

Winter 12-14-2018

# Raising OAS CAHPS Scores: Using Patient Education

Katrina Pangilinan  
kmpangilinan@gmail.com

Follow this and additional works at: <https://repository.usfca.edu/capstone>

 Part of the [Other Nursing Commons](#)

---

## Recommended Citation

Pangilinan, Katrina, "Raising OAS CAHPS Scores: Using Patient Education" (2018). *Master's Projects and Capstones*. 854.  
<https://repository.usfca.edu/capstone/854>

This Project/Capstone is brought to you for free and open access by the Theses, Dissertations, Capstones and Projects at USF Scholarship: a digital repository @ Gleeson Library | Geschke Center. It has been accepted for inclusion in Master's Projects and Capstones by an authorized administrator of USF Scholarship: a digital repository @ Gleeson Library | Geschke Center. For more information, please contact [repository@usfca.edu](mailto:repository@usfca.edu).

Raising OAS CAHPS Scores: Using Patient Education

Katrina Pangilinan, RN

University of San Francisco

### Abstract

At the Golden Gate Endoscopy Center (GGEC), the Consumer Assessment of Healthcare Providers and Systems Outpatient and Ambulatory Surgery (OAS CAHPS) survey results on patient satisfaction have been below the 50th percentile for the last three quarters of 2018.

Patient satisfaction scores are a quality measure for the patient care experience and important for the success of the organization and its providers. Based on patient comments from previous surveys, patients feel that the center does not explain the possible side effects of the anesthesia in a way they can understand. Other patient comments and concerns included confusion regarding dietary restrictions after procedures. In addition to, patients reported a lack of understanding what to expect once they enter the lobby. The goal of improving health education using printed materials will increase patient satisfaction scores within the center. By the end of the 4th quarter of 2018, patient satisfaction scores will show a score equal to or greater than the 50th percentile across the region. Implementation will range from October 2018 to December 2018. Patient surveys will be mailed using the National Research Corporation Health (NRC) surveys at the end of the quarter to determine the success of the project. Results will be available in January 2019. Since implementation of the educational forms, patients immediately responded with gratitude and appreciativeness to the staff. Health education interventions will significantly improve the patient care experience which will alleviate low patient satisfaction scores at the center.

## Raising OAS CAHPS Scores: Using Patient Education

### Introduction

#### **Problem Description**

The enactment of the Patient Protection and Affordable Care Act (ACA) of 2010 emphasized the importance of the patient care experience and reimbursement rates for hospitals and ambulatory surgery centers (ASC). The Centers for Medicare & Medicaid (CMS) in partnership with the Agency for Healthcare Research and Quality (AHRQ) developed the Consumer Assessment of Healthcare Providers and Systems Outpatient and Ambulatory Surgery (OAS CAHPS) survey in 2012 to measure the patient care experience for patients who visited a Medicare-certified center for a procedure or surgery (CMS, 2016). OAS CAHPS will provide “statistical data from the patient perspective to inform quality improvement and comparative consumer information about outpatient facilities” (CMS, 2016, para. 1).

Golden Gate Endoscopy Center (GGEC), a Sutter Health affiliate, is part of the Sutter Outpatient Services (SOPS) division. GGEC is an outpatient ambulatory surgery center that specializes in colonoscopy and endoscopy procedures to properly screen and diagnose gastrointestinal disorders and diseases. The patient age distribution ranges from 18 to 90 years old, with average age about 50 years old. The center’s average patient admissions per day is approximately 35, which is equivalent to 500-600 patients per month. The center utilizes NRC health, a CMS-approved vendor, to electronically mail OAS CAHPS surveys to patients. The survey encompasses key drivers of satisfaction, including information and education, respect for patient preferences, physical comfort, emotional support, continuity and transition, and access to care (NRC Health, n.d.). It is crucial that the center’s performance exceeds patients’ expectations when providing high quality care to depict the success of the physicians and the organization.

Interventions to improve the patient care experience can positively impact patient satisfaction and health outcomes. This paper will provide evidence-based knowledge to implement a quality improvement plan using patient education.

### **Available Knowledge**

Beginning with the PICO statement as in Appendix A, literature reviews and articles that evaluated the value of patient satisfaction and patient education were examined. A search on the Gleeson library, CINAHL, and MEDLINE databases was conducted using the PICO strategic recommendation with key words *patient satisfaction*, *nursing*, and *education*. The search generated numerous literature reviews and articles regarding patient satisfaction and health education published from 2008 through 2018. A total of two studies (See Appendix B) and one article were the most relevant.

An international study by Gadalean, Cheptea, and Constantin (2011) analyzed and evaluated satisfaction scores amongst patients admitted into the intensive care unit (ICU). Researchers conducted a prospective study with a sample size of 106 participants that received an anonymous questionnaire 24 hours after discharge. The questionnaire consisted of 39 factors of satisfaction and dissatisfaction. Factors that influenced satisfaction scores in the ICU included proper treatment, explanation of procedure/treatment, family contact, nutrition, and pain treatment. However, dissatisfaction factors included no explanation regarding treatments, ambiguity about the length of stay, dietary restrictions, and unsatisfactory accommodations. The researchers concluded that factors related to high satisfaction scores are related to hospital staff and patient relationships.

Sutton et al. (2017) conducted a prospective study to improve patient satisfaction in a dermatology clinic. The researchers interviewed 298 patients to determine general satisfaction

within the clinic. The survey asked patients to rate their patient care experience using a 5-point Likert scale (strongly agree, agree, uncertain, disagree, and strongly disagree). Patient satisfaction scores resulted in an average of 3.86 out of 5 points. The authors concluded that interventions including “educational handouts in the patient’s primary language can increase satisfaction and improve compliance” (p. 273). Thus, analyzing patient satisfaction scores can support the need for specific interventions to alleviate subpar results.

In a review article examining patient satisfaction in the dermatological practice, Prakash (2010) assert that patient satisfaction is an outlook that indicates the quality and success of the physician and hospital, and thus the delivery of high quality care must be patient-centered at all times. In order to ensure high patient satisfaction, the author suggests that service excellence includes the physician, the patient, and the organization. Moreover, the article explains that high patient satisfaction can lead to customer loyalty, patient retention, consistent profitability, increased staff morale, reduced risk of malpractice suits, and increased personal and professional satisfaction. Interventions to improve the patient care experience can include patient education through various teaching modalities such as verbal education, printed materials, the internet, etc.

### **Rationale**

Healthcare organizations are focused-driven on improving the patient care experience and patient satisfaction. The Institute for Health Improvement (2018) states that the patient experience is a significant indicator for improvements in patient satisfaction scores. GGEC’s mission statement is to provide patients and communities health care services by “a not-for-profit commitment through compassion and excellence” (Sutter Health, n.d.). Sutter Health (n.d.) believes in the excellence of care which is transcended through honesty and integrity to achieve teamwork, quality, affordability, and new innovations in care. GGEC provides patients high

quality care by allowing physicians to properly screen and diagnose gastrointestinal disorders and diseases. Currently, patients receive printed materials regarding their procedure, these handouts will be in addition to. According to the Agency for Healthcare Research and Quality (AHRQ), total costs were an average of \$412 lower for patients who received proper education than those who did not (Danyell, 2016). Patient education is critical determinant in the overall cost of care. Applying change theory and leadership methods could increase the probability of success in planning various interventions to improve the patient care experience in GGEC.

Everett Rogers' theory of diffusion (See Appendix C), derived from Kurt Lewin's theory, identifies five stages of planned change—awareness, interest, evaluation, trial and adoption (Mitchell, 2013). It is a valuable change process that guides new ideas or innovations that can be modified and adapted to meet the needs of the microsystem (Kaminski, 2011). Kaminski (2011) describes that during the awareness stage, the individual is exposed to the innovation but lacks data and information. The interest stage places significance on the individual and seeks additional information. The evaluation stage allows the individual to contemplate whether to adopt or reject the innovation. Then, the trial stage implements the innovation into the microsystem. In the final stage, the adoption stage, the innovation becomes fully integrated. This theory is important for managers and change agents to implement planned change and gain acceptance amongst individuals within the microsystem.

Transformational leadership is a conceptual framework that believes in the willingness to adapt to change and focuses on rewarding and guiding staff through their roles within the organization (Finkelman, 2016). Leaders focus on the future of the organization while adhering to its vision and mission statement. A nursing role that embraces this style of leadership provides the organization a person who is “self-confident, self-directed, honest, energetic, loyal,

committed, and is able to develop and implement a vision” (Finkelman, 2016, p. 14). They are essential for the betterment of the organization and its future by empowering staff and helping guide change. Furthermore, transformational leadership is correlated to integrated thinking, innovation, and change to challenges in the workplace (Campbell, 2018). The style of leadership motivates individuals to perform at their best for the good of the organization and enhances team collaboration to guarantee best practices.

### **Specific Project Aim**

The specific aim of this project is to improve patient satisfaction by refining patient education at GGEC. The current OAS CAHPS survey data reveal subpar results for GGEC compared to other ambulatory surgery centers in the region. A key driver in our OAS CAHPS survey is education and information regarding anesthesia, which received scores below 50<sup>th</sup> percentile since January of 2018 and clearly shows a need for improvement (Appendix Q). Patients feel that the center does not explain the possible side effects of the anesthesia in a way they can understand. Based on comments on the surveys, patients reported confusion regarding dietary restrictions after procedures and had a lack of understanding of what to expect once they walk into the lobby. Therefore, an educational handout will include a flow map of the patient’s journey throughout the center from registration to discharge, and another dietary suggestion/restriction handout will be introduced. The GANTT chart shows that this quality improvement project will take place from October 2018 to December 2018 (Appendix K). Patient surveys will be electronically mailed at the end of December 2018 by NRC health and results will be posted online on January of 2019. By Quarter 4 (end of December), patient satisfaction scores will be assessed for improvement of scores equal to greater than the 50<sup>th</sup>



percentile. Addressing patient education concerns should lead to enhanced patient satisfaction and better compliance with procedure outcomes (Marcus, 2014).

### Methods

### Context

The concept of a microsystem is to provide patients with the highest quality care, accessibility, and affordability at the frontline of care. GGEC is partnered with eleven physicians and has a total of fourteen credentialed physicians performing procedures at the center. There are sixteen contracted and credentialed anesthesiologists. GGEC currently employs twenty-one staff members including five 1.0 FTE nurses, two 0.6 FTE nurses, six float pool nurses, three endoscopy technicians, two unit clerks, a charge nurse, director of nursing, and a nurse regional administrator. In this microsystem, a small group of people work towards a shared goal composed of the P's: purpose, patients, patients, processes, and patterns (See Appendix D).

Work flow and processes of GGEC are heavily patient-centered and efficient (See Appendix E). Anesthesiologists briefly meet with patients the day of their procedure to discuss any pertinent health concerns and sedation processes regarding Propofol administration. During the post-operative process (20-30 min), nurses go over discharge planning with the patients. Discharge planning includes written instructions regarding what to expect, complications, and procedural findings. Verbal discharge instructions include various food suggestions and restrictions. Furthermore, most patients have questions answered about the medication they received for sedation. Although, patients are awake and alert, many tend to forget what was said during discharge.

The stakeholder analysis (See Appendix F) reveals that physicians' interest in the project will enhance patient loyalty and compliance. According to Prakash (2010), patient satisfaction is

linked to patient loyalty, improves patient retention, less vulnerable to price wars, consistent profitability, increased staff morale, and reduced risk of malpractice suits. In addition to, physician bonuses are linked to patient evaluation of their interaction with them (Prakash, 2010). Anesthesia providers' interest reflects their patients understanding of health literacy regarding anesthesia services. The evaluation of services is an important aspect of continuous quality improvement in anesthesia. Poor quality of anesthesia services may discourage patients from using accessible resources (Gebremedhn, Chekol, Amberbir, & Flatie, 2015). The nursing administration's interest in the program reveals the success and strong center performance across the region. Satisfaction measures is an important component of the organizational performance (Koné Péfoyo & Wodchis (2013). Lastly, the nursing and frontline staffs' incentive in the program reflects the amount of the bi-annual bonus program. An increase in patient satisfaction will lead to an increase of staff morale and productivity (Prakash, 2010).

A SWOT analysis (See Appendix G) of the proposed quality project reveals the strengths of improving patient education. This project is expected to be cost effective and standard information dissemination will be provided. Weaknesses include the possibility that nurses may forget to place handouts into the patient's discharge envelope, and the limitations that handouts are written in English only. Opportunities included improved patient satisfaction, increased patient education, better patient outcomes, and improved physician and center performance and success. No threats were identified in this analysis.

The fishbone analysis shows potential causes of the problem in order to identify subpar patient satisfaction measures (Appendix H). Potential causes include communication barriers, nursing staff confidence levels, physician-patient interaction, time management, patient knowledge deficit, etc. Furthermore, communication between the patient, the gastroenterologist,

anesthesia provider, and RNs are essential factors of providing high quality care and improving the patient care processes. AHRQ (2017) suggests that effective communication is the foundation for better health outcomes, patient safety, and the perceptions of quality. Utilizing printed materials to enhance patient education is a strategic tool to improve communication.

### **Intervention**

It is projected that the cost for implementing this project is minimal as materials such as ink and paper and the time to create the handouts would be the most substantial (Appendix I). Materials would cost an average of an additional \$50-\$60 per month (0.10/per page). Secondly, the charge nurse time to create the handouts would be a one-time amount of \$520 (\$65/hr x 8 hours). Patient handouts will be utilized to help to improve patient scores (See Appendix E, Appendix M, Appendix N). The charge nurse, lead anesthesiologist, nurse administrator, and the medical director will be involved in the quality improvement project. The charge nurse will create the handouts and the lead anesthesiologist will edit them. Then, the charge nurse will submit the final handouts to the nurse administrator to be presented in the next governing board meeting for approval by the medical director. Once approved, the new packet will be given to all affiliated gastroenterologist offices and will be available in the center for patients. Staff members will be encouraged to submit comments and suggestions to improve the patient education handouts. Patient satisfaction scores will be continuously monitoring to determine if the intervention is successful.

### **Measures**

IHI (2017) states that measurement is important part to determine if a quality improvement project is successful. The endoscopy center's patient satisfaction surveys are measured every quarter using the National Research Corporation (NRC) Health surveys. NRC

health will randomly mail surveys to patients until a minimum of 30 surveys are returned. Patient satisfaction has gained popularity over the years as a tool to measure quality improvement. According to Al-Abri and Al-Balushi (2014), the importance of evaluating the patient care experience allows for “opportunity for improvement, enhance strategic decision making, reduce cost, meet patients' expectations, frame strategies for effective management, monitor healthcare performance of health plans and provide benchmarking” across the healthcare continuum (p. 4). Our patient satisfaction surveys focus on the patient experience by helping build trust and establishing empathy using holistic and proprietary methods (NRC Health, n.d.). OAS CAHPS surveys have the advantage of good reliability and validity, however, offer limited scope of survey questions (Al-Abri and Al-Balushi, 2014). Patient surveys are identified to be an important instrument to measure success of ASCs.

### **Ethical Considerations**

An ethical aspect of implementing and studying the intervention is treating patients with equity and distributive justice. Health literacy is the ability to process medical information. Limited health literacy affects 80 million Americans considering their primary language, cultural beliefs, and underlying knowledge of their medical condition (Tauqeer, 2017). Using medical jargon can build barriers between patients and healthcare providers. It is important to identify and expose these potential hurdles to providing high quality care. Therefore, patient education should be written in a sixth grade level or lower to increase understanding.

### **Results**

The initial steps of the interventions required revising the printed materials prior to approval by the governing board (Appendix N, Appendix O, Appendix P). During implementation, a modification was made to cut costs by laminating two of the three patient

education forms and hand out to patients during admission and pre-operative phases. Constant reminders and re-training of nursing and non-nursing staff was required to gain full compliance of the quality improvement activity which was finally achieved mid-November. As of December 2018, patient satisfaction scores are being released on the NRC website. However, only 13 out of 30 patient surveys have been retrieved and scores remain the same. It is important to acknowledge that quick wins and early results can cause tension for project leaders (Dixon-Woods, McNicol, & Martin, 2012). Therefore, continuous monitoring of OAS CAHPS scores and using the handouts consistently are necessary to achieve positive results over-time.

Some issues that posed a challenge was full compliance from nursing and non-nursing staff to utilize the patient handouts. On the first day of implementation, there were 15 copies of anesthesia information sheets and 10 copies remained by the end of the day. In order to maintain compliance amongst healthcare professionals, constant reminders and re-training were needed to reexamine current and historical data that shows the need for quality improvement. Furthermore, reminding them that patient satisfaction measurements correlates to the amount of their bi-annual bonus creates an incentive to prioritize the quality improvement project.

#### Discussion

#### **Summary**

Healthcare professionals understand that increasing patient satisfaction scores is a significant goal since the enactment of the ACA. Patient satisfaction is key indicator for the success of the physician and its organization. OAS CAHPS surveys provide meaningful, measurable, and actionable data to depict the quality of healthcare systems. Since August 2018, OAS CAHPS surveys are below the 50<sup>th</sup> percentile under the information and education findings. Therefore, it is essential for GGEC to increase current patient satisfaction scores through

improving patient education. Based on patients' comments and actual scores on OAS CAHPS surveys, three specific education handouts were selected. Patient materials are a cost effective tool for patient education (See Appendix I). The handouts were revised and edited prior to implementation. All frontline staff required education and training regarding the need for the quality improvement project. Current data reveals that OAS CAHPS scores have not changed since implementation of the project. It is important to acknowledge that the sample size is low at this time. Although, patients reported appreciativeness regarding the education forms. Furthermore, is it essential for project leaders to anticipate pitfalls, yet at the same time to provide staff encouragement to maintain enthusiasm and commitment to the project.

### **Conclusions**

Since implementation of the patient education program, patients have reported tremendous gratitude to staff. However, no changes in OAS CAHPS scores were revealed at this time. Continuous monitoring of OAS CAHPS scores and patient comments are needed to provide staff the data to sustain the project. Acknowledging the importance for improving patient education is one step to improving satisfaction scores. The project has gained attention from upper management and will be used for other quality improvement projects in other Sutter Health affiliated endoscopy centers across Northern California.

### References

- Agency for Healthcare Research and Quality. (2017). Communications to improve quality strategy implementation handbook. Retrieved from [https://www.ahrq.gov/sites/default/files/wysiwyg/professionals/systems/hospital/engagingfamilies/strategy2/Strat2\\_Implement\\_Hndbook\\_508.pdf](https://www.ahrq.gov/sites/default/files/wysiwyg/professionals/systems/hospital/engagingfamilies/strategy2/Strat2_Implement_Hndbook_508.pdf)
- Al-Abri, R., Al-Balushi, A. (2014). Patient satisfaction survey as a tool towards quality improvement. *Oman Medical Journal*, 29(1), 3-7. doi: 10.5001/omj.2014.02
- Campbell, J. W. (2018). Efficiency, incentives, and transformational leadership: Understanding collaboration preferences in the public sector. *Public Performance & Management Review*, 41(2), 277-299. doi: <https://doi.org/10.1080/15309576.2017.1403332>
- Centers for Medicare & Medicaid Services (2016). Outpatient and ambulatory surgery CAHPS (OAS CAHPS). Retrieved from <https://oascahps.org/General-Information/About-OAS-CAHPS-Survey>
- Danyell. (2016). Patient education is key to cutting healthcare costs. Retrieved from <https://www.docresponse.com/patient-education-key-cutting-healthcare-costs/>
- Dixon-Woods, M., McNicol, S., Martin, G. (2012). Ten challenges in improving quality in healthcare: Lessons from the Health Foundation's programme evaluation and relevant literature. *BMJ Quality & Safety*, 21(10). doi: <http://dx.doi.org/10.1136/bmjqs-2011-000760>
- Finkelman, A. (2016). *Leadership and management for nurses: Core competencies for quality care (3<sup>rd</sup> ed.)*. Upper Saddle River, NJ: Pearson.

- Gadalean, I., Cheptea, M., & Constantin, I. (2011). Evaluation of patient satisfaction. *Applied Medical Informatics*, 29(4), 41-47. Retrieved from <http://ami.info.umfcluj.ro/index.php/AMI/article/viewFile/361/pdf>
- Gebremedhn, E. G., Chekol, W. B., Amberbir, W. D., & Flatie, T. D. (2015). Patient satisfaction with anaesthesia services and associated factors at the University of Gondar Hospital, 2013: A cross-sectional study. *BMC research notes*, 8(377). doi:10.1186/s13104-015-1332-4
- Institute of Healthcare Improvement. (2018). The patient experience: Improving safety, efficiency, and CAHPS through patient-centered care. Retrieved from <http://www.ihl.org/education/InPersonTraining/ThePatientExperience/Pages/default.aspx>
- Kaminski, J. (2011). Diffusion of innovation theory. *Canadian Journal of Nursing Informatics*, 6(2). Retrieved from <http://cjni.net/journal/?p=1444>
- Koné Péfoyo, A. J., & Wodchis, W. P. (2013). Organizational performance impacting patient satisfaction in Ontario hospitals: A multilevel analysis. *BMC Research Notes*, 6, 509. doi:10.1186/1756-0500-6-509
- Marcus, C. (2014). Strategies for improving the quality of verbal patient and family education: A review of the literature and creation of the EDUCATE model. *Health Psychology and Behavioral Medicine*, 2(1), 482-495. doi: 10.1080/21642850.2014.900450
- Mitchell, G. (2012). Selecting the best theory to implement planned change. *Nursing Management*, 20(1), 32-37. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=ccm&AN=108003510&site=eds-live&scope=site&custid=s3818721>
- NRC Health. (n.d.). NRC health. Retrieved from <https://nrchealth.com>



Prakash, B. (2010). Patient satisfaction. *Journal of Cutaneous and Aesthetic Surgery*, 3(3), 151-155. doi: 10.4103/0974-2077.74491

Sutter Health. (n.d.). Mission, vision and values. Retrieved from <https://www.sutterhealth.org/about/mission>

Sutton, A. V., Ellis, C. N., Spragg, S., Thorpe, J., Tsai, K., Patel, S.,...Crew, A. B. (2017). Improving patient satisfaction in dermatology: A prospective study of an urban dermatology clinic. *Cutis*, 99(4), 273-278. Retrieved from <https://www.mdedge.com/cutis/article/135087/practice-management>

Tauqeer, Z. (2017). To understand and be understood: The ethics of language, literacy, and hierarchy in medicine. *AMA Journal of Ethics*, 19(3), 234-237. doi: 10.1001/journalofethics.2017.19.3.fred1-1703

Appendix A

PICO Statement

**Patient/Population:** Patients admitted to an outpatient endoscopy center

**Intervention:** Use of patient education packets before and after procedures

**Comparison:** Verbally discussing patient education

**Outcome:** Increasing patient satisfaction scores

Appendix B

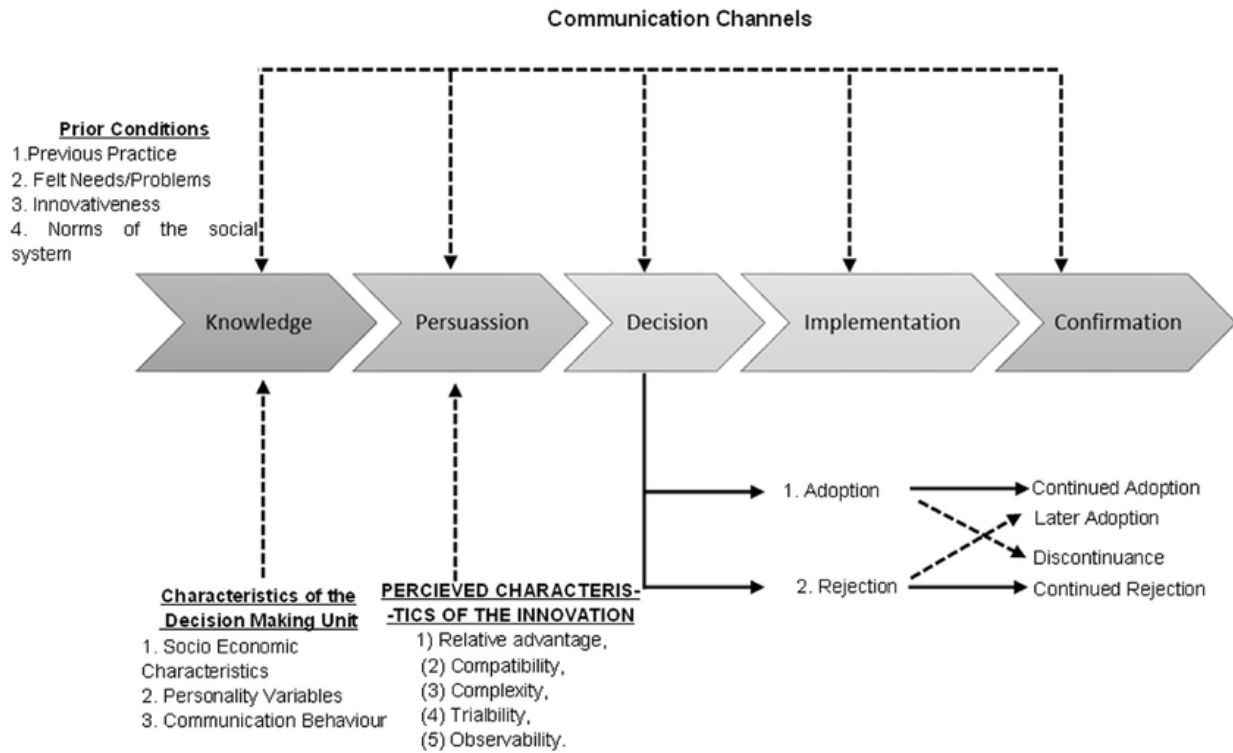
Evaluation Table

First Author (Year)	Design Method	Conceptual Framework	Sample/ Setting	Variables studied and their Definitions	Measurement	Data Analysis	Findings	Appraisal Worth to Practice
<b>Gadalean et al. (2011).</b> <b>Evaluation of patient satisfaction.</b> <i>Applied Medical Informatics, 29(4), 41-47</i>	Prospective Study	None	Purposive sampling:  N = 106  Average age: 54 (Female and Male)  Education level  Diagnosis: Ovarian neo, colon disease, medical therapy cases  Discharged within 24 hours from ICU	Independent variable: Patients  Dependent variable: Education level and diagnosis	Anonymous questionnaires grouped into two sections related to factors of satisfaction and dissatisfaction	Statistical analysis using the chi-square test	Patient satisfaction is closely related to nursing activities and influenced by education level and diagnosis	Yes
<b>Sutton et al. (2017).</b> <b>Improving patient satisfaction in dermatology: A prospective study of an urban dermatology clinic.</b> <i>Cutis, 99(4), 273-278</i>	Prospective study	None	Purposive sampling:  N = 298 participants  Age 18-29: 39 30-49: 92 50-64: 139 65 +: 27  Male: 151 Female: 147	Independent variable: Patients aging from 18 to 65 years and older  Dependent variable: age, sex, ethnicity, language, level of education, income	Patient Questionnaire Short Form developed by RAND Corporation	Statistical analysis conducted using SAS software version 9.2	Achieving high patient satisfaction scores validates physician success. Patient surveys can establish interventions that can improve satisfaction in the dermatology office	Yes

Used with permission, © 2007 Fineout-Overholt

Appendix C

A Model of Five Stages in the Innovation-Decision Process



Rogers. (1983). Diffusion of Innovations.

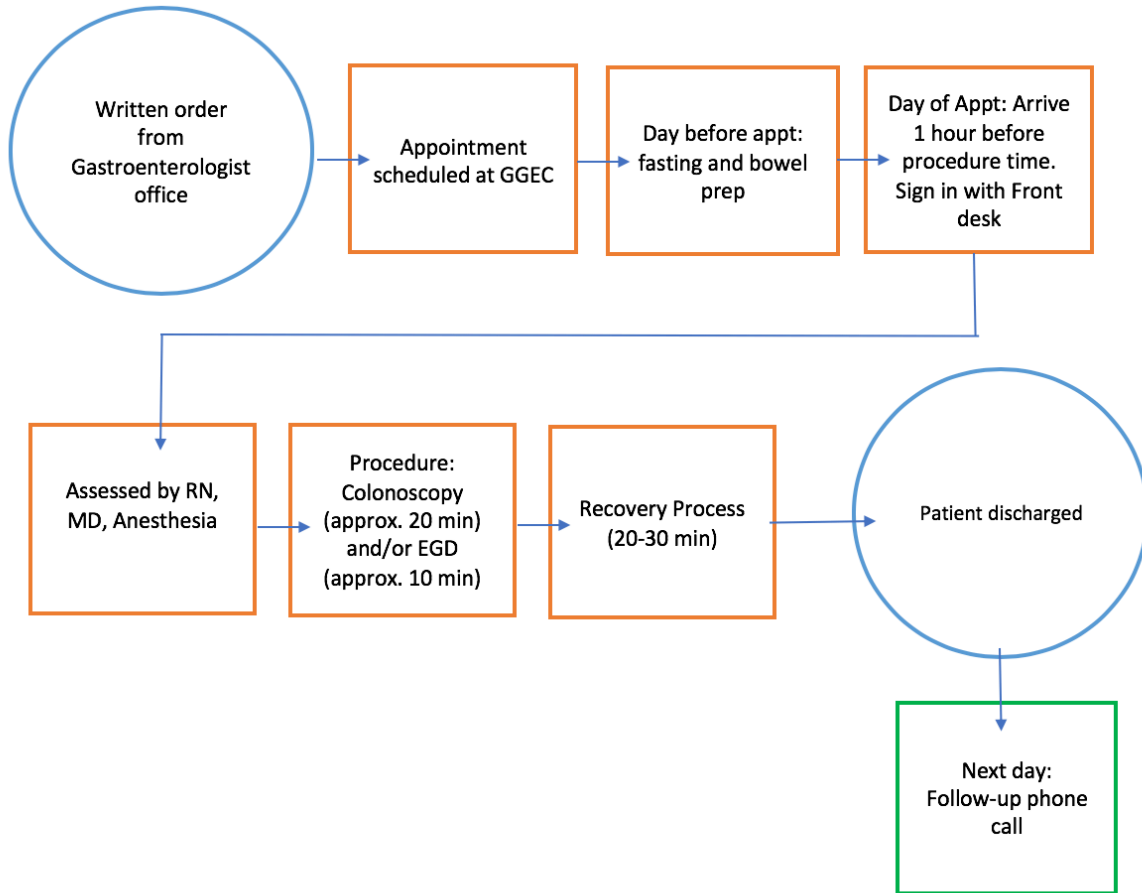
Appendix D

Microsystem Assessment using 5P's

Purpose	Patients	People	Processes	Patterns
Improving OAS CAHPS scores through refining patient education.	<p>All patients admitted into GGEC.</p> <p>- The patient age distribution is estimated to be about 50 years old ranging from 18 to 90 years old.</p> <p>- 500 to 600 patients per month</p>	<p>Anesthesia providers only verbally educate patients regarding anesthesia prior to procedure</p> <p>RNs verbally discuss dietary restrictions during discharge process while patients are recovering from Propofol sedation</p> <p>Patients unaware of what to expect from admission to discharge in the center</p>	<p>Integrating printed materials for patient education:</p> <ul style="list-style-type: none"> <li>- Sedation handout</li> <li>- Dietary suggestions/restrictions handout</li> <li>- Patient process flow sheet</li> </ul>	<p>Patients continuously rated anesthesia education lower than other key findings in OAS CAHPS survey</p> <p>Patient left comments on surveys:</p> <ul style="list-style-type: none"> <li>- "Did not know what to expect when I stepped into the lobby"</li> <li>- "Unclear of what foods and drinks to have after my procedure"</li> </ul>

Appendix E

Golden Gate Endoscopy Center Workflow Processes



Appendix F

Stakeholder Analysis

Stakeholder	Interest or requirement in the program	What the program needs from stakeholder	Perceived attitudes and risks	Actions to take
Physicians	- Patient loyalty and compliance - Medicare reimbursement and bonus	Full buy-in	May not 100% agree with the information provided	Present to Governing board for approval
Anesthesia Providers	- Increased patient satisfaction scores in OAS CAHPS survey under anesthesia - Increased patient health literacy regarding sedation	Full buy-in	May not 100% agree with the information provided	Send to lead anesthesiologists to edit information, if needed
Nursing Administration	- Increased patient satisfaction from OAS CAHPS survey - Successful and strong center performance	Full buy-in	May not 100% agree with the information provided	Provide leadership and education to nursing staff about information dissemination
RNs	- Increased patient satisfaction scores on OAS CAHPS - Higher bonus incentives	- Suggestions and feedback - Full buy-in	May forget to hand out to patients during discharge process	Continuous huddles/staff meetings regarding education efforts.

AHRQ. (2013). Tool 1B: Stakeholder analysis.

## Appendix G

## SWOT Analysis

**Strengths**

- Cost efficiency (paper, ink)
- Standard information dissemination:
  - medication for sedation
  - dietary restrictions and suggestions

**Weaknesses**

- Nurses may forget to hand out discharge paperwork to patients
- Discharge paperwork is written in English

**Opportunities**

- Increases patient education
- Increases OAS CAHPS scores
- Increases nursing and provider collaboration
- Improved physician and center performance

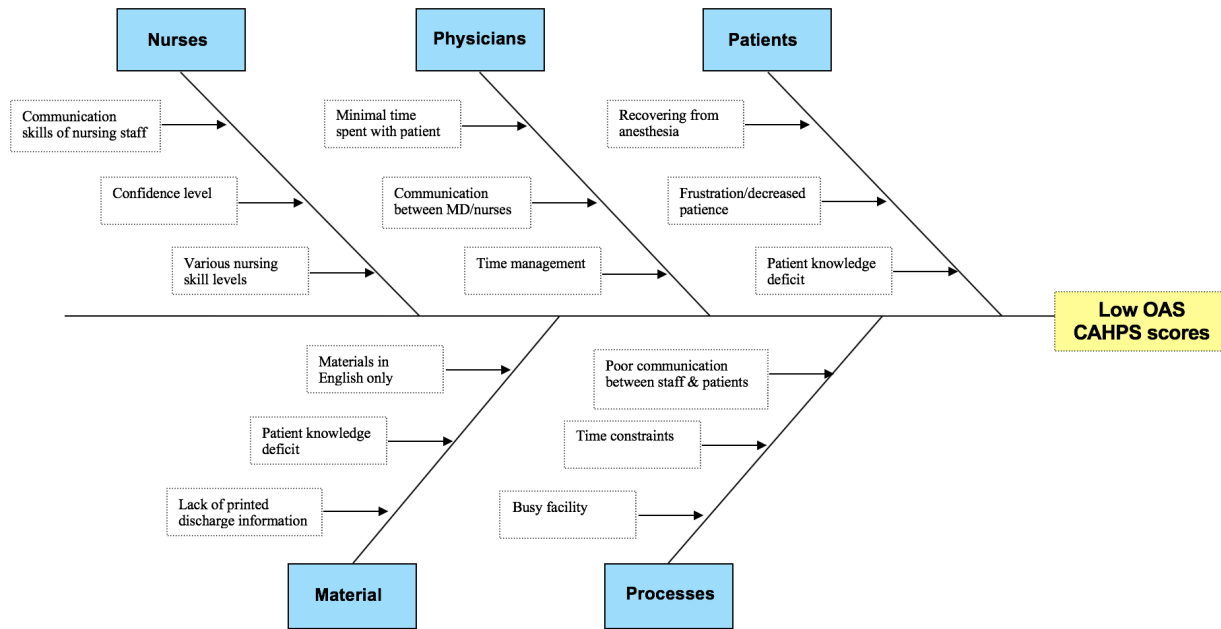
**Threats**

- None identified



Appendix H

Fishbone Analysis



## Appendix I

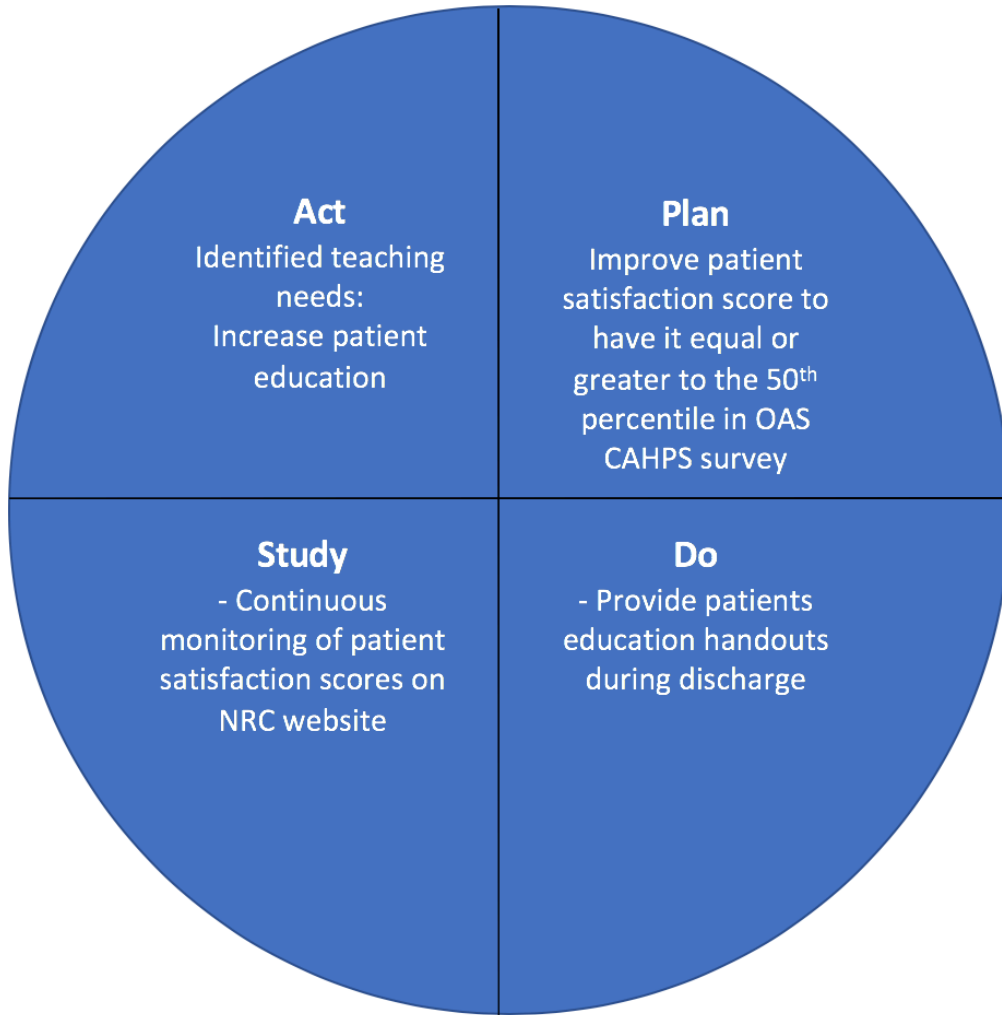
## Return on Investment

Return on Investment				
Cost	October	November	December	January
Charge Nurse Time	\$520	\$0	\$0	\$0
Materials	\$50	\$50	\$50	\$50

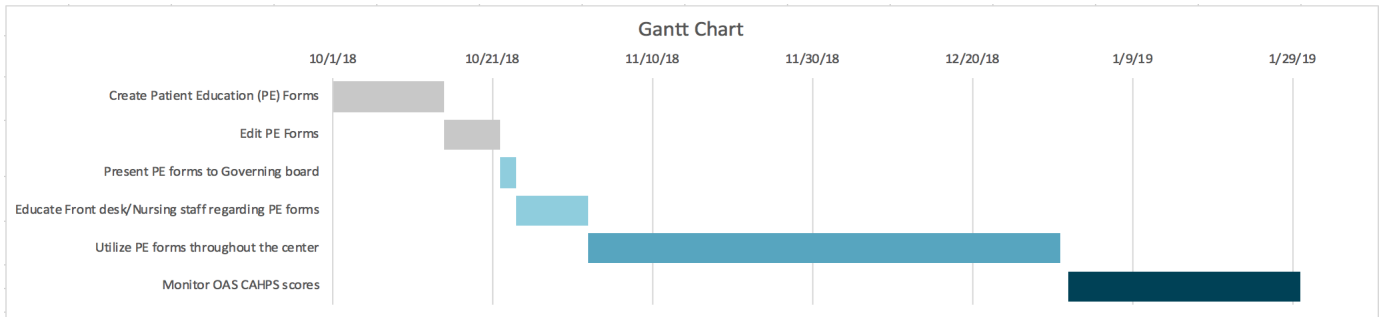
\*Total costs were an average of \$412 lower for patients who received proper education than those who did not (Danyell, 2016).

Appendix J

PDSA Cycle 1: October 2018



### Appendix K GANTT Chart



## Appendix L

## Handout #1

**Diprivan propofol****Generic Name:** propofol**Pronounced:** PROE poe fol**Brand Names:** Diprivan, Propoven**What is the most important information I should know about propofol?**

Before you receive propofol, tell your doctor about all your medical conditions and allergies. Also make sure your doctor knows if you are pregnant or breast-feeding.

**What is propofol?**

- Propofol slows the activity of your brain and nervous system.
- Propofol is used to help you relax before and during general anesthesia for surgery or other medical procedures.
- Propofol is also used to sedate a patient who is under critical care and needs a mechanical ventilator (breathing machine).
- Propofol may also be used for purposes not listed in this medication guide.

**How is propofol given?**

Propofol is injected into a vein through an IV. A healthcare provider will give you this injection. You will relax and fall asleep very quickly after propofol is injected. Your breathing, blood pressure, oxygen levels, kidney function, and other vital signs will be watched closely while you are under the effects of propofol.

**What should I avoid after receiving propofol?**

Propofol can cause severe drowsiness or dizziness, which may last for several hours. You will need someone to drive you home after your surgery or procedure. Do not drive yourself or do anything that requires you to be awake and alert for at least 24 hours after you have been treated with propofol.

**What are the possible side effects of propofol?**

Get emergency medical help if you have *signs of an allergic reaction*: hives; difficulty breathing; swelling of your face, lips, tongue, or throat.

*Common side effects may include:*

mild itching or rash;  
fast or slow heart rate; or  
slight burning or stinging around the IV needle.

**Where can I get more information?**

Your doctor or pharmacist can provide more information about propofol.

## Appendix M

## Handout #2

**What to eat after your procedure?**

What you eat and drink after the procedure is important. The preparations you went through to prepare for the colonoscopy are dehydrating, so putting fluids and electrolytes back into your system is vital.

**Suggestions**

- drinks with electrolytes
- water
- fruit juice
- vegetable juice
- herbal tea
- saltine crackers
- graham crackers
- soup
- applesauce
- scrambled eggs
- tender, cooked vegetables
- canned fruit, such as peaches
- yogurt
- Jell-O
- popsicles
- pudding
- mashed or baked potato
- white bread or toast
- smooth nut butter
- soft white fish
- apple butter

**Restrictions**

- alcoholic beverages
- steak, or any type of tough, hard-to-digest meat
- whole grain bread
- whole grain crackers, or crackers with seeds
- raw vegetables
- corn
- legumes
- brown rice
- fruit with the skin on
- dried fruit, such as raisins
- coconut
- spices, such as garlic, curry, and red pepper
- highly-seasoned foods
- crunchy nut butters
- popcorn
- fried food
- nuts

Copyright © 2005 - 2018 Healthline Media. All rights reserved. Our content does not constitute a medical consultation. See a certified medical professional for diagnosis. [Privacy Policy](#).

## Appendix N

## Handout #1 (edited)

**Diprivan propofol**

**Generic Name:** propofol

**Pronounced:** PROE poe fol

**Brand Names:** Diprivan, Propoven

**What is the most important information I should know about propofol?**

Before you receive propofol, tell your doctor about all your medical conditions, drugs, and food allergies. Also make sure your doctor knows if you are pregnant or breast-feeding.

**What is propofol?**

- Propofol is an intravenous sedation drug that slows the activity of your brain and nervous system.
- Propofol is used to help you relax before and during your procedure(s).

**How is propofol given?**

Propofol is injected into a vein through an IV. An anesthesiologist will give you this injection. You will relax and fall asleep very quickly after propofol is injected. Your breathing, blood pressure, oxygen levels, and other vital signs will be monitored while you are under the effects of propofol.

**What should I avoid after receiving propofol?**

Propofol can cause severe drowsiness or dizziness, which may last for several hours. You will need someone to drive you home after your procedure. Do not drive yourself or do anything that requires you to be awake and alert for at least 24 hours after you have been treated with propofol. Do not drink alcohol for the remainder of the day. Mental alertness may be impaired.

**What are the possible side effects of propofol?**

- mild itching or rash;
- fast or slow heart rate; or
- slight burning or stinging around the IV needle.

**Get emergency medical help if you have *signs of an allergic reaction: hives; difficulty breathing; swelling of your face, lips, tongue, or throat.***

**Where can I get more information?**

Your doctor can provide more information about propofol.

Copyright © 2018 Epocrates, Inc. All Rights Reserved. Epocrates® Online is a trademark of Epocrates Inc, in the U.S. and elsewhere.

## Appendix O

## Handout #2 (edited)



### What to eat after your procedure?

What you eat and drink after the procedure is important. The preparations you went through to prepare for the colonoscopy are dehydrating, so putting fluids and electrolytes back into your system is vital. Keep in mind, that these are only suggestions for your first meal after your procedure. Return to your normal diet after the first meal.

#### Suggestions

- drinks with electrolytes
- water
- fruit juice
- vegetable juice
- herbal tea
- saltine crackers
- graham crackers
- soup
- scrambled eggs
- tender, cooked vegetables
- canned fruit, such as peaches
- yogurt
- porridge
- popsicles
- pudding
- mashed or baked potato
- white bread or toast
- smooth nut butter
- soft white fish
- apple butter

#### Food/Drinks to avoid

- alcoholic beverages
- steak, or any type of tough, hard-to-digest meat
- whole grain bread
- whole grain crackers, or crackers with seeds
- raw vegetables
- corn
- legumes
- brown rice
- fruit with the skin on
- dried fruit, such as raisins
- spices, such as garlic, curry, and red pepper
- highly-seasoned foods
- crunchy nut butters
- popcorn
- fried food
- nuts

Copyright © 2005 - 2018 Healthline Media. All rights reserved. Our content does not constitute a medical consultation. See a certified medical professional for diagnosis. [Privacy Policy](#).

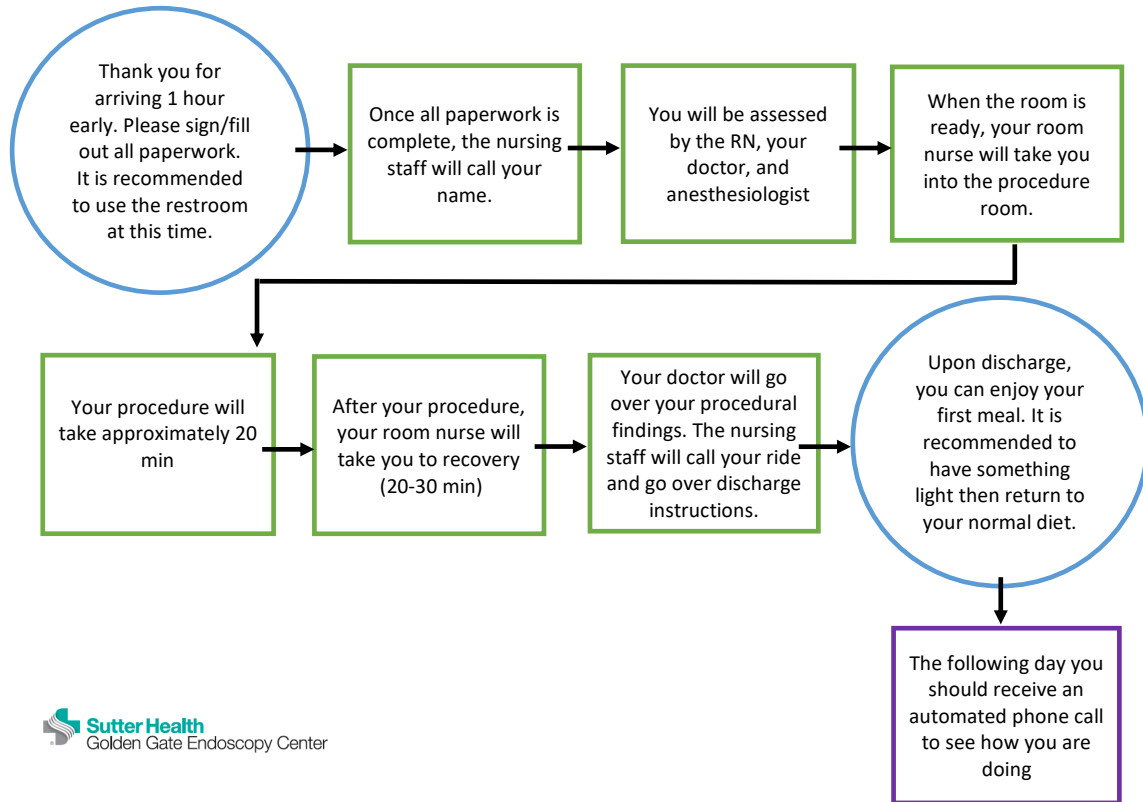


Appendix P

Handout #3 (edited)

**WELCOME TO GOLDEN GATE ENDOSCOPY CENTER**

What to expect during your visit



Appendix Q

OAS CAHPS Scores – August 2018

Overall

Overall		NRC 50th Percentile*	NRC 75th Percentile	Current YTD	Prior Year	12 Months‡	Qtr 3 2018‡	Qtr 2 2018	Qtr 1 2018	Qtr 4 2017
Using any number from 0 to 10, where 0 is the worst facility possible and 10 is the best facility possible, what number would you use to rate this facility?		85.2%	88.9%	85.0% PR=49	82.8% PR=35	84.2% PR=43	87.0%	84.6%	83.8%	81.7%

Key Drivers

Key Drivers	more...		NRC 50th Percentile*	NRC 75th Percentile	Current YTD	Prior Year	12 Months‡	Qtr 3 2018‡	Qtr 2 2018	Qtr 1 2018	Qtr 4 2017
<b>Information and Education</b>			89.7%	91.5%	88.2% PR=32	89.8% PR=53	88.3% PR=33	87.2%	86.3%	90.8%	88.4%
Did your doctor or anyone from the facility prepare you for what to expect during your recovery?			85.9%	88.7%	84.8% PR=40	86.4% PR=55	84.8% PR=40	84.6%	82.5%	87.3%	84.5%
Did your doctor or anyone from the facility explain the process of giving anesthesia in a way that was easy to understand?			92.9%	94.5%	91.5% PR=33	94.6% PR=75	92.1% PR=39	91.2%	91.8%	91.3%	93.9%
Before your procedure, did your doctor or anyone from the facility give you easy to understand instructions about getting ready for your procedure?			93.5%	95.1%	91.3% PR=28	92.8% PR=43	91.6% PR=31	90.1%	89.1%	94.4%	92.2%
Did your doctor or anyone from the facility explain the possible side effects of the anesthesia in a way that was easy to understand?			83.1%	86.4%	76.0% PR=12	77.5% PR=16	76.4% PR=13	78.2%	71.8%	78.4%	77.0%