count for both the current English version PowerPoint presentation, and the verbiage for the voiceover. The English version PowerPoint presentation consists of 28 slides

and 532 words. The narrative for the voiceover contains 3554 words. The institution's contracted interpreting service charges .20 cents per written word translated; therefore, the charge for translating the PowerPoint presentation will total $106.40, while translation of the narrative for the voiceover will cost $710.80. To save on the cost associated with translating the existing PowerPoint presentation, and to create a more meaningful form of education, the team voted to replace the existing, one word bullet point key topics on each PowerPoint slide with two to three full sentence phrases containing key take-away information narrated during the voiceover for each slide. This plan will eliminate the $106.40 cost associated with translating the existing PowerPoint, and key sentences will be pulled from the translated voiceover narrative. The orthopedic service line plans to partner with one of the institution's Arabic speaking healthcare providers to create the Arabic version mp4 PowerPoint with voiceover using the script provided, at no charge to the organization.

The total cost associated with this project is $710.80. The cost associated with providing preoperative education to one Arabic speaking patient is $402.00. Therefore, with the orthopedic service line's current volume of one Arabic speaking patient per week, within two weeks, the project will have paid for itself, as well as saved the institution $93.20 in dollars spent on patient education. If current patient volumes remain constant, without consideration for growth, in CY2016 total costs associated with delivering preoperative education to Arabic speaking major joint replacement patients will include the cost for creating the project plus the estimated costs for incorporating this process into the weekly group educational session multiplied by 52 weeks (Appendix F). Estimated costs to deliver preoperative education to the institution's Arabic speaking major joint patient population for CY2016 will total $1,727.00. This is a drastic reduction in costs in comparison to the costs spent to educate the same volume of Arabic

speaking major joint patients in CY2015, which will total $20,904.00 by end of the calendar year. Implementation of this project will be an overall cost saving of $19,177.00 to the organization in CY2016.

Translation of the education and creation of the presentation will be separated into the processes. Translation of the English PowerPoint into the Arabic language is scheduled for the two week period beginning November 2, 2015 and this process will begin with submission of the institution's translation request form to Multicultural Services (Appendix J). Translation of the scripting for the voiceover of each slide is scheduled for the three week period beginning November 23, 2015. Development of the Arabic version PowerPoint presentation with voiceover mp4 file is scheduled to be completed during the two week period beginning December 14, 2015.

Implementation of the Arabic version PowerPoint with voiceover presentation is scheduled for January 1, 2016. The PowerPoint will be viewed by Arabic speaking patients using earbuds during delivery of the presentation in English at the weekly group educational session. The new process will be trialed system wide at all four acute care hospitals for the three month period beginning January 1, 2016 and ending March 31, 2016.

Post intervention outcome data collection and review by the system vice president of orthopedics, orthopedic program manager and senior orthopedic specialists will be conducted for the three month period beginning April 1, 2016 and ending June 30, 2016. Post-intervention nursing surveys (Appendix I) will be distributed to the system nurse educators to determine the effectiveness of the new process, analyze associated costs, celebrate successes and determine areas of opportunity for improvement.

The target date for achieving an 80% discharge to home goal by the Arabic speaking major joint patient population is July 1, 2016. This goal is the desired outcome of delivering cost effective, high quality, patient-centered preoperative education, allowing access to the information necessary for meeting this goal. This performance improvement plan and patient outcomes will be entered into The Joint Commission website and will be presented to the surveyor during the August 2016 intracycle review phone call, demonstrating the action plan implemented to assist patients with meeting this goal.

Expected Results

The cost analysis (Appendix F) and the Nursing Survey (Appendix H) revealed how costly and ineffective the service line's current process is for providing education to this patient population. The three hour one to one educational session is mentally and physically exhausting for both the patient and the educator. The education is fragmented, and steers off course due to numerous interruptions and low quality interpreting services. The three hour session costs the organization $402.00 to provide preoperative education to one patient, and the patient does not benefit by visual or written forms of education. As a result, 70% of the institution's Arabic speaking major joint patient population are not following the clinical pathway allowing for a day two discharge and not making the home preparations for a safe discharge (Sharp Healthcare Orthopedic Registry, 2015).

The result expected by implementing this project on January 1, 2016 is a seamless, cost effective, timely process for providing quality education to Arabic speaking patients at the preoperative joint replacement group educational class. Arabic speaking patients do not currently have access to the information necessary for partnering in their healthcare and preparing for a safe discharge within two days of surgery as do the institution's English speaking

patients. Providing Arabic speaking patients with visual, audible, and written education in their primary language is expected to translate into improved understanding of clinical and mobility pathways, knowledge of home care needs, strategic knowledge for prevention of postoperative and hospital acquired complications, and overall improved patient outcomes. Additional benefits expected by implementation of this process is the reduction in costs associated with educating the institution's Arabic speaking patient population by $19,981 annually.

The most important conclusion that may emerge from this study is the need to create high quality, visual, audible, and written joint replacement preoperative education in all languages served by the institution. Providing patients with equal access to information by eliminating language barriers is a responsibility of the healthcare institution. Eliminating healthcare disparities will improve the outcomes of all patients served in the community despite lingual and cultural differences, while raising the expectation for providing culturally competent, patient-centered care to all.

Nursing Relevance

Improving the process for educating the institution's growing population of Arabic speaking patients is relevant to the nursing profession on several levels. Standardization of the educational process system wide will reduce practice variations and deploy evidence based practice leading to improved outcomes at all four acute care hospitals. Elimination of the weekly three hour preoperative educational sessions will allow the orthopedic program manager and senior orthopedic specialists to spend this time on other responsibilities of their role such as daily patient rounds and review of clinical data.

As Centers of Excellence in hip and knee replacement surgery, the orthopedic program manager and senior orthopedic specialists are responsible for implementing process improvement plans to meet the target goal of discharging 80% of major joint replacement patients to home in two days or less. Implementation of this project will assist the program managers with meeting the goal for this Joint Commission metric which will be significant to The Joint Commission-Disease Specific Care recertification site surveys scheduled for 2017.

Summary Report

This project addresses the needs of the adult and geriatric Arabic speaking major joint patient population served by the orthopedic service line of Sharp Healthcare's four acute care hospitals in San Diego, California. The aim of this project is to discharge 80% of Sharp Healthcare's Arabic speaking major joint patient population to a safe home environment with support for home care needs in two days or less. To achieve this goal, the orthopedic service line will develop a joint replacement preoperative patient education presentation in the Arabic language, providing patients with access to the knowledge needed to partner in their healthcare and achieve this goal.

A team approach was used to determine the need and implement this project. John Kotter's 8 Step Change Model was used to propel the project forward, remove obstacles, and prevent backward drift (Kotter, 2012). Baseline data abstracted from the Sharp Healthcare orthopedic registry and nurse educator surveys revealed that the institution's current process for educating Arabic speaking major joint patients using a third party interpreter averaged three hours in length and cost $402.00 per patient. The nurse educator surveys further revealed that the education delivered over the three hour meeting was fragmented, abbreviated, and low in quality (Appendix H). When compared to the time and costs associated with providing

preoperative joint replacement education to patients in the weekly ninety minute group session averaging costs of $3.75 per patient educated, the need for this project was identified. Patient outcome data abstracted from the Sharp Healthcare orthopedic registry further revealed that 80% of English speaking major joint patients attending the preoperative group educational session were meeting the goal of discharging to the home environment in two days or less, while only 30% of Arabic speaking patients were meeting this goal.

A clinical microsystem assessment tool was used to assess the microsystem (Appendix C). A project timeline was created to set realistic goals for creating and translating the written education, and to partner with an Arabic speaking healthcare provider to create the PowerPoint with voiceover presentation. Implementation of the Arabic joint replacement preoperative education presentation in the weekly joint replacement group educational session is set for January 1, 2016. Following a three month trial period, post-intervention data will be collected and analyzed by review of the system orthopedic dashboards. Data collection will begin April 1, 2016 through June 30, 2016. Expected results of implementing this project is that 80% of Arabic speaking major joint patients are meeting the goal of discharging to the home environment in two days or less by July 1, 2016. Post-intervention analysis of the data collected from the orthopedic registry and post-intervention nurse educator survey (Appendix I) will reveal the actual cost savings and patient outcomes resulting from creating a high quality joint replacement preoperative education in the Arabic language to be viewed by patients on a laptop using earbuds at the group educational session.

Following post-intervention data analysis, the orthopedic service line plans to use the joint replacement education PowerPoint with narrative document created for this project to translate our education into all languages serviced by Sharp Healthcare. In doing so, the

orthopedic service line will eliminate the institution's current disparity between the quality of education received by English speaking and non-English speaking major joint patients. The projected conclusion is the vision to deliver patient-centered care to every individual served by Sharp Healthcare's orthopedic service line despite language or culture and to become a culturally competent healthcare institution. The document created during this project will also serve as a training tool for onboarding nurse educators, providing them with a document containing the specific patient education to be provided in the lecture presented during the joint replacement preoperative patient educational session.

Sustaining the new process for educating the institution's Arabic speaking major joint patients will require re-evaluation of the process and outcomes by the orthopedic service line staff at monthly staff meetings. Modifications of the new process may be indicated based on the outcomes and will be addressed and agreed upon by the orthopedic service line staff at the monthly meetings. Maintenance of the laptops and earbuds utilized to provide the presentation will be required, and budgeting for replacement equipment will be required.

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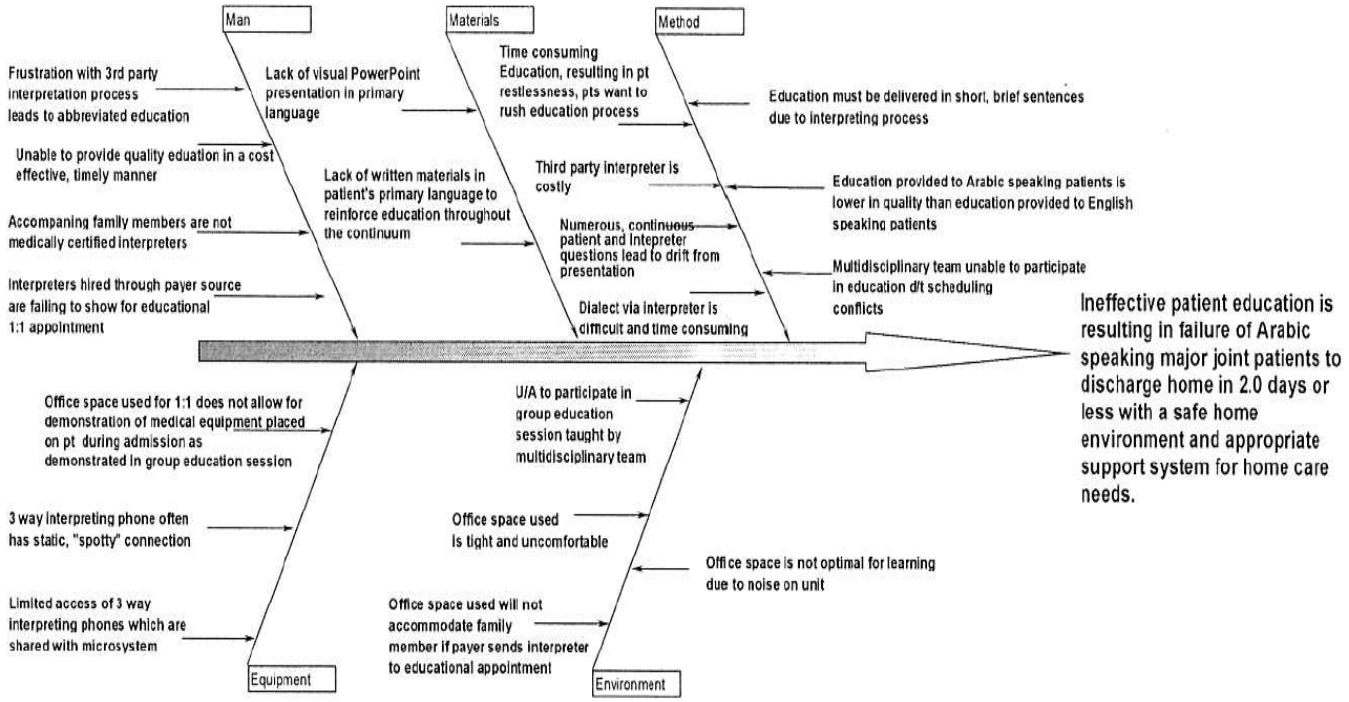
Appendix A

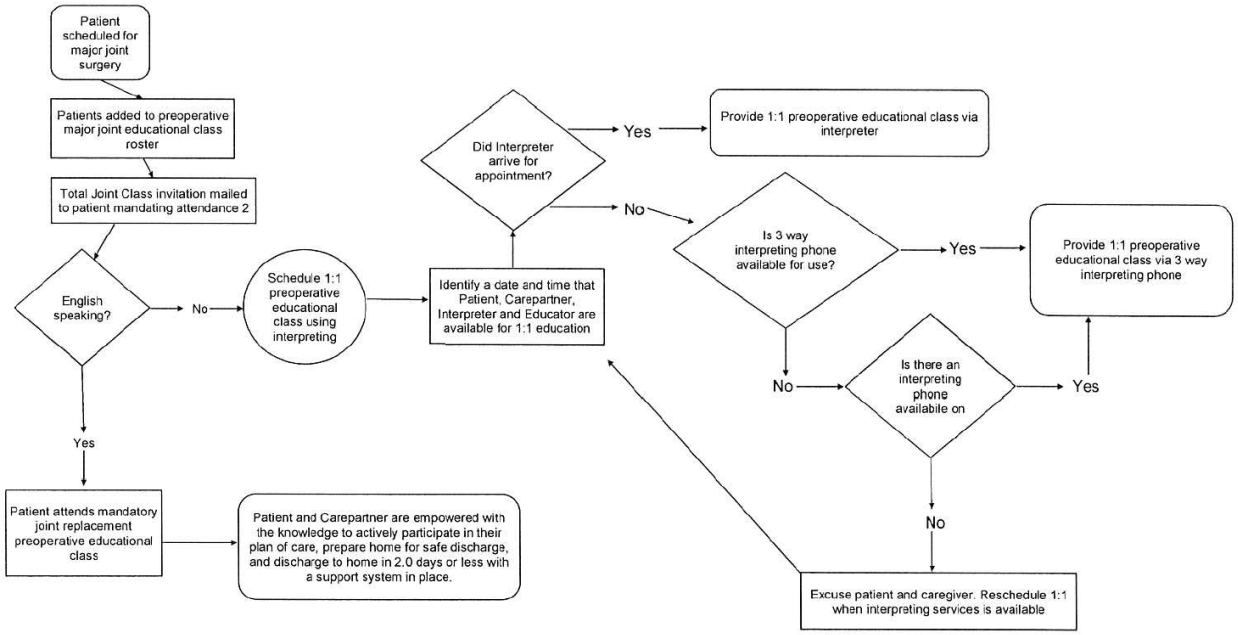
Root Cause Analysis

Fishbone Diagram



Appendix B

Process Map



Appendix C

Clinical Microsystem Assessment Tool

CLINICAL MICROSYSTEM ASSESSMENT TOOL

Instructions: Each of the "success" characteristics (e.g., leadership) is followed by a series of three descriptions. For each characteristic, ***please check*** the description that ***best describes*** your current microsystem and the care it delivers *OR* use a microsystem you are *MOST* familiar with.

	Characteristic and Definition	Descriptions			
Leadership	**1. Leadership:** The role of leaders is to balance setting and reaching collective goals, and to empower individual autonomy and accountability, through building knowledge, respectful action, reviewing and reflecting.	☐ Leaders often tell me how to do my job and leave little room for innovation and autonomy. Overall, they don't foster a positive culture.	☐ Leaders struggle to find the right balance between reaching performance goals and supporting and empowering the staff.	☐ Leaders maintain constancy of purpose, establish clear goals and expectations, and foster a respectful positive culture. Leaders take time to build knowledge, review and reflect, and take action about microsystems and the larger organization.	☐ Can't Rate
Leadership	**2. Organizational Support:** The larger organization looks for ways to support the work of the microsystem and coordinate the hand-offs between microsystems.	☐ The larger organization isn't supportive in a way that provides recognition, information, and resources to enhance my work.	☐ The larger organization is inconsistent and unpredictable in providing the recognition, information and resources needed to enhance my work.	☐ The larger organization provides recognition, information, and resources that enhance my work and makes it easier for me to meet the needs of patients.	☐ Can't Rate
Staff	**3. Staff Focus:** There is selective hiring of the right kind of people. The orientation process is designed to fully integrate new staff into culture and work roles. Expectations of staff are high regarding performance, continuing education, professional growth, and networking.	☐ I am not made to feel like a valued member of the microsystem. My orientation was incomplete. My continuing education and professional growth needs are not being met.	☐ I feel like I am a valued member of the microsystem, but I don't think the microsystem is doing all that it could to support education and training of staff, workload, and professional growth.	☐ I am a valued member of the microsystem and what I say matters. This is evident through staffing, education and training, workload, and professional growth.	☐ Can't Rate
Staff	**4. Education and Training:** All clinical microsystems have responsibility for the ongoing education and training of staff and for aligning daily work roles with training competencies. Academic clinical microsystems have the additional responsibility of training students.	☐ Training is accomplished in disciplinary silos, e.g., nurses train nurses, physicians train residents, etc. The educational efforts are not aligned with the flow of patient care, so that education becomes an "add-on" to what we do.	☐ We recognize that our training could be different to reflect the needs of our microsystem, but we haven't made many changes yet. Some continuing education is available to everyone.	☐ There is a team approach to training, whether we are are training staff, nurses or students. Education and patient care are integrated into the flow of work in a way that benefits both from the available resources. Continuing education for all staff is recognized as vital to our continued success.	☐ Can't Rate
Staff	**5. Interdependence:** The interaction of staff is characterized by trust, collaboration, willingness to help each other, appreciation of complementary roles, respect and recognition that all contribute individually to a shared purpose.	☐ I work independently and I am responsible for my own part of the work. There is a lack of collaboration and a lack of appreciation for the importance of complementary roles.	☐ The care approach is interdisciplinary, but we are not always able to work together as an effective team.	☐ Care is provided by a interdisciplinary team characterized by trust, collaboration, appreciation of complementary roles, and a recognition that all contribute individually to a shared purpose.	☐ Can't Rate
Patients	**6. Patient Focus:** The primary concern is to meet all patient needs — caring, listening, educating, and responding to special requests, innovating to meet patient needs, and smooth service flow.	☐ Most of us, including our patients, would agree that we do not always provide patient centered care. We are not always clear about what patients want and need.	☐ We are actively working to provide patient centered care and we are making progress toward more effectively and consistently learning about and meeting patient needs.	☐ We are effective in learning about and meeting patient needs — caring, listening, educating, and responding to special requests, and smooth service flow.	☐ Can't Rate

Side A

Please continue on Side B

CLINICAL MICROSYSTEM ASSESSMENT TOOL

- CONTINUED -

	Characteristic and Definition		Descriptions			
Patients	**7. Community and Market Focus:** The microsystem is a resource for the community; the community is a resource to the microsystem; the microsystem establishes excellent and innovative relationships with the community.		☐ We focus on the patients who come to our unit. We haven't implemented any outreach programs in our community. Patients and their families often make their own connections to the community resources they need.	☐ We have tried a few outreach programs and have had some success, but it is not the norm for us to go out into the community or actively connect patients to the community resources that are available to them.	☐ We are doing everything we can to understand our community. We actively employ resources to help us work with the community. We add to the community and we draw on resources from the community to meet patient needs.	☐ Can't Rate
Performance	**8. Performance Results:** Performance focuses on patient outcomes, avoidable costs, streamlining delivery, using data feedback, promoting positive competition, and frank discussions about performance.		☐ We don't routinely collect data on the process or outcomes of the care we provide.	☐ We often collect data on the outcomes of the care we provide and on some processes of care.	☐ Outcomes (clinical, satisfaction, financial, technical, safety) are routinely measured, we feed data back to staff, and we make changes based on data.	☐ Can't Rate
Performance	**9. Process Improvement:** An atmosphere for learning and redesign is supported by the continuous monitoring of care, use of benchmarking, frequent tests of change, and a staff that has been empowered to innovate.		☐ The resources required (in the form of training, financial support, and time) are rarely available to support improvement work. Any improvement activities we do are in addition to our daily work.	☐ Some resources are available to support improvement work, but we don't use them as often as we could. Change ideas are implemented without much discipline.	☐ There are ample resources to support continual improvement work. Studying, measuring and improving care in a scientific way are essential parts of our daily work.	☐ Can't Rate
Information and Information Technology	**10. Information and Information Technology:** Information is THE connector - staff to patients, staff to staff, needs with actions to meet needs. Technology facilitates effective communication and multiple formal and informal channels are used to keep everyone informed all the time, listen to everyone's ideas, and ensure that everyone is connected on important topics. *Given the complexity of information and the use of technology in the microsystem, assess your microsystem on the following three characteristics: (1) integration of information with patients, (2) integration of information with providers and staff, and (3) integration of information with technology.*	A. Integration of Information with Patients	☐ Patients have access to some standard information that is available to all patients.	☐ Patients have access to standard information that is available to all patients. We've started to think about how to improve the information they are given to better meet their needs.	☐ Patients have a variety of ways to get the information they need and it can be customized to meet their individual learning styles. We routinely ask patients for feedback about how to improve the information we give them.	☐ Can't Rate
Information and Information Technology		B. Integration of Information with Providers and Staff	☐ I am always tracking down the information I need to do my work.	☐ Most of the time I have the information I need, but sometimes essential information is missing and I have to track it down.	☐ The information I need to do my work is available when I need it.	☐ Can't Rate
Information and Information Technology		C. Integration of Information with Technology	☐ The technology I need to facilitate and enhance my work is either not available to me or it is available but not effective. The technology we currently have does not make my job easier.	☐ I have access to technology that will enhance my work, but it is not easy to use and seems to be cumbersome and time consuming.	☐ Technology facilitates a smooth linkage between information and patient care by providing timely, effective access to a rich information environment. The information environment has been designed to support the work of the clinical unit.	☐ Can't Rate

Side B

Appendix D

SWOT Analysis

SWOT ANALYSIS

Preoperative Education: A Patient-Centered Care Approach

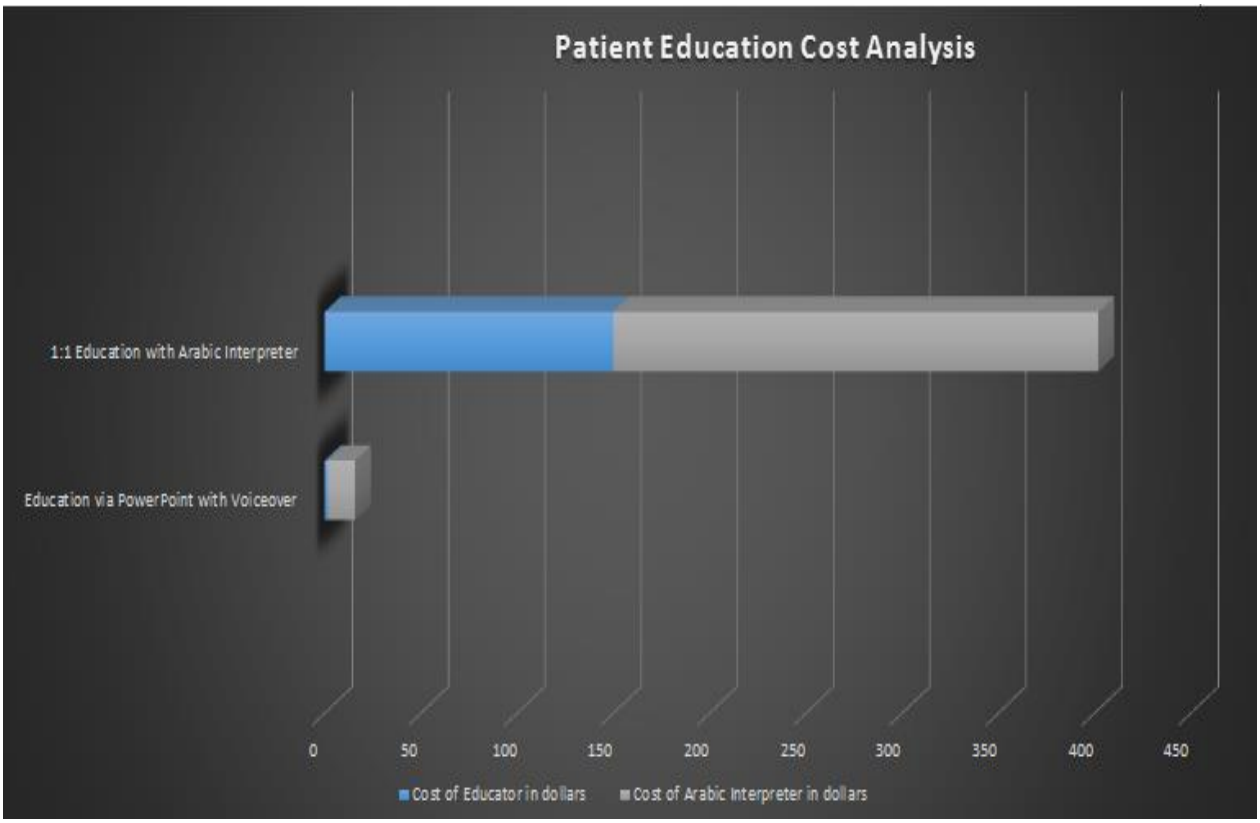
Appendix E

Stakeholder Analysis

Stakeholder	Stake in Project	Impact/ Influence	What do we need from them?	Perceived attitudes/ Risks	Stakeholder Management Strategy	Responsibility
Vice President Orthopedic Services	Responsible for strategic planning Process Owner	High/High	Approval to implement change Designation of budget dollars to fund project	Perceives project to be costly Lack of clarity in preferred approach	Project Steering	Project Sponsor
Orthopedic Program Manager	Frontline Educator End user of new product	High/Medium	Conduction of needs assessment, supporting literature & cost analysis Presentation of resource options for project design	Concerned about producing a quality product within allocated budget	Leads project task force at weekly staff meetings Presentation of literature Project Management	Project Champion
Senior Orthopedic Specialists	Frontline Educators End users of new product	High/Medium	Commitment to implementing change Participation in developing educational materials	Concerned about effectiveness of project implementation	Task Force Team Members	Project Team Members

Appendix F

Cost Analysis



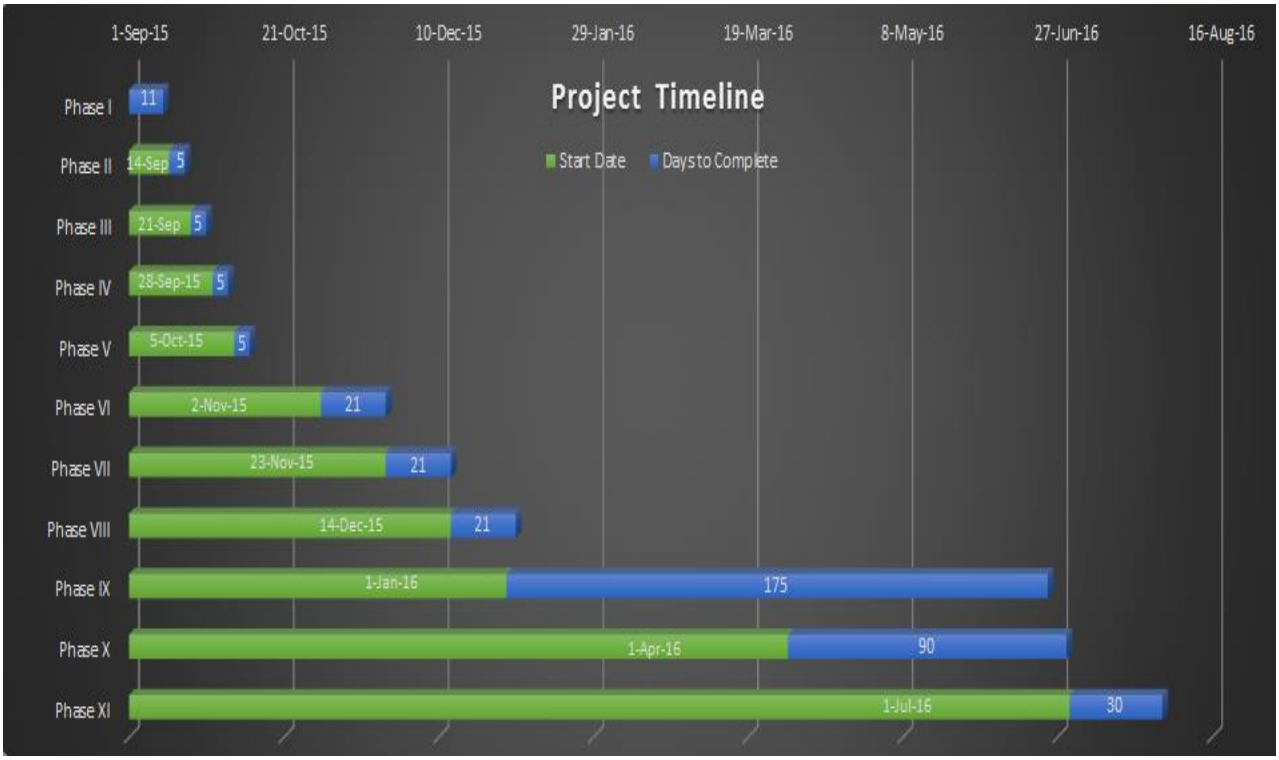
COST OF PROVIDERS PER HOUR	1:1 ARABIC PREOPERATIVE EDUCATIONAL SESSION /THIRD PARTY INTERPRETER AVERAGE TIME SPENT	TOTAL COST FOR EDUCATION PER PATIENT
Cost of Nurse Educator per Hour: $50.00	3 hours	$150.00
Cost of Arabic Interpreter per Hou: $84.00	3 hours	$252.00
		$402.00

COST OF PROVIDERS PER HOUR	GROUP EDUCATIONAL SESSION USING POWERPOINT WITH VOICEOVER FOR ARABIC SPEAKING PATIENTS AVERAGE TIME SPENT	TOTAL COST FOR EDUCATION PER PATIENT
Cost of Nurse Educator per Hour: $50.00	1.5 hours /20 patients	$3.75
Cost of Arabic Ingerpreter per Hou $84.00	10 minutes for introduction and closing communications	$14.00
		$17.75
		$384.25 Cost Savings Per Patient

Appendix G

Gantt Chart

Project Timeline



Phase I: Microsystem Assessment

Phase II: Outcome Data Collection and Review

Phase III: Nurse Educator Survey #1

Phase IV: Pre-Intervention Cost Analysis of Education Process

Phase V: Development of Interventions

Phase VI: Translation of PowerPoint Slides into Arabic

Phase VII: Translation of Scripting for PowerPoint Voiceover

Phase VIII: Creation of PowerPoint with Voiceover MP4 File

Phase IX: Implementation of Arabic Preoperative Patient Education Presentation

Phase X: Post-Intervention Outcome Data Collection and Review

Phase XI: 80% Arabic speaking Major Joint Patients Discharged in 2.0 Days or Less

Appendix H

Nursing Survey I

Ortho/Neuro Service Line

Orthopedic Program Manager Nurse Surveys

Preoperative Education

1. **How often do you have an Arabic speaking patient scheduled to attend the weekly mandatory preoperative joint replacement educational class?**

☐ Always (90-100%) ☐ Usually (40-89%) ☐ Sometimes (1-39%) ☐ Never (0%)

2. **What are the barriers to having Arabic speaking patients attending the mandatory preoperative joint educational class? *Mark all that apply:***

☐ Requires assistance from an additional RN
☐ Verbal interpretation is disruptive to other patients during lecture
☐ Frequent interruptions during English lecture
☐ Time spent on clarification of education greatly increases class time for other patients in the group
☐ Group needs aren't met during the allotted class time due to time spent communicating with Arabic speaking patient 1:1 using interpreting services
☐ Other:_____

3. **How often does the patient arrive to class with a medically certified interpreter?**

☐ Always (90-100%) ☐ Usually (40-89%) ☐ Sometimes (1-39%) ☐ Never (0%)

4. **How often is a 3 way interpreting phone available during the preoperative joint educational class?**

☐ Always (90-100%) ☐ Usually (40-89%) ☐ Sometimes (1-39%) ☐ Never (0%)

5. **What is the estimated time to provide the entire preoperative total joint educational lecture as lectured in the English language using an Arabic interpreter?**

☐ 1 hour ☐ 1.5 hours ☐ 2 hours ☐ 2.5 hours ☐ 3 hours ☐ >3 hours

Appendix H

Nursing Survey I

6. **What is the approximate cost to the organization for an educator to provide a 1:1 preoperative educational session in the Arabic language using interpreting services per patient:**

☐ $50. ☐ $100. ☐ $150. ☐ $200. ☐ >$200

7. **What is the approximate cost per hour to the organization to use Sharp Healthcare's Interpretation Services for a 1:1 preoperative educational session in Arabic?**

☐ $50/hour ☐ $85/hour ☐ $100/hour ☐ No cost to the organization

8. **What would best facilitate high quality, cost effective and timely preoperative education to the Arabic speaking patient population?**

☐ Creating a group session preoperative educational class using a third party interpreter?
☐ Delegating preoperative education to the Arabic speaking patient population to one Educator on the Ortho/Neuro Service Line team?
☐ Creating a DVD or PowerPoint with Voiceover of the preoperative educational lecture in the Arabic language?
☐ Other:_____

☐ **Suggestions**:_____
_____
_____
_____
_____
_____
_____

Thank you for your input and assistance with improving our process for delivering cost effective, high quality preoperative education to our growing Arabic speaking major joint patient population.

Gia Wendt, RN
USF MSN/CNL Student

Appendix I

Nursing Survey II

Ortho/Neuro Service Line

Orthopedic Program Manager Nurse Survey II

Preoperative Education

1. **How often do you have an Arabic speaking patient scheduled to attend the weekly mandatory preoperative joint replacement educational class?**

☐ Always (90-100%) ☐ Usually (40-89%) ☐ Sometimes (1-39%) ☐ Never (0%)

2. **What are the barriers to having Arabic speaking patients attending the mandatory preoperative joint educational class? *Mark all that apply:***

☐ Requires assistance from an additional RN
☐ Time spent with Q&A following presentation exceeds 5 minutes
☐ Frequent interruptions during English lecture
☐ Time spent clarifying instructions greatly increases class time for other patients in the group
☐ Group needs aren't met during the allotted class time due to time spent communicating with Arabic speaking patient 1:1 using interpreting services
☐ Other:_____

3. **How often is a 3 way interpreting phone available during the preoperative joint educational class?**

☐ Always (90-100%) ☐ Usually (40-89%) ☐ Sometimes (1-39%) ☐ Never (0%)

4. **What is the estimated time using three way interpretation phone for introductive purposes, instructions for viewing PowerPoint with voiceover and for and closing communications?**

☐ 5 mins ☐ 10 mins ☐ 15 mins ☐ 20 mins ☐ 25 mins ☐ >30mins

5. **How often do you experience interruptions during the class lecture due to technical issues with the Arabic PowerPoint with voiceover?**

☐ Always (90-100%) ☐ Usually (40-89%) ☐ Sometimes (1-39%) ☐ Never (0%)

Appendix I

Nursing Survey II

6. **What is the approximate cost per hour to the organization to use Sharp Healthcare's Interpretation Services for a 1:1 preoperative educational session in Arabic?**

☐ $50/hour ☐ $85/hour ☐ $100/hour ☐ No cost to the organization

7. **Is the PowerPoint with voiceover producing high quality, cost effective and timely preoperative education to the Arabic speaking patient population?**

☐ Yes
☐ No
☐ Unsure at this time
☐ Other: _____

☐ **Compare and contrast benefits of providing preoperative education to Arabic speaking patients using PowerPoint with voiceover during the group educational setting versus conducting a 1:1 educational session using a third party interpreter:**

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

Thank you for your input and assistance with improving our process for delivering cost effective, high quality preoperative education to our growing Arabic speaking major joint patient population.

Gia Wendt, RN
USF CNL/MSN Student

Appendix J

Translation Request Form

Translation Request Form

If completing form electronically, press the **Tab** button to go from one field to the next.

Requesting Persons Name/Title: _____

SHARP Entity/Department: _____

Phone: _____ **E-mail address:** _____

Name of Item to be translated: _____

Language Needed: _____

Target audience origin/nationality: _____

What is the general education level of the target audience? _____

Type of project requested: ☐ Translation ☐ Editing/Proofreading

Purpose of the project: ☐ Flier ☐ Brochure ☐ Form ☐ Postcard

☐ Booklet (5+ pgs.) ☐ Press Release ☐ Website ☐ Other: _____

Description of item: _____

_____

Due Date: _____ **Cost Center:** _____

Authorizing Managers Name/Title: _____

(Print)

Managers Signature/Date: _____

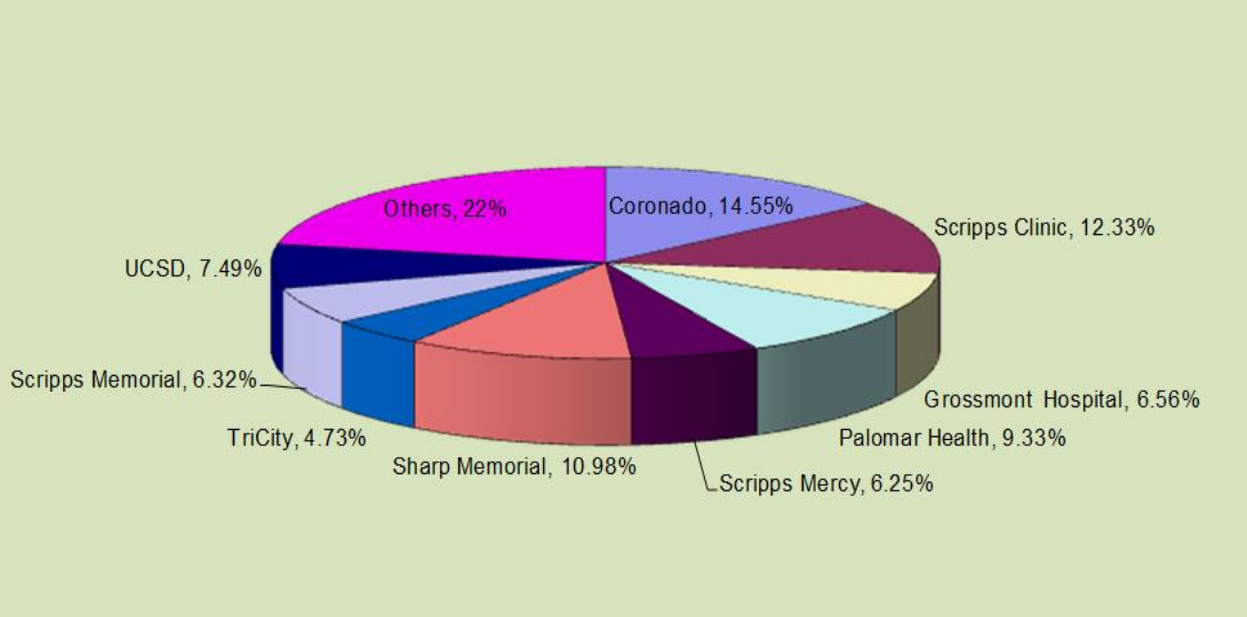
PLEASE ATTACH ITEM TO BE TRANSLATED AND SEND TO: Multicultural@sharp.com

(For questions filling out this form, please e-mail the Multicultural Services Department)

For Multicultural Services Use Only:

Appendix K

Sharp Healthcare Joint Replacement Program Market Share



Data Source: 2013 OSHPD Inpatient Hospital Discharge Data

Sharp Healthcare has 32.09% of San Diego County's Joint Replacement Market Share

- **Sharp Coronado Hospital has 14.55% of Market Share**
- **Sharp Memorial Hospital has 10.98% of Market Share**
- **Sharp Grossmont Hospital has 6.56% of Market Share**

* Scripps Mercy Hospital includes both Hillcrest and Chula Vista Campuses