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The Examination of Expectations in Day-Surgery Patients and the Development of a Patient Satisfaction Questionnaire for Day-Surgery Patients

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A thesis submitted in partial fulfillment of the requirements for the Master of Science degree in Surgery

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Abstract

Patient satisfaction has become a growing area of study within health care. Existing hospital-wide satisfaction tools don't provide the specificity that various departments require to truly get a sense of where they stand in terms of patient satisfaction. Further, many of these tools fail to consider an important component associated with satisfaction, *patient expectations*. Currently, there is no patient satisfaction tool specific to adult day-surgery patients that has been developed through a careful exploration of patient expectations. In this qualitative study, we conducted a series of semi-structured interviews on patients undergoing outpatient surgery to explore expectations. We performed a thematic analysis on our data and distilled six themes of expectations: Communication, Safety, Responsiveness, Compassionate Care, Flow, and Creating Confidence. Using these themes, we developed a preliminary Patient Satisfaction Questionnaire for Day-Surgery Patients. The resulting questionnaire can be used by institutions to gather patient satisfaction data in those undergoing day-surgery.

Keywords

Patient Satisfaction, Patient Reported Outcome Measure, Patient Expectations, Day-surgery, Outpatient Surgery, Thematic Analysis, Survey, Questionnaire.

Summary for Lay Audience

In today's surgical world, it is no longer sufficient to measure only clinical outcomes such as death and complication rates. In order to gain a holistic appreciation of how well we are serving our surgical patients we need to capture a missing puzzle piece: the patient voice. One way to do this is by measuring patient satisfaction. Existing hospital-wide satisfaction surveys do not provide the specificity to assess patients' satisfaction in the delivery of care across various different departments in the hospital. For example, a tool that measures patient satisfaction in patients who undergo surgery and are admitted for a hospital stay, are likely not specific enough to measure patient satisfaction in those patients who come to hospital for surgery and then are discharged the same day. Further, many of these tools fail to consider an important component associated with satisfaction, *patient expectations*. Currently, there are no patient satisfaction tools specific to those undergoing day-surgery that have been developed based on a careful exploration of patient expectations.

In this study, we conducted a series of loosely structured interviews on patients undergoing outpatient surgery to explore what their expectations were for the day of surgery. We analyzed our data using a set of steps called thematic analysis to help us characterize and identify what sort of expectations patients had. We used the analysis to help distill all of the information regarding patient expectations into six different themes: Communication, Safety, Responsiveness, Compassionate Care, Flow, and Creating Confidence. Using these themes, we developed a preliminary Patient Satisfaction Questionnaire for Day-Surgery Patients. The resulting questionnaire can be used by institutions to gather patient satisfaction data in those undergoing day-surgery.

Acknowledgments

There are several people without whom this thesis would have never been possible.

I would like to thank Jake Davidson, who was responsible for getting this study off the ground by assisting in putting together our ethics and study materials and laying the foundation in pre-admit clinic for this to happen. Thank you so much for answering your texts on weekends and for keeping me organized throughout it all.

Thank you to the departments of surgery that agreed to allow me to interview your patients and thank you to the kind staff at the pre-admission clinic at Victoria Hospital for allowing me space and time to conduct these interviews. Thank you to Janel Dhooma who helped transcribe interviews tirelessly. Thank you to Linda Qu for your very valuable time that you spent proofreading this thesis. Thank you to Melissa Holdren, Layla Amer, Sarah Ollier and Karishma Desai for your encouragement, support and for lifting me up.

My deepest and most sincere gratitude to my supervisors who were endless sources of knowledge, wisdom and encouragement. Thank you so much, Dr. Sayra Cristancho, for all of your careful guidance as I navigated qualitative research for the first time. Without your insightful suggestions and reflections, I would still be trying to figure out what I want to say. Thank you is not a big enough phrase to express my gratitude to Dr. Sarah Jones. You have been my mentor, my teacher, my cheerleader and a valued and trusted confidante throughout this entire process. Thank you so much for helping me find my way, and for your unflagging belief in me.

Lastly, I'd like to thank my parents for their unwavering support and for giving me an opportunity to see through a patient's eyes.

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Western Research

Date: 13 September 2018

To: Dr. Chris Bailey

Project ID: 111954

Study Title: Development of a Patient Satisfaction Questionnaire for Adult Surgical Patients

Application Type: HSREB Initial Application

Review Type: Delegated

Full Board Reporting Date: October 2, 2018

Date Approval Issued: 13/Sep/2018

REB Approval Expiry Date: 13/Sep/2019

Dear Dr. Chris Bailey

The Western University Health Science Research Ethics Board (HSREB) has reviewed and approved the above mentioned study as described in the WREM application form, as of the HSREB Initial Approval Date noted above. This research study is to be conducted by the investigator noted above. All other required institutional approvals must also be obtained prior to the conduct of the study.

Documents Approved:

Document Name	Document Type	Document Date	Document Version
LOI and Consent form Patient Expectations and Satisfaction V2	Written Consent/Assent	31/Aug/2018	2
Post-Surgery Interview Guide V1	Interview Guide	13/Jul/2018	1
Pre-Surgery Demographics Questionnaire V1	Paper Survey	13/Jul/2018	1
Pre-Surgery Interview Guide V1	Interview Guide	13/Jul/2018	1
Protocol for Patient Satisfaction and Expectations V2	Protocol	31/Aug/2018	2

No deviations from, or changes to, the protocol or WREM application should be initiated without prior written approval of an appropriate amendment from Western HSREB, except when necessary to eliminate immediate hazard(s) to study participants or when the change(s) involves only administrative or logistical aspects of the trial.

REB members involved in the research project do not participate in the review, discussion or decision.

The Western University HSREB operates in compliance with, and is constituted in accordance with, the requirements of the TriCouncil Policy Statement: Ethical Conduct for Research Involving Humans (TCPS 2); the International Conference on Harmonisation Good Clinical Practice Consolidated Guideline (ICH GCP); Part C, Division 5 of the Food and Drug Regulations; Part 4 of the Natural Health Products Regulations; Part 3 of the Medical Devices Regulations and the provisions of the Ontario Personal Health Information Protection Act (PHIPA 2004) and its applicable regulations. The HSREB is registered with the U.S. Department of Health & Human Services under the IRB registration number IRB 00000940.

Please do not hesitate to contact us if you have any questions.

Sincerely,

Karen Gopaul, Ethics Officer on behalf of Dr. Joseph Gilbert, HSREB Chair

Note: This correspondence includes an electronic signature (validation and approval via an online system that is compliant with all regulations).

We are approaching you to participate in this study because we feel as though getting the experiences and expectations of the patient as they go through the surgery process will help us to create a satisfaction questionnaire that captures what is truly important to the patient. In doing so the hope is that the results from this questionnaire can be used as evidence to continue to improve the surgery experience for our patients.

Study Objectives

The primary objective of this study is to identify themes and important areas of overall hospital and surgery experience and use this information to develop a patient expectation and satisfaction questionnaire.

Study Design and Procedures

This is a qualitative study looking at pre- and post-surgery expectations for surgical patients. The data collected from this study will be used for the development of a patient expectation and satisfaction questionnaire. The development process includes conducting interviews with surgical patients before and after surgery at Victoria Hospital, London Health Sciences Centre. If you choose to take part in this study, you will participate in two interviews. First, will be an interview before your surgery, which will occur within a 2-6 week time period, between your anaesthesia/pre-operative consultation at the hospital and before the date of your scheduled surgery. The second interview is within 4 weeks after your date of discharge.

Study Sample

This study will aim to recruit 15-40 surgery patients for pre- and post-surgery interviews. This study will only include surgical procedures from Orthopaedics, Urology, and General Surgery. You are eligible to participate in this study if you are 18 years of age and over, are undergoing an elective surgical procedure (inpatient or day surgery/outpatient), and are able to speak, read, and write in English. You are not eligible to participate in the study if you are under the age of 18 years old, require a substitute decision maker, and cannot read, write, or speak English. You will be removed from the study if you do not complete both interviews after providing written consent.

Procedures

Surgical Patient Interviews

Interviews will be completed either by phone or in person by the research support staff and are estimated to last a maximum of one hour. The **pre-surgery interview** will involve a brief demographics questionnaire to collect demographic data and will also include a series of questions aimed to capture your expectations at each stage of your processing through the hospital. There are 6 main areas you will experience during your hospital encounter and they include: 1. Arrival at hospital, 2. Admission/Check-

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Chapter 1

1 General Introduction and Review of Literature

This chapter will introduce the concept of patient satisfaction. It will demonstrate its importance and will discuss some of the challenges in measuring patient satisfaction.

1.1 Patient Reported Outcome Measures (PROMs)

In improving the quality of care in surgical specialties, research has traditionally focused on areas that can be measured by conventional clinical outcomes such as mortality, complication rates and re-admission rates. These metrics are easily quantified and have clear value in ensuring high quality healthcare and thus have been a cornerstone of quality improvement research in surgical services.

Over time, patient-centeredness has emerged as a key tenant in the improvement of the quality of healthcare. In 2001, The Institute of Medicine targeted patient-centeredness as one of 6 goals for the improvement of health care and defined it as “providing care that is respectful of and representative to individual patient preferences, needs, and values and ensuring that patient values guide all clinical decisions”¹. Patient centered care encompasses a number of dimensions including the improvement of health literacy through information and education; coordination and integration of care; physical comfort; emotional support; and shared decision making to achieve personalized care².

In striving towards providing patient-centered care, it has become clear that a greater emphasis must be placed on elucidating the patient experience. Chow³ believes that the measurement of quality of health care can be taken from two distinct perspectives: that of the health care provider and that of the patient. He feels that as physicians, there is a natural tendency to view quality of care from the viewpoint of the health care provider which has resulted in our traditional outcome measures centering on operative clinical outcomes, such as mortality and postoperative infection rates³. These conventional surgical outcomes lack

consideration of the patient's perspective and do not provide space for the patient and care-giver voice to be heard.

This missing piece of the puzzle had been captured by the emergence of patient reported outcome measures or PROMs. PROMs have been used frequently in specialties such as oncology and palliative care where often it may be more appropriate to assess outcome measures such as symptom amelioration and functional status rather than endpoints such as mortality or complication rates⁴. In moving towards adopting a patient-centeredness approach to surgical care, PROMs are now often used alongside traditional surgical outcomes to obtain a holistic assessment of the quality of care being provided to surgical patients³. Some important PROMs in surgical care include pain, return to function, mood and patient satisfaction³. In Chow's review article, Patient-reported outcome measures: The importance of patient satisfaction in surgery, he categorized PROMs into three main areas: quality of life, current health state and patient satisfaction³. The remainder of this chapter delves into the concept of patient satisfaction as a whole and more specifically its value as it pertains to surgical care. An understanding of the importance of patient satisfaction forms the cornerstone for the rationale of this study. In this project, we ultimately seek to create a patient satisfaction questionnaire for use in adult day-surgery patients.

1.2 Patient Satisfaction

Patient satisfaction is a concept borrowed from consumer marketing ideology⁵. Satisfaction is an assessment of how a product or service measures against the anticipated expectations of the customer⁶. In terms of healthcare, patient satisfaction may be broadly thought of as the degree to which a patient feels they have received high-quality health care³. In Chow's review, he stated that patient satisfaction provides an ultimate endpoint of the patients' perspective and can be thought of as giving an end point to the assessment of the quality of health care³. Others such as Kupfer² warn against equating Patient Satisfaction with Patient Centered Care. He underscores the difference between patient centered care and patient satisfaction by stating that that physicians are not obligated to satisfy all demands by patients in a patient- centered practice². Indeed, this is a crucial difference between patient centered care and consumer marketing theory in which the goal

is to produce a product that satisfies all consumer expectation. Thus, we should consider patient centered care and patient satisfaction as two distinct entities that are each necessary though not synonymous².

1.3 Patient Satisfaction and Pay for Performance

In 2011, The United States centers for Medicare & Medicaid Services established a new reimbursement model that would adjust payments based on patient satisfaction scores⁷. This new policy in the United States of America (U.S.A.) reflected a global trend towards value-based healthcare models and “pay for performance” initiatives. In policies such as these, patient satisfaction becomes an important variable affecting compensation. These policies recommend the usage of patient satisfaction scores as part of a composite indicator of health care quality. This trend has prompted increasing exploration into patient satisfaction research, as stakeholders realized further exploration into the link between patient satisfaction and health care quality is necessary⁸.

1.4 Patient Satisfaction Scores and Objective Measures of Surgical Quality

There has been significant debate in the literature as to the relationship between patient satisfaction and other important clinical outcomes. Lyu⁹ conducted a study in which Hospital patient satisfaction scores were compared with hospital Surgical Care Improvement Program compliance and hospital employee safety attitudes (safety culture) scores during a 2-year period (2009-2010). The standard Hospital Consumer Assessment of Healthcare Providers and Systems Survey¹⁰ (HCAHPS), the Centers for Medicare & Medicaid Surgical Care Improvement Program (SCIP), and the employee Safety Attitudes Questionnaire (SAQ) were used to gather data from surgical patients across 31 hospitals in the U.S.A. Using a global rating patient satisfaction score, patient satisfaction was not significantly associated with hospital compliance with surgical processes of quality care measures (antibiotic prophylaxis, appropriate hair removal, Foley catheter removal, and deep vein thrombosis prophylaxis). In addition, patient satisfaction was not associated with a hospital’s overall safety culture score⁹. Lyu thus concluded that a high patient satisfaction rating does not necessarily assume the provision of high-quality surgical care⁹.

Sacks¹¹ however reached the opposite conclusion in his retrospective observational study of participating American College of Surgeons National Surgical Quality Improvement Project (ACS NSQIP) hospitals. In his study, a total of 103 866 patients older than 65 years undergoing inpatient surgery were included from 180 hospitals which were grouped by quartile based on their performance on the HCAHPS survey. They created hierarchical logistic regression models to predict the occurrence of adverse postoperative outcomes based on a hospital's patient satisfaction scores. Compared with patients treated at hospitals in the lowest quartile of patient satisfaction scores, those at the highest quartile had significantly lower risk-adjusted odds of death (odds ratio = 0.85; 95% CI, 0.73-0.99), failure to rescue (odds ratio = 0.82; 95% CI, 0.70-0.96), and minor complication (odds ratio = 0.87; 95% CI, 0.75-0.99)¹¹. Although no significant relationship was noted between patient satisfaction and either major complication or hospital readmission, Sacks concluded that there is an association between patient satisfaction scores and several objective measures of surgical quality¹¹.

These two studies are examples of two opposing viewpoints in the debate of whether patient satisfaction can be associated with other objective measures of quality surgical care. Research such as this has been undertaken in the context of evaluating the appropriateness of the usage of hospital wide satisfaction scores in determining value - based purchasing compensation models. One of the major pitfalls in this model is the assumption that a single global rating of patient satisfaction is comprehensive and sufficient to provide useful data across all spheres of patient care. Indeed, a number of authors including Espinel¹², Calabro¹³, Cheung¹⁴, Carr-Hill¹⁵ and Lemos¹⁶ amongst many others discuss the need for patient satisfaction tools that are specific to unique expectations and circumstances of the department in question. These authors propose that there can be no one, single, hospital-wide satisfaction tool which effectively captures patient experience in medical vs surgical, inpatient vs outpatient and adult vs pediatric spheres of care. Thus, it is difficult to establish whether there exists an association between high quality surgical care, and patient satisfaction. The majority of these studies have used standardized hospital-wide satisfaction tools such as the HCAHPS which is used by The United States centers for Medicare & Medicaid Services in determining pay for performance compensation. There

also is discrepancy between which objective measures of high-quality surgical care should be used as a comparative benchmark to patient satisfaction.

1.5 Factors Associated with Patient Satisfaction in Surgical Care

Although there have been inconsistent conclusions regarding the association between patient satisfaction and other markers of quality surgical care, Tevis¹⁷ found that high surgical volume more strongly predicted overall patient satisfaction on the HCAHPS survey than postoperative outcomes. In this study, 171 hospitals participating in the University Health System Consortium database from 2011- 2012 were included and patients were restricted to those discharged by general surgeons. Hospital data were paired with HCAHPS survey results. Postoperative outcomes were dichotomized based on the median for all hospitals and stratified based on surgical volume. The primary outcome of interest was “high” on overall patient satisfaction. High surgical volume was a more important predictor of overall patient satisfaction regardless of hospital complication, readmission or mortality rates¹⁸. Tevis demonstrated that hospitals with high surgical volume are more likely to have high overall patient satisfaction, even after controlling for hospital variables and hospital-level patient outcomes. Although it is impossible to extrapolate from this study exactly how high surgical volume contributes to a greater overall patient satisfaction, it draws attention to the concept that patient satisfaction in surgical patients seems to be influenced by not only the outcome of surgical care, but also its process.

A study conducted in the Netherlands by Rademakers¹⁹ also demonstrated the importance of distinguishing process from outcome and the importance that each factor plays in patients’ perceptions of health care quality. This study used Donabedian’s model of health care in which he distinguished it’s three components: structure, process and outcome²⁰. He defined structure as the environment in which healthcare is provided, process as the method by which healthcare is provided and outcome as the consequence of the healthcare provided. In Rademakers’ study, secondary analyses were undertaken on survey data from patients who underwent hip or knee surgery, cataract surgery, patients suffering from varicose veins, spinal disc herniation or rheumatoid arthritis. In these analyses, the patient-

given global rating served as the dependent variable, and experiences regarding structure (waiting times, continuity of care), process (doctor-patient communication and information) and outcome aspects (improvement or worsening of symptoms) served as independent variables. They found that experiences regarding process aspects explained most of the variance in the global rating followed by structure aspects. Surprisingly, experiences regarding outcome did not explain much variance in the global rating in any of the patient groups¹⁹. This is critical data in understanding the need to examine not only the “outcome” aspect of surgical care as it pertains to patient satisfaction, but also the “structure” and “process” aspects which seem to have a significant contribution to overall patient satisfaction.

1.6 Patient Satisfaction in the Canadian Health Care System

In the Canadian health care system, allocation of resources, including funding, has not been informed by any patient satisfaction data to date. However, as interest in public transparency within the health care field grows, the need to provide Canadians with publicly reported patient experience data has also been identified. In 2019, the Canadian Institute for Health Information (CIHI) published Patient Experience in Canadian Hospitals, its first analysis of pan-Canadian patient experience data²¹. The report uses results from the Canadian Patient Experiences Survey on Inpatient Care (CPES-IC), a newly developed national standardized survey derived from the American HCAHPS which CIHI has developed to capture patient experience data²¹. The 2019 CIHI report is part of phase 1 of their public data reporting plan and offers a first look at data from 5 participating provinces on how people feel information was communicated and shared at different stages throughout their hospital stay. Phase two of their plan intends to report on facility level patient experience indicators by Spring 2021. This again, reflects a trend towards increased public interest in care quality markers, and also a trend towards understanding the importance of the patient experience.

When gathered with the appropriate tools, on a smaller scale, patient satisfaction data can be used to inform individual practices of the patient’s perception of care provided. Patient satisfaction data provides a window into the patient’s perspective of their experience with

health care. This data can be used to guide the investment of energy and/or money into specific aspects within the process of care which patients' identify as requiring improvement. For example, if a well-constructed patient satisfaction tool demonstrates that internal medicine inpatients are not satisfied with communication at the time of discharge, a focus group could be formed to determine what interventions may facilitate a better experience. Those interventions can be implemented, and satisfaction scores revisited to assess the effectiveness of the intervention. In addition, physicians demonstrating a low index of patient satisfaction are more likely to have malpractice suits brought against them²². In their study of 353 physicians at a large American teaching hospital, Stelfox et al found that compared with physicians with the top satisfaction survey ratings, physicians in the middle tertile had malpractice lawsuit rates that were 26% higher (rate ratio [RR] = 1.26; 95% confidence interval [CI]: 0.72 to 2.18; P = 0.41), and physicians in the bottom tertile had malpractice lawsuit rates that were 110% higher (RR = 2.10; 95% CI: 1.13 to 3.90; P = 0.019)²².

1.7 Available Tools for Assessing Patient Satisfaction

In Donabedian's well known model of health care, assessing quality of care defines three important realms: structure, process and outcome²⁰. It is important to distinguish between satisfaction as it relates to the outcomes of care versus the process of care⁸. For example, a patient undergoing day surgery for an inguinal hernia repair may be highly satisfied with the outcome of the surgery but may be dissatisfied with the process of care due to long pre-operative delays and poor communication in the day-surgery unit. The literature is abundant with tools used to determine the degree to which patients are satisfied with the outcomes of surgical care. For example, post-operative patient satisfaction could be measured alongside other metrics such as hospital re-admission rate to determine the success of laparoscopic cholecystectomy²³. Thus, there are a multitude of tools developed to assess patient satisfaction with outcomes for a variety of different surgeries in multiple disciplines. More sporadic in the literature are tools to assess patient satisfaction with the processes of care associated with surgical services. Although hospital-wide tools such as the HCAHPS survey²⁴ and the newly created CPES-IC survey are used to evaluate

satisfaction with process of care, they do not provide the specificity to assess patients' satisfaction in the delivery of care across various unique departments¹³.

1.8 Current Patient Satisfaction Tools for Surgical Patients

Fewer tools exist which are tailored specifically to surgical in-patients, and to our knowledge no validated tool has emerged to measure patient satisfaction in day surgery within the last 10 years. The CAHPS Surgical Care Survey or S-CAHPS was endorsed by the National Quality Forum and released for use in June of 2012²⁵. The process for survey development and validation of the survey was similar to that of the parent HCAHPS survey and included engagement of appropriate stakeholder, comprehensive literature review, analysis of critical incident, focus groups, cognitive interviewing and field testing. Despite its use to gather data on the experience of the operative patient, it is designed for the assessment of elective surgical inpatients only and excludes the entire day-surgery population and those that present requiring emergency surgery.

One criticism of hospital-wide tools is that satisfaction scores are often quite high¹⁵. This has also been demonstrated by researchers who have used somewhat more specific tools such as the S-CAHPS as well. A study completed by Schmocker demonstrates the concept of comparing “top-box” responses to “not top-box” responses²⁶. Specifically, when the question “Using any number from 0 to 10, where 0 is the worst surgeon possible and 10 is the best surgeon possible, what number would you use to rate all your care from this surgeon?” was asked, a response of 10 was considered the top-box response, and patients were grouped into those who gave the top-box response and those who gave anything else (scores of 0–9). Although standard HCAHPS top-box scores for hospital evaluation include scores of 9 and 10 on this scale, Schmocker chose only to look at 10 on the S-CAHPS survey question to improve the discriminatory ability of the comparisons given the significant right skew in the data. In their study, Schmocker found that 72% of respondents gave a top-box response rating their surgeon as the best surgeon possible²⁶. In general, it has been found that asking more specific question that are tailored to the process or outcome being studied, often yields lower and more varied satisfaction scores³. Thus, simply applying hospital-wide surveys or even general surgical surveys for use in specific areas of care such as day-surgery may yield.

1.9 Validity and Reliability of Current Patient Satisfaction Tools

Ideally, a tool used to measure patient satisfaction must undergo rigorous determination of reliability and validity²⁷. Reliability refers to the reproducibility of a measure between and within individual raters²⁸. Validity of a tool assesses whether the tool actually measures what it intends to measure²⁸. There is no single gold standard measure for ensuring validity and thus often multiple approaches must be taken. It is crucial to consider that reliability and validity are not fixed properties of a tool; they may vary across different patient populations (considering different societal and cultural beliefs, socioeconomic status and healthcare literacy) and in different clinical settings¹⁴. For example, Lemos studied patient satisfaction in 251 consecutive day surgery patients in an academic hospital in Porto, Portugal¹⁶. They used a survey developed for this study examining patients' level of satisfaction in relation to different variables, using questions of demographics, logistics, and those relating to surgery both immediately after surgery and 30 days following surgery. They found that over 95% of patients were satisfied with their care at both interviews; 74.5% of patients were completely satisfied at the discharge time; and only 62.4% had the same opinion 30 days after the surgery.

Although this is a well thought out study, without any information on what process if any was used to ensure validity and reliability of their survey, the results can be questioned. Secondly, even if such a tool had been validated for use amongst this patient population, further exploration would need to be made before deciding that there are sufficient similarities between Lemos' population and our population to allow for use of their tool to assess our group of interest. Only by validating the survey for our group of patients would we be able to say confidently that this tool captures our patient population's experience. Therefore, a tool used to assess the satisfaction of patients undergoing day surgery should ideally be developed and validated in a population of day surgery patients reflecting similar demographic considerations and undergoing a similar care process as the target population.

1.10 The role of Patient Expectations in Determining Patient Satisfaction Tools

Patient satisfaction is a complex and multifaceted concept which relates to a number of factors including past experience, individual values, lifestyle and patient expectations³. Ware et al²⁹ divided patient satisfaction into its components and determinants. Non-modifiable factors comprise the determinants and include “patient expectations” as well as “patient characteristics”. Similarly, in a systematic review of the determinants of patient satisfaction, Batbaatar³⁰ divided determinants of satisfaction broadly into health care provider-related determinants and patient-related determinants. Patient related determinants included “patient expectations”. The relationship between patient expectations and satisfaction is complex, however in a systematic review investigating patient expectations and PROMs in surgery, most studies found that expectation fulfillment was associated with patient satisfaction⁵.

In efforts to improve a process such as ambulatory surgery, consumer marketing theories may provide insight into the mechanism by which patient expectations could influence satisfaction. For example, *the expectancy-discrepancy theory*³¹ postulates that expectations create a point of reference for an individual to base an evaluation of an event. A minimal discrepancy between what was expected and what actually happened results in satisfaction. Consider, additionally, *the assimilation-contrast theory*³¹ which suggests when an individual’s evaluation of the event is close to their expectations, the patient will adjust their evaluation to match their preoperative expectation (this is called assimilation). Conversely, when their experience does not match their expectations, the individual emphasizes this difference (contrast), which may be negative or positive.

Thus, in order to create a tool to measure satisfaction in any patient population, it becomes paramount to first evaluate the scope and breadth of patient expectations and then formulate an assessment tool for satisfaction that considers whether or not those expectations have been met.

1.11 Rationale for this Study

To our knowledge, the literature lacks a patient satisfaction tool for the process of adult day-surgery that is derived from an examination of patient expectations and is validated. Thus, the goals of this study will include 1) investigating the expectations of adult patients for the day-surgery process, and 2) developing a Patient Satisfaction questionnaire for adult patients undergoing day-surgery.

Chapter 2

2 Introduction to Qualitative Research

In this chapter, we will outline the basic methodologies used in qualitative research and will explain in depth the techniques used in our study.

2.1 Overview of Qualitative Research

Qualitative research has its foundations in the social sciences and humanities. As Patricia Leavy describes, “*qualitative research is a way of learning about social reality.*”³² Although the history of qualitative research spans decades prior, the social justice movements of the 1960s and 1970s proved to be pivotal in the growth of qualitative inquiry, as they led to in major changes in the academic landscape, including the asking of new research questions and the reframing of many previously asked research questions and corresponding approaches to research. These movements became catalysts for new ways of thinking and led to the critique of dominant methods of scientific practice.³²

Qualitative research methods encompass a set of techniques that allow the researcher to understand a phenomenon in its natural setting. Leading qualitative researchers Denzin and Lincoln describe qualitative research as:

*“a situated activity that locates the observer in the world. Qualitative research consists of a set of interpretive, material practices that make the world visible...They turn the world into a series of representations, including field notes, interviews, conversations, photographs, recordings and memos to the self. At this level, qualitative research involves an interpretive, naturalistic approach to the world. This means that qualitative researchers study things in their natural settings, attempting to make sense of or interpret phenomena in terms of the meanings people bring to them.”*³³

This definition highlights a number of key features of qualitative research. Firstly, it is a situated activity whereby the researcher goes to the natural setting of the phenomenon as opposed to the laboratory to collect data.³⁴ Qualitative research then seeks to turn the world

into series of representations through a variety of different words, pictures, documents and images that can capture different facets of the phenomenon at hand.³⁵ Finally, qualitative research interprets and makes sense of that information in terms of the meaning people bring to them to better understand that phenomenon.

While quantitative research seeks to understand a phenomenon by quantifying it, undertaking statistical analysis and then extrapolating to the wider population, qualitative data seeks to describe, explore or understand a phenomenon through methods of inquiry that elicit non-numerical data.³⁶ Many issues in health care can be studied from either a quantitative or qualitative approach, yielding different types of information brought about through asking fundamentally different types of research questions. While quantitative research asks ‘when’, ‘where’ and ‘for whom’, a phenomenon occurs; qualitative research looks to explore ‘how’ and ‘why’ it occurs, and the meanings and experiences associated with it.³⁶ Because qualitative research explores how things unfold in real world settings, it is ideal for generating meaningful answers to a number of pressing questions in the field of health care.³⁴ A qualitative approach can be ideal for assessing complex human interactions such as those that underpin team-working, education, communication and decision making in health care settings.³⁷

Qualitative research can be hypothesis generating, and as such, it is often the ideal approach for exploration of an uncharted health care issue. Goals that may be best addressed by qualitative research include defining the problem; understanding when the problem occurs, as well when it does not occur; exploring what makes it happen or more likely to happen, as well as what factors prevented it from occurring; and what relationships or associations are important and relevant when studying the health phenomenon.³⁸

Quantitative research is generally associated with a deductive approach, where a hypothesis or theory is created a priori and then information is gathered to test that theory. Qualitative research generally uses an inductive approach to knowledge, in which the experiences of individuals are used to formulate initial understandings and generate theories.³⁸ Quantitative researchers work from the assumption that there is an absolute truth which they are trying to discover, and that knowledge is objective and neutral. This

belief about knowledge has been called 'objectivism' and the theoretical framework it implies is called 'positivism'.³⁹ Most qualitative researchers share a different belief about knowledge, called "constructivism," which holds that the reality we perceive is constructed by our social, historical, and individual contexts.³⁹

Table 1: Comparison of qualitative and quantitative studies*(Adapted from Choo³⁸ and Marshall⁴⁰)*

Characteristic	Qualitative	Quantitative
Nature of concept under study	Unfamiliar, poorly defined, not well understood	Clearly defined
Philosophical foundation	Inductive	Deductive
Main goals of the study	Gain an in-depth understanding.	Obtain numerical descriptions of a representative sample. Produce generalizable results.
Position of the researcher	Integral part of research process	Detached and objective
Study Plan	Iterative and flexible	Stepwise and predetermined
Type of measurement	Exploratory, formative and confirmatory.	Structured and hypothesis driven.
Characteristics of data collection	<p>Flexible to allow for in depth understanding and discovery of the unexpected.</p> <p>Questions asked can be refined during the course of the study.</p> <p>Concludes when “data sufficiency” is achieved and no new information is discovered.</p>	<p>Validated, repeatability of measure is important.</p> <p>Hypotheses and measures are decided upon a priori and not subject to change.</p> <p>Concludes when established sample size is reached.</p>
Characteristics of data analysis	Iterative, used to modify research questions	Constructed a priori and not influenced by data collection.
Assessing quality of outcomes	Quality assurance methods of trustworthiness.	Direct tests of validity and reliability using statistics.
Measures of utility of results	Transferability	Generalizability

Rather than strive for generalizability, qualitative research aims to explore rather than remove the influence of context, culture and perspective. Thus, although it may produce conceptual understanding that may be transferred into other contexts, careful consideration must be made to how those conceptual understandings unfold differently in distinct settings.³⁴ Another distinguishing facet of qualitative research is the potential for researcher subjectivity and the fact that it places the researcher at the center of the data-gathering phase.⁴¹ Qualitative research, based upon a constructivist paradigm, acknowledges the role of the researcher as a “co-constructor” of knowledge and emphasizes the need for reflexivity, whereby the researcher is explicit about the perspectives they bring to the research process, and how their own values, assumptions and thought process effects the research.³⁵ Table 1 elucidates several other key differences between qualitative and quantitative research.

2.2 Qualitative Research Methodologies

The world of qualitative research encompasses a broad range of methodologies – principles and procedures that define how the research is approached – each with distinctive approaches to inquiry and distinct products.³⁴ Methodology creates the backbone of qualitative research and informs all processes in the research method. It shapes the way the research question is asked, defines the characteristics of an appropriate sample, and governs the way the data collection and analysis procedures are organized.³⁴ The methodology used should be chosen based upon the purpose of the research with consideration towards the goals of different approaches.³⁵ Cresswell compared and contrasted five of the most commonly used methodologies including narrative research, phenomenology, grounded theory, ethnography and case study which is described in more detail in Table 2.⁴²

Table 2. Comparing Five Different Approaches to Qualitative Inquiry*(Adapted from Cresswell⁴²)*

Consideration	Narrative Research	Phenomenology	Grounded Theory	Ethnography	Case Study
Focus of research	Exploring the life of an individual	Understanding the essence of an experience	Developing a theory grounded in data from the field	Describing and interpreting a culture-sharing group	Developing an in-depth description and analysis of a case or of multiple cases
Type of Research problem best suited for approach	Needing to tell stories of individual experiences	Needing to describe the essence of a lived phenomenon	Grounding a theory in the views of participants	Describing and interpreting the shared patterns of the culture of a group	Providing an in-depth understanding of a case or of multiple cases
Forms of data collection used	Primarily interviews and documents	Primarily interviews with individuals, though documents, observations and art may be used	Primarily interviews	Primarily observations and interviews, but collecting other sources during extended time in the field	Multiple sources including interviews, observations, documents and artifacts
Strategies of data analysis	Analyzing data for stories, 're-storying' stories and developing themes using a chronology	Analyzing data for significant statements, meaning units, textual and structural description and the description of the 'essence'	Analyzing data through different methods of data coding	Analyzing data through description of the culture-sharing group and themes about the group	Analyzing data through description of the case and the themes of the case as well as cross-case themes

2.3 Qualitative Data Collection Models

There are a multitude of different data collection methods used in qualitative research, and the choice of methods should be driven by the research question, the intended methodology and practical considerations³⁵. Data collection models used frequently in qualitative research include the interview, focus groups, direct observations, written narratives and document reviews.⁴³ Qualitative studies may incorporate more than one data source so that the insight gained from different perspectives can add to the richness of understanding of the phenomenon in a process called triangulation.⁴³

The most common method of generating data is the interview which may be unstructured, semi-structured or structured.³⁶ During the interview process, the researcher participates in the discussion by asking guiding questions that help elucidate the participant's ideas, attitudes, feelings and experiences. The interview is usually audio or video recorded, and then transcribed to generate the data for analysis.

Focus groups are another possible method of data collection in which a number of participants take part in a group discussion moderated by the facilitator. Information emerges from both the individuals in the group and also from their interactions with each other.³⁷ Focus groups are an ideal setting to explore cultural issues such as the prevailing norms and values within a certain population, as the interaction of group members gives additional information in this respect.

Direct observations differ from the previous two methods, as it allows the researcher to become a 'fly on the wall' and to observe how events unfold in their natural setting.³⁸ Observational data can provide researchers with powerful insight into the routines and processes of a group. In observational studies, field notes are often the dominant data source for subsequent analysis.³⁴

Written narratives, and other documents can also provide valuable sources of data for analysis either alone, or in combination with observations and interviews. Finally, in this age, there are a number of emerging sources for data collection that can be considered in

qualitative research including social media, emails and instant messaging, audio diaries and photovoice.⁴⁴

2.4 Qualitative Interviewing

Research that is designed to test an a priori hypothesis often uses a highly structured, survey-type interview format yielding standardized results. Qualitative research, on the other hand, often uses a looser, less standardized interview format that encourages the interviewee to share rich descriptions of phenomenon, allowing for interpretation and analysis by investigators.⁴⁵ Although qualitative interviews can be categorized in a number of ways, frequently they are classified as structured, semi-structured and unstructured, with semi-structured and unstructured being key tools utilized by the qualitative researcher.

The unstructured interview originates traditionally from the ethnographic tradition of anthropology whereby investigators identify “key informants” to serve as teachers, commentators, translators and mentors to interview on an ongoing basis during the course of study.⁴⁵

The semi-structured interview is perhaps the most widely used interviewing format for qualitative research and can occur either with an individual or in groups and lasts roughly between 30 minutes to several hours.⁴⁵ Individual in-depth, semi-structured interviews are widely used by health care researchers to co-create meaning with interviewees through reconstructing perceptions of events and experiences related to health care delivery.⁴⁵ In a semi-structured interview, the basic research question may serve as the first interview question, but in general 5-10 more specific questions are developed to delve more deeply into different facets of the research issue. Because of the iterative nature of the qualitative research process whereby data collection and analysis often happen in a simultaneous fashion, it is very much acceptable for the researchers to change, add, or drop questions from the interview as they see fit throughout the interviewing process. In addition, during the course of each individual interview, the interviewer should be prepared to diverge from the planned interview outline in order to further explore new ideas brought into light by the interviewee. When constructing the interview guide, questions should be open-ended and should create room for discussion for new, unexpected phenomenon.³⁸

Unlike administration of a standardized structured interview, semi-structured interviewing for qualitative research often requires creative strategies in order to ensure that quality data is obtained. Cristancho et al describe strategies to avoid the “cover story” – politically correct answers that are often superficial rather than deep and reflective – such as keeping questions open ended, using follow-up probes and using vignettes to help illustrate questions to interviewees.³⁴

2.5 Sampling, Saturation and Sufficiency

Qualitative research often makes use of sampling strategies that contrast sharply with those used in quantitative research. In quantitative studies, often the goal is to establish a random sample which gives equal representation of all members of the population. In qualitative research, however, we will actively seek to include those participants that we feel would be best suited to answer the research question in what is called a purposive sample.⁴⁶ Another important technique is theoretical sampling. Here the researcher simultaneously collects, codes and analyzes his data and then decides what data to collect next, and where to find them in order to further mature and develop their emerging theory.⁴⁷

Traditionally, the concept of saturation has been used to determine the appropriate sample size in a number of qualitative methodologies. The notion of saturation as it pertains to qualitative research has its origins in the theoretical sampling process belonging to the grounded theory method of qualitative research. Glaser and Strauss further describe that saturation means that no additional data are being found whereby the researcher can develop properties of the category.⁴⁷ Charmaz defines saturation as the point in which the researcher’s categories are robust because they have found no new properties of these categories and the established properties account for patterns in the data.⁴⁸ She warns that saturation is not simply “nothing new happening” in the data, but that it is the state where categories are rich and have conceptual depth.⁴⁸

There are also qualitative researchers who have begun to move away from the term “saturation” and find it to be somewhat misleading, as it suggests a point beyond which it is not possible to add anything further. Nelson finds that a more appropriate way to define

the point at which a researcher may decide to stop as having reached “conceptual depth,” where there is *sufficient* depth of understanding that can allow the researcher to theorize.⁴⁹

2.6 Thematic Analysis of Qualitative Data

Thematic analysis is a method for identifying, analyzing and reporting patterns (themes) within data.⁵⁰ It identifies and categorizes themes within and across a data set to describe a phenomenon of interest.³⁵ While some qualitative researchers consider thematic coding as a process performed within another major analytic tradition (such as grounded theory), other researchers such as Braun and Clarke⁵¹ feel that it should be considered an approach in its own right. Perhaps the most important benefit of thematic analysis is its flexibility. It is a methodology that can be applied across a range of theoretical and epistemological approaches.⁵¹ In arguing that thematic analysis should be considered its own major analytic methodology, Braun and Clark describe the utility of employing thematic analysis without needing to subscribe to the theoretical commitments of any other major methodology.⁵¹

Braun and Clarke have developed a useful step-by-step guide on how researchers can actually conduct thematic analysis with an endpoint of reporting of the content and meaning of patterns (themes) in the data.⁵¹ The six steps involve: familiarizing yourself with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes and finally producing the report.

In the first step, the researcher familiarizes themselves with the data. They immerse themselves in the data to familiarize themselves with its depth and breadth. This involves repeated readings of the data in an active fashion to search for meanings, patterns and so on. During this stage, the researcher should begin to take notes, and keep track of ideas for codes that will be revisited in subsequent steps. If data is transcribed by a third party, it is important to check the transcripts against the original audio for accuracy.

In the second step, the researcher begins to generate initial ‘codes.’ Codes identify a feature of the data that appears interesting to the researcher and refers to “the most basic segment, or element of the raw data or information that can be assessed in a meaningful way”

(Boyatzis 1998). Coding helps to organize data into meaningful groups and may be more data-driven or theory-driven. At this stage, coding should be done for as many potential themes or patterns as possible.

The third step consists of searching for themes and occurs when all data has been initially coded and collated. This stage involves beginning to sort the different codes into potential themes. Visual aids such as tables or mind maps might be helpful to consider how different codes may combine to form an overarching theme. At this stage, the researcher begins to think about the relationship between codes, between themes and between different levels of themes.

In the fourth step, the researcher reviews themes from the set of candidate themes devised in the previous step. This stage involves two levels of reviewing and refinement of themes. Level one involves reviewing at the level of the coded data extracts for each theme to ensure that your candidate themes adequately capture the scope of the coded data. Level two involves a similar process but in relation to the entire data set, whereby the researcher considers the validity of distinct themes in relation to the data set as a whole.

In step five, the researcher defines and names the themes. The researcher needs to identify the essence of what each theme is about and determine what aspects of the data each theme captures. A detailed analysis is written for each individual theme where the 'story' of each theme is clear, as well as how each fit into the overall 'story' of the data. The researcher then chooses a concise name for each theme that gives the reader a sense of what the theme is about.

In the final step, the researcher produces the report. The object of the write up is to tell the complicated story of the data in a way that convinces the reader of the merit and validity of the analysis. The write up should provide sufficient evidence of the themes within the data. Examples or extracts are used to demonstrate the essence of different ideas. The following tables summarize the phases of thematic analysis according to Braun and Clarke (2004) as well as their checklist of criteria for good thematic analysis.

Table 3. Phases of Thematic Analysis (Braun and Clarke 2006).

Phase	Description of the Process
1. Familiarizing yourself with your data:	Transcribing data (if necessary), reading and re- reading the data, noting down initial ideas.
2. Generating initial codes:	Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code.
3. Searching for themes:	Collating codes into potential themes, gathering all data relevant to each potential theme.
4. Reviewing themes:	Checking in the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic „map“ of the analysis.
5. Defining and naming themes:	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells; generating clear definitions and names for each theme.
6. Producing the report:	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis.

Table 4. A 15-Point Checklist for Good Thematic Analysis (Braun and Clarke 2006)

Process	No.	Criteria
Transcription	1	The data have been transcribed to an appropriate level of detail, and the transcripts have been checked against the tapes for accuracy
Coding	2	Each data item has been given equal attention in the coding process
	3	Themes have not been generated from a few vivid examples (an anecdotal approach), but instead the coding process has been thorough, inclusive and comprehensive
	4	All relevant extracts for all each theme have been collated
	5	Themes have been checked against each other and back to the original data set
Analysis	6	Themes are internally coherent, consistent, and distinctive
	7	Data have been analyzed – interpreted, made sense of - rather than just paraphrased or described
	8	Analysis and data match each other – the extracts illustrate the analytic claims
	9	Analysis tells a convincing and well-organized story about the data and topic
Overall	10	A good balance between analytic narrative and illustrative extracts is provided
	11	enough time has been allocated to complete all phases of the analysis adequately, without rushing a phase or giving it a once-over-lightly
Written Report	12	The assumptions about, and specific approach to, thematic analysis are clearly explicated
	13	There is a good fit between what you claim you do, and what you show you have done – i.e., described method and reported analysis are consistent
	14	The language and concepts used in the report are consistent with the epistemological position of the analysis
	15	The researcher is positioned as active in the research process; themes do not just emerge

2.7 Principals of Rigour in Qualitative Research

Just as in quantitative research, qualitative research also has a set of principles of rigour that are used to judge the quality of the work. Recognizing these standards of rigour are particularly important in qualitative research, as it helps to address the criticism that poorly conducted qualitative research can be anecdotal and subjective. Cristancho et al. summarize the most frequently discussed principles that appear in most criteria for rigour in qualitative research into five distinct components: reflexivity, adequacy, authenticity, trustworthiness and resonance.³⁴ Reflexivity is a concept in qualitative research whereby the researcher considers their own orientations towards the studied phenomenon, acknowledging their own assumptions and articulating their impressions on the data.³⁴ In considering adequacy and authenticity, the researcher questions themselves on whether the data is sufficient to allow robust insight into the studied phenomenon and whether it provides an authentic depiction of the phenomenon at hand. The trustworthiness of the research is established by systematically and clearly describing analytical procedures. Finally, resonance is demonstrated when the findings and interpretations are meaningful to those who have “lived” the phenomenon in question.

In order to promote rigour in reporting qualitative research, a number of checklists have been developed analogous to the consolidated standards of reporting trials statement. Perhaps the most widely used of these is consolidated criteria for reporting qualitative research (COREQ), a 32-point checklist developed to assess the reporting of interview and focus-group based studies.⁵² Table 6 presents the COREQ checklist.

Table 5: Consolidated criteria for reporting qualitative studies: 32-item checklist

No.	Item	Guide questions/description
Domain 1. Research team and reflexivity		
<i>Personal Characteristics</i>		
1.	Interviewer/facilitator	Which author/s conducted the interview or focus group?
2.	Credentials	What were the researcher's credentials? E.g. PhD, MD
3.	Occupation	What was their occupation at the time of the study?
4.	Gender	Was the researcher male or female?
5.	Experience and Training	What experience or training did the researcher have?
<i>Relationship with Participants</i>		
6.	Relationship established	Was a relationship established prior to study commencement?
7.	Participant knowledge of the interviewer	What did the participants know about the researcher? e.g. personal goals, reasons for doing the research
8.	Interviewer characteristics	What characteristics were reported about the interviewer/facilitator? e.g. Bias, assumptions, reasons and interests in the research topic
Domain 2. Study design		
<i>Theoretical Framework</i>		
9.	Methodological orientation and theory	What methodological orientation was stated to underpin the study? e.g. grounded theory, discourse analysis, ethnography, phenomenology, content analysis
<i>Participant Selection</i>		
10.	Sampling	How were participants selected? e.g. purposive, convenience, consecutive, snowball
11.	Method of approach	How were participants approached? e.g. face-to-face, telephone, mail, email
12.	Sample size	How many participants were in the study?
13.	Non-participation	How many people refused to participate or dropped out? Reasons?
<i>Setting</i>		
14.	Setting of data collection	Where was the data collected? e.g. home, clinic, workplace
15.	Presence of non-participants	Was anyone else present besides the participants and researchers?
16.	Description of sample	What are the important characteristics of the sample? e.g. demographic data, data
<i>Data Collection</i>		
17.	Interview guide	Were questions, prompts, guides provided by the authors? Was it pilot tested?
18.	Repeat interviews	Were questions, prompts, guides provided by the authors? Was it pilot tested?
19.	Audio/Visual recording	Did the research use audio or visual recording to collect the data?
20.	Field notes	Were field notes made during and/or after the interview or focus group?
21.	Duration	What was the duration of the interviews or focus group?

22.	Data saturation	Was data saturation discussed?
23.	Transcripts returned	Were transcripts returned to participants for comment and/or correction?
Domain 3. Analysis and Findings		
<i>Data Analysis</i>		
24.	Number of data coders	How many data coders coded the data?
25.	Description of the coding tree	Did the authors provide a description of the coding tree?
26.	Derivation of themes	Were themes identified in advance or derived from the data?
27.	Software	What software, if applicable was used to manage the data?
28.	Participant checking	Did participants provide feedback on the findings?
<i>Reporting</i>		
29.	Quotations presented	Were participant quotations presented to illustrate the themes / findings? Was each quotation identified? e.g. participant number
30.	Data and findings consistent	Was there consistency between the data presented and the findings?
31.	Clarity of major themes	Were major themes clearly presented in the findings?
32.	Clarity of minor themes	Is there a description of diverse cases or discussion of minor themes?

Chapter 3

3 Materials and Methods

This chapter describes the study design as well as the specific methodologies used to conduct this research.

3.1 Study Design

This study was conducted within the Department of Surgery, Schulich School of Medicine at the University of Western Ontario and at London Health Sciences Centre, Victoria Hospital. Specifically, this study was completed with the cooperation of the departments of Orthopedic Surgery, General Surgery and Urology. This study was approved by the Research Ethics Board at the University of Western Ontario (Appendix A). Informed consent was obtained from each study participant prior to the beginning of the study.

In this study, using purposive and convenience sampling techniques, we conducted a series of 11 interviews with adult day-surgery patients regarding their expectations for the outpatient surgery process and their ideas about what contributes to a satisfying outpatient surgery experience. Patients were interviewed at their pre-admission clinic appointment prior to the day of surgery. In order to be eligible for the study, patients were required to be undergoing outpatient surgery by either a general surgeon, a urologist or an orthopedic surgeon at the operating room at London Health Sciences, Victoria Campus. Patients were excluded if they did not have a pre-admission clinic visit, but otherwise a broad scope of patients were interviewed including both male and female patients as well as patients undergoing surgery for the first time and returning patients.

After transcription, interviews were analyzed for common themes pertaining to patient expectations and satisfaction. Recurring themes were then consolidated to a number of broad categories from which a series of questions were derived to create a Patient Satisfaction Questionnaire.

3.2 Data Collection

An interview guide (Appendix B) was compiled by the principal investigator which was designed to elicit responses regarding patient expectations at each state of the outpatient surgery process. The initial guide was approved by the research team and was amended throughout the process of data collection as needed to form a second version which was used for the majority of interviews (Appendix C). The guide was formatted to facilitate a semi-structured interview with open ended questions allowing discussion of topics and guidance of the interview towards data-rich information. All materials (letter of information (Appendix D), details of the study and consent forms) were provided to participants prior to interviews. All interviews were conducted by the principal investigator at the preadmission clinic. Initial study design also included a post-surgery interview; however, this was discontinued after it became clear that information about patient expectations were better elicited from pre-surgery interviews.

3.3 Pre-Surgery Interview

After obtaining informed consent, demographic data regarding age, sex, type of surgery, reason for surgery and any previous surgeries were collected from each participant. Interviews were conducted in the preadmission clinic and were recorded on an encrypted recording device. Each interview lasted approximately 20-30 minutes with questions adjusted according to the flow of the discussion. Patients were encouraged to seek clarification during the interview if questions were not clear and were counseled that they could end the interview at any time.

3.4 Data Analysis

Following interviews, transcription software was used to transcribe the interviews, and then members of the research team checked over transcriptions against recordings to ensure accuracy. All interviews were anonymized and assigned a study ID number to protect confidentiality.

Organization of the data was facilitated using Nvivo Software⁵³. Interview transcripts were analyzed using a coding process outlined in thematic analysis (section 2.6). Coding

occurred in an iterative fashion, with analysis of existing interviews and conducting further interviews occurring simultaneously. Multiple iterations of coding were done for each interview until the entire dataset was defined by a number of codes which were defined and entered into a master code book.

Codes were then sorted into loose categories and finally expressed as six themes with the aid of a mind map. The principal investigator debriefed with team members at each stage of the analytical process to ensure resonance and usefulness of the data generated.⁴⁸

3.5 Creation of Preliminary Patient Satisfaction Questionnaire for Day-surgery Patients

The Patient Satisfaction Questionnaire was developed by creating a series of questions that captured the essence of each of the 6 major themes derived from the data collected. The questions were developed for use with a Likert Scale⁵⁴ allowing patients to assign a number in accordance with their level of agreement with each of the statements. Questions were discussed with members of the research team in order to refine their meaning and to ensure that they captured the essence of the patient expectations in question. The compilation of questions resulted in the preliminary Patient Satisfaction Questionnaire for Adult Day-surgery Patients.

3.6 Reflexivity Statement

The purpose of this section is to provide the reader with insight into the perspective from which the researcher approached this study and to gain an understanding of any biases that may be inherent to that perspective.

Interviews, data analysis, and writing of the manuscript were done primarily by myself. I am a female, general surgery resident in my PGY-3 year. I am of South Asian descent, though I have no first-hand experience with any health care system other than the Canadian system. At the time that this study took place, I am in my late 20's. I have never had the experience of undergoing day surgery at any hospital. I have had close family members undergo day surgery, however none at Victoria Hospital where this study took place.

As a general surgery resident, I am quite familiar with the environment of the operating room and also the PACU. Although we do sometimes need to visit patients in the day-surgery preparation area, in general, my familiarity with that environment is less. As a surgical resident, often the first time I am seeing the patient is in the operating room itself, and our interaction on the day of surgery ends when I accompany them to the PACU post operatively.

Prior to beginning this study, I anticipated that patients would identify that they are expecting a safe and fast day-surgery experience and that delays and feeling rushed would cause dissatisfaction. My hopes for this study were to create a tool that fully captures patient satisfaction in the day-surgery experience that yields information that is actionable towards improving this experience for patients.

The other members of this study consisted of Dr. Sayra Cristancho and Dr. Sarah Jones, who were my supervisors for this research. Dr. Cristancho is a scientist at the Centre for Education Research & Innovation (CERI) and an Associate Professor in the Department of Surgery and Faculty of Education at Western University. Dr. Jones is a pediatric surgeon at Victoria Hospital as well as an Associate Professor in the Department of Surgery & Department of Paediatrics. Both of these researchers contributed their perspectives at various points of the study primarily by discussing the thematic analysis, helping to refine the themes and by offering insight into the survey creation.

Chapter 4

4 Results

This chapter will discuss our findings from our thematic analysis of interviews.

4.1 Demographic Data

Table 6. demonstrates the demographic data of the participants of our study. Of the eleven patients interviewed, five were female. The mean age was 64 ± 14 years. All patients who were interviewed had had some type of surgical procedure in the past, with nine of them having had surgery within the last 7 years.

Table 6. Demographic Data

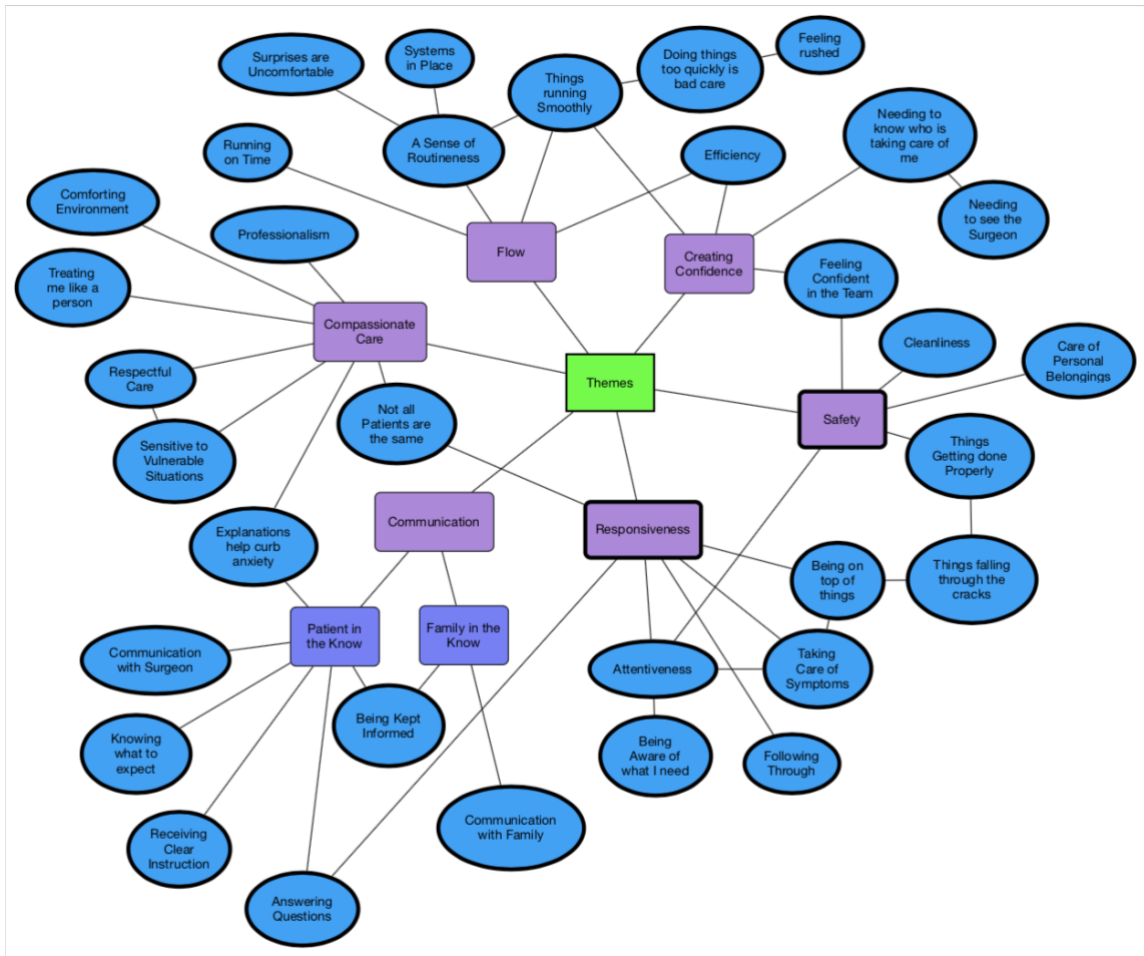
		<i>n</i> (%)
<i>Gender</i>	Male	6 (54.5)
	Female	5 (45.5)
<i>Age</i>	< 40	0 (0)
	40- 65	5 (45.5)
	> 65	6 (54.5)
<i>Level of Education</i>	High School or Less	6 (54.5)
	Completed College	2 (18.2)
	Completed University	2 (18.2)
	Any Level of Post-graduate	1 (9.1)
<i>Surgical Specialty</i>	Orthopedics	2 (18.2)
	General Surgery	4 (36.4)
	Urology	5 (45.5)
<i>Any Previous Surgery</i>	Yes	11 (100)
	No	0 (0)
<i>Previous Surgery at LHSC</i>	Yes	9 (81.8)
	No	2 (18.2)
<i>Years Since Last Surgery</i>	<5	7 (63.6)
	6-10	1 (9.1)
	> 10	3 (27.3)

4.2 Themes

4.2.1 Introduction to Themes

Analysis of the set of interviews resulted in a number of codes that were distilled into six major themes: Communication, Safety, Responsiveness, Compassionate Care, Flow, and Creating Confidence. Each of the themes will be defined and explored and the relationship between these themes also highlighted. Visually, the collection of themes can be represented by the mind map presented in Figure 1.

Figure 1. Six themes of patient satisfaction during day-surgery



4.2.2 Communication

Communication is a broadly recurring theme across interviews. This theme is defined by the expectation of information transfer resulting in patients and their loved ones feeling “in the loop.” Good communication as an antidote against anxiety provoking and unfamiliar situations was extremely important to patients and was captured by the code “Explanations help curb anxiety.” Many patients expressed feeling that knowledge can be empowering in the face of unfamiliar terrain. *“I think knowledge is power - so I think if you’re informing me of what’s going on as it’s happening then that’s what works for me.” - Study ID 8.*

This idea of using explanations to curb anxiety also relates closely to the theme of Compassionate Care. Patients expressed that being kept informed was a significant part of how they knew and felt that they were cared for. *“I was being kept up to date—okay looks like we’re going a little bit over so we’ll come back and tell you when - so there was always ... a feeling that I was being cared for which was really important you know?” – study ID 6.*

Many patients expressed that they could demonstrate understanding in the face of unforeseen delays, unfamiliar environments, and unexpected complications as long as they are kept informed of events as they unfold. This notion is captured in the node “Being kept informed.”

“I: So, you expect that there could be some delays?”

P: Yes... and when they get delayed that someone will communicate with you...

because sometimes you get nervous and waiting, waiting, waiting makes it worse.”

- Study ID 3

Patients expressed the importance of not only them being kept informed, but also of their families and loved ones also being kept informed. *“I know he’s not their patient, but he is my caregiver. If he has questions or anything, I want him to feel like he can talk to somebody and I don’t want him to be shut out of any information that I get...” – Study ID*

7. Thus, effective communication should take into account the needs of both patients and families to feel informed.

Patients also feel that they are in the know when there is established communication with the surgeon and the surgical team. This is captured by “communication with the surgeon.” Some patients who had a positive experience communicating with the surgeon’s office prior to the day of surgery, already felt quite confident and comfortable. *“I feel that this ... should go off without a hitch and from what I’ve seen from all my communication with Dr. X’s office ... I will be clearly taken care of.” – Study ID 6.* Patients clearly feel that effective communication is a key factor in establishing a relationship that fosters confidence. As demonstrated by this example, it is important to note that in effectively streamlining the day surgery process, we must also take into account that patients who experience effective communication prior to the date of their surgery often arrive on the day of surgery feeling reassured and confident.

Communication was integral to patients feeling that they knew what to expect. A number of patients cited past surgical experiences in helping them know what to expect and helping to ease their concerns regarding the impending surgery. Patients appreciated when they could anticipate what was ahead. In addition, they also valued being given clear instructions. Although many patients did not have any specific thoughts about what “clear instructions” looks like, some acknowledged that effective ways of communicating clear instructions may be by providing both written and verbal information, as well as providing information to both the patient and the family.

Some patients acknowledged that no matter how clear information being given is, there may be still be some uncertainty or concerns in which case it is critical that patients feel that there is someone to answer their questions at every stage of the process. *“And that, sometimes, mostly here at Hospital X, the place is kind of big...if we are not familiar with the building, with the hospital, we get lost very easily and we... are nervous or stressed, because we came for a surgery...but at the same time, according to our experience, we had a lot of volunteers around ...to ask if we need help so that is a such a good help.” – Study ID 3*

This concept, of feeling as if questions can be addressed as they arise connects very closely with the theme of Responsiveness. Feeling that their concerns and questions are addressed is an integral part of patients' perception of effective communication.

4.2.3 Compassionate Care

Compassionate Care can be defined as putting patients at ease with attention to not only their medical needs but their emotional needs as well. Patients identified that preparing for, undergoing and recovering from surgery is a process in which they are uniquely vulnerable and must place their trust in the team caring for them. A critical expectation of their day surgery experience is an awareness that preparing for, undergoing and recovering from surgery exposes patients in vulnerable situations and thus care must be taken from day surgery team to ensure patients' dignity and respect is protected. *“At that point I had my little IV with me, and ... the gown ...and house coat on. So, you know everything is covered, because you don't want to feel like you're a specimen walking in.” – Study ID 6.*

In addition, patients also expressed the expectation to be dealt with respectfully and with professionalism. Patients felt that the team taking care of them was professional when they felt they were treated with kindness, respect and when they felt that members of the team were well prepared and well-practiced in their roles. *“I just felt like there was a nice camaraderie amongst the staff ... so it was very professional, and it was also very welcoming. I was really treated like ‘we know who you are, we know your name...we are prepared for you, we know exactly what we're doing’.” – Study ID 6.* This quote clearly shows that when the patient sensed professionalism in the staff taking care of them, they felt well cared for and were at ease, which is a key aspect of Compassionate Care.

Putting the patient at ease through effective communication is a concept that is captured by the node “Explanations help curb anxiety” which is shared between Compassionate Care and Communication. Patients also described a number of factors that help to create a comfortable environment which is another component of putting the patient at ease. A comfortable environment was described by a number of patients in several different ways and could include anything from warm blankets in the recovery area, access to personal belongings in the pre-op area, seeing staff dressed for sterile procedures in the OR, and a

physical layout of the recovery area that allows patients privacy, but also gives easy access to recovery room staff to monitor patients.

Finally, patients also expected that as part of the care they receive during their day surgery experience, they will be treated not only as a patient, but as a person and an individual with unique needs.

P: “We’re there and your job is to do your cutting and it’s a job and I get that... I want them to understand that some people have anxiety and not to just ignore us.

I: You're expecting them to be kind of ... warm?

P: To humanize the room I guess.” – Study ID 4

In the above excerpt, the patient expresses a desire for a “humanized” experience, despite understanding that the task at hand is a “job” for the surgeon.

Patients also expressed the desire to be seen as an individual and a number of patients expressed negative feelings associated with what can be described as a “cookie-cutter” approach to patient care. *“I have felt rushed in the past where they tell my husband ‘okay you can go get the car and we’ll wheel her down’ and the next thing you know, I go to sit up and I pass out ... I just feel (and I know it’s day-surgery so it’s an in-and-out) that not everybody’s the same. And some people just might need that extra time.” - Study ID 4.* In this excerpt, the patient describes a previous experience where she felt that the efficiency of the day surgery process was streamlined at the cost of patient care and that attention to her individual needs were neglected. Other patients also express concern about the one-size-fits-all approach to streamlining care with regards to pain control. *“I know there’s a big push on right now—this to me this is nonsense, you know you go and get trapped under the knife and well let’s see we’ll try to manage pain without that ... why because some clowns on the street were abusing oxycontin and now I can’t have that? You know what I mean? ... Everybody experiences pain differently; everybody gets sick differently.” - Study ID 10.* Both of these examples demonstrate that patients expect that their care team acknowledge and understand that not all patients are the same as part of providing them with compassionate care.

4.2.4 Responsiveness

Responsiveness is a key theme that was demonstrated throughout our interviews. The definition of Responsiveness is the expectation that patients' needs, and concerns are anticipated and attended to effectively throughout their day surgery experience. Responsiveness means that the team providing care acts in a way that makes patients feel valued, and their individual and unique concerns are acknowledged and addressed by the team providing care for them. One of the major sub-themes within Responsiveness is Attentiveness. Here, patients demonstrate the expectation that the staff taking care of them will be "tuned in" to their needs throughout the day surgery process. Even when patients were not able to confidently anticipate what they felt those needs may be, a number of them expressed the expectation that the staff taking care of them would know which issues may arise and would be focused on watching for those issues. This notion was captured by the node "Being aware of what I need" and can be demonstrated by the following quote. *"I suppose I expect the nursing team, or whoever is going to be caring for me, to recognize any major problem that's propping up, and they will assist me."* – Study ID 1. Another patient highlights this key expectation with the following quote. *"I'm assuming I will be brought to like a post-operation room where I'm able be observed for x number of moments, and you know, like asking me if I'm nauseous ... or if there's any like weird pains or if there's any like you know ... they obviously have to monitor. I think there's always a fear of like blood clots and stuff when you have any kind of surgery or if you've been lying down for a long period of time so I'm assuming that there will be some monitoring."* – Study ID 6.

Part of attentiveness is also about creating an environment where patients feel that they are the center of focus. On being brought into the operating room, one patient remarked *"There was a very light atmosphere, so I was able to like joke a little ... so that made me feel very comfortable like I wasn't being told to 'be quiet we're working here', you know? I was being treated like yeah, you are the person that's here, you're the reason why we're here and we are attentive to your needs."* - Study ID 6. This quotation demonstrates how attending to and responding to patient needs is an important part of how patients know they are being cared for thoroughly, creating an environment of trust.

When patients brought forth examples of how responsiveness was important to them throughout the day surgery process, a specific sub theme that recurred was patients' expectation that when they are in the recovery area, their physical symptoms post-surgery would be attended to and taken care of by the recovery room staff. When describing their expectations in the post anesthesia recovery unit, one patient said *"I'm just hoping that if there is anything to do with pain or any bleeding or anything like that, that it's dealt with in a—in a sort of a quick and professional manner."* - Study ID 7. Patients also recognize that during this time, when they are still impaired from the anesthetic immediately post operatively, they will have to rely upon the expertise of the staff taking care of them to help navigate symptoms such as pain and nausea. On this subject, one patient said *"I expect to wake up in the recovery room, you know and they ...talk to you and—and if you're in pain, they ask you... and they gave you some medication...but you're still kind of—quite a little bit groggy..."* – Study ID 10. This highlights again the importance for nursing staff in the PACU to be both attentive and responsive to patient needs in the form of physical symptoms.

Closely related to this concept, is another sub theme of responsiveness that patients brought up throughout the interviews which was captured by the node "Being on top of things". Patients wanted to feel that the staff who were looking after them were "on top" of any situation that arose and that things were well in hand. In describing a moment where the patient felt things were not well in hand, one patient states *"And instead of putting it into the IV... she injected it right into my hand because she got in a hurry and —it burnt everything through the veins and I really felt like I was having a heart attack. So that left such a terrifying moment for me in my mind...I like it to run smoothly, I'd like to take the time to get ready or you know, even if they'd have to do it a little quicker... but I like to know that they're on top of it."* – Study ID 5. In this quote, the patient describes a situation in which she felt that the nursing staff rushed through insertion of her IV, as the operating room was running behind schedule. She paints a picture of how upsetting and "terrifying" it was to have an experience where she felt that the team taking care of her was not on top of things. This quotation also brings to light the relationship between patients' perception that things are being rushed in order to "flow" effectively, and their perception of quality care – an idea which will be discussed at length in the remaining main themes

Another important way in which we can create an environment of trust through responsiveness is by “Following through.” This patient demonstrates how important following through is with the following quote regarding discharge instructions. *“I want to make sure that if they tell me that there’s going to be someone there that they follow through on that because I don’t know where it got lost in translation but my husband and I - we didn’t know what to do. So, I need to know that any information they give to me, it’s going to follow through with what they say. I need to know exactly what medications, how to use them and that I can contact somebody if there’s an issue.”* – Study ID 5. In this quotation, the patient not only highlights the importance of following through to create trust, but also brings to light once again the expectation of responsiveness – that patients expect that there will be someone to respond to their concerns at each stage of the day surgery process, including after discharge. Closely related to this is the expectation that things do not “fall through the cracks.” This means that as part of patients’ expectation for their needs to be recognized and responded to, that important facets of their care do not get left behind or forgotten. One patient describes a situation where they felt that things had fallen through the cracks. *“I was sent home from my knee surgery and there was supposed to be a caregiver come in and check everything and take care of me with you know, with just that visit. And they never showed up, and it was four days later before anybody was sent.”* - Study ID 5. In this quotation, a patient describes a situation in which their understanding was that immediate home care nursing would be arranged by the operating team and did not have access to home care for several days. Similar stories about home care not showing up or requesting that patients present to a home care nursing clinic were prevalent throughout a number of interviews and caused patients to experience a negative view of the day surgery.

What is interesting about this, is that aside from ensuring the request for home care is properly filled out and faxed in a prompt manner, the burden of organizing and providing appropriate home care falls entirely upon the community organization responsible for this. Thus, it is, for the most part, out of the scope of those within the surgical team. Despite this, a negative experience with home care often permeates into a negative experience of the day surgery process. Although it may not be feasible for hospital staff to influence the reliability of the home care services provided, it is very important that as part of our duty

to respond to the needs of the patient we are very explicit about what we are expecting from home care for our patient. For example, it is important to clarify expectations with the patient either before or on the day of surgery to make sure they understand that home care services will be provided either in the home or at the nearest community clinic. It is also critical to provide patients with the resources and information they need to advocate for themselves to ensure they are receiving quality care. For example, it may improve a patient's experience if the surgeon provides them with clear instructions for how to contact the home care organization if arrangements have not been made within 24hrs of the surgery.

This is one of the most straightforward ways in which the team providing care can ensure responsiveness - by ensuring that during their time in hospital, there are staff available to answer questions and that following discharge, patients have the resources to contact the correct source if further questions arise. Clearly, this is also a very important part of effective Communication, another main theme that recurred throughout the interviews. Patients made it clear that having the opportunity for themselves and their loved ones to ask questions and receive a knowledgeable response is an important factor in creating a positive day surgery experience.

4.2.5 Safety

Safety was another one of the key themes that was discovered throughout the patient interviews. Safety is defined as patients feeling confident and secure throughout the day surgery process. A critical component of patients feeling safe is their feelings of trust and confidence in the people taking care of them. This closely relates to another major theme, Creating Confidence. This feeling of confidence in the team was of particular importance when the patient enters the operating room and is preparing to be anesthetized. *"I think for me, for personally, just like anything else if you walk into any kind of a place and they look organized you get ... warm and fuzzy about it...And if they look like, you know, 'oh where's Joe? Or where's Sam? Or where whoever?' you say 'well, what's going on?'"* – Study ID 7. In this quotation, the patient describes a situation where he experiences a sense of well-being upon entering the operating room, and seeing the staff organized with things well in hand.

In addition to having expectations regarding the team, patients also expressed the expectation that the hospital environment is both clean and comfortable. This also contributed to their feelings of safety within the hospital. Many patients expressed the expectation of a clean environment in a way that suggested that this goes without saying. A number of them also expressed that in general, it was not a major concern to them due to the fact that they felt there would be “health standards” in place regarding the cleanliness of the operating environment. They also highlighted the idea that for a number of them, our hospital is a known entity, and they suggested they would have greater concern for cleanliness if they were to be receiving surgery in an unknown hospital or a hospital outside of the country. *“I can see it, if it’s a sterile and cleanly environment—I mean if I walked in it and it wasn’t sterile or clean, I would have some concerns ... But I would expect, being in a hospital and having health standards and the type of hospital this is, that I wouldn’t have that fear.”* – Study ID 8.

In terms of experiencing a comforting environment that promoted feelings of safety, patients expressed that being provided with physical comforts such as warm blankets and access to their personal belongings were important to them. They also described comforting elements of the set-up of the day surgery area. One patient stated *“You know, you’re not kind of left alone. That’s a nice thing, as opposed to being in a closed off hospital room, I think that would be more stressful. You’re sitting with other people who are getting ready for surgery. I mean because it was such a huge surgery, my older brother was there, which was nice too.”* – Study ID 6. Having access to family members during appropriate times throughout the day surgery process was also important in patients experiencing a comforting environment. *“There’s another room where you’re garbed up and stuff like that, and I can understand family members not being allowed there, but during the waiting room process I think that they should be allowed.”* – Study ID 7. In creating a sense of safety, patients also expressed the expectation that their personal belongings would be safely cared for during the time of their surgery.

Another key feature in creating a sense of safety for patients undergoing day surgery was captured by the node “Things getting done properly.” Here, patients expressed again the need to have confidence and trust in the team taking care of them. One way in which this trust is built is when patients feel the team is going about their work with care and expertise. When asked about his expectations in the operating room one patient answered, *“Well I think once the surgeon is done, that the team remaining to do whatever surgical procedures are left, the stitching or whatever, that’s done properly. I’m assuming it is. But just that the whole process flows nice and easy and that everybody is doing the job they’re supposed to do.”* – Study ID 7.

4.2.6 Creating Confidence

The notion of creating confidence is tied closely to how patients perceive safety, but it can also be thought of as its own theme. Creating Confidence refers to constructing an environment where patients trust not only the staff caring for them, but also the systems in place responsible for their successful day surgery experience. Patients have a number of expectations that when fulfilled, create a sense of confidence which in turn creates a backdrop of calm and comfort for patients undergoing surgery.

Feeling confident in the team of physicians and nurses, is one key facet in Creating Confidence. This sub theme is also related closely to safety, as patients feel safe and well cared for when they feel confident in the team taking care of them. As discussed above, one important way in which patients build confidence in those taking care of them is by having positive experiences within the hospital where patients feel that things are getting done “right” and with professionalism. The process of building confidence in the care team begins before the patient even enters the hospital on the day of their surgery. One patient explained during their interview at the pre-admit clinic,

P: “What I can say is up to this point, I’m extremely impressed, I’m really impressed at how things are managed so well.”

I: “Is that to do with your appointments with your surgeon?”

P: "From the beginning. From the very beginning - being informed, receiving a letter, being contacted, coming in for this appointment today - and that's very impressive truly."

– Study ID 1. Clearly, this patient demonstrates that the process of building confidence begins at their first interaction with the hospital system. Opportunities for building confidence exist at the surgeon's outpatient clinic, in the process of scheduling a day and time for surgery, and at the pre-admit appointment or phone call prior to patients even arriving for their surgery.

Another important way in which patients build a sense of confidence is when they feel that they know who is taking care of them. This is particularly important to patients as they are entering the operating room. In some cases, patients specified that they would want to see and speak to the attending surgeon prior to going to sleep, but other patients stated that as long as someone from the surgical team identifies themselves and their role, they would be comfortable with that. When asked what kind of expectations they had for entering the operating room, one patient said *"I'd like people introduce themselves to you - I don't think I've ever been in one [operating room] where someone hasn't introduced themselves as to who they are and what they're doing. And I'd like to see my doctor before it happens because I want to make sure he's there. One time it's happened that the doctor wasn't in there before I got the medication to sleep and I was nervous about that."* - Study ID 5

Another way in which patients Create Confidence, is through feeling that the procedures in place for circulating patients through the entire day surgery process are organized, time-effective and efficient. Patients alluded to the importance of efficiency a number of times throughout the interview. Efficient processing through the stages of day surgery from check-in to discharge is important to patients; many expressed that surgery is an anxiety inducing experience, and that the "hurry up and wait" phenomenon of having to sit idle and wait for the next step can often make that anxiety worse. This relates closely to the concept of Flow which was another major theme during the interviews. Aside from reducing anxiety, when patients experienced efficiency, they were often more at ease and were confident in the system in place. When one patient was asked about their expectations of going from the check in process to the operating room, they stated *"I expect that the nurses will move me efficiently, that I'm not hanging out in there too long when I get to the*

waiting room. Or in the operating room - that everything will be in place, they're not waiting for team members, that everybody's there ... and that they're gowned up and ready to go...Because once you move in there, I know they can give me the stuff and I'll be ... out. But I'd like to think when I walk in there that I can look around and have confidence...that everybody's in position and ready to go." – Study ID 7.

4.2.7 Flow

Related closely to the concept efficiency is another major theme, Flow. Flow refers to the smooth advancement of patients through the day surgery process. It balances efficiency with the need to provide thorough and meticulous patient care, and therefore relates also to the theme of safety. When asked about their expectations in general for the day of surgery, patients often brought up the concept of flow independently. A number indicated that it was important to them to advance through the day surgery process as quickly as possible, with minimal delays and setbacks if possible. Other patients, and even some of the same patients that expressed the desire to be in and out without delay, also expressed the need to make sure that efficiency doesn't come at the cost of patient care. They emphasized the importance of ensuring that they felt prepared and safe at each stage of the process. Ultimately, the ideal flow of the day ensures that patients experience the sense of confidence built by an efficient and timely advancement through the day surgery process without experiencing a sense that they are feeling "rushed."

Feeling Rushed is a subtheme that a number of patients explored in their interviews. Previous quotations have expressed patients' negative reactions to situations in which they felt they were either rushed through the recovery and discharge process, or when they felt that the quality of care suffered due to their perception that staff were rushing (ie. failed IV insertions). This raises another minor theme that appeared in several interviews, the concept that Doing Things Too Quickly is Bad Care. This subtheme raises the idea that patients sometimes equate things happening at a rapid pace with lesser quality care. This is an important consideration for those who are trying to create an optimal day surgery experience; although we as stakeholders and physicians may prioritize rapid and efficient care, it is important that it is done in a way in which the patients sense of security and safety is preserved.

One way in which that sense of security may be maintained is when patients proceed through the day surgery process with a Sense of Routineness. This is another contributing theme that appeared in patient interviews whereby patients expressed that it created confidence when they felt that events were unfolding in a very routine way. In addition, they felt comforted placing themselves in the hands of the staff caring for them knowing that the entire flow of the day follows a set routine. One patient, when asked about whether he has any concerns about the process between arriving in hospital and being taken into the operating room stated. *“Not really. In my past experience has been that you go on to the admitting area for the surgery, usually your name is right there - it’s very organized. They’re going to call your name when it’s your time, then you go into a change area where you put your surgical gown on, they assign you a little cubicle in that and then you come out and then you are waiting till they get you—it’s pretty straight forward...”* – Study ID 10. In This patient describes the routine of the day as a means to explain his sense of confidence.

Similarly, patients also expressed discomfort with surprises. This was captured in the node “Surprises are uncomfortable”. Many patients clearly stated in their interviews that being surprised by a turn of events, or simply from not knowing or understanding the routine was an undesirable experience. These “surprises” described ranged from having their surgery cancelled or called early, going off to sleep before they expected, or experiencing pain when they were not prepared for it.

4.2.8 Summary of Themes

The essence of the interviews conducted were distilled into 6 independent but interconnected themes. While some themes directly complement each other such as Communication and Compassionate Care, other themes were discussed in equilibrium with each other such as Flow and Safety.

Communication and Compassionate Care were closely linked themes. One major way in which patients know and feel they are receiving thorough and compassionate care is in the way that day surgery staff communicate with them. Patients feel cared for when the communication is not only professional and polite, but effective and thorough. A third

theme that is very much related to Communication and Compassionate Care is also Responsiveness. Attending to patient needs with compassion and effective, professional communication skills is important to patients.

Responsiveness and Creating Confidence are also closely interconnected. One way in which patients are able to build confidence in the system is through feeling that their concerns have been addressed and attended to. Creating Confidence is interdependent on all of the other themes. Each of Safety, Compassionate Care, Flow, Responsiveness and Communication play a role in helping the patient to feel confident and secure during the day surgery process. When patients see that their safety is held paramount and that specific care is taken with regards to it, they feel more secure. Knowing that the providers of care are compassionate and responsive to their needs also helps to increase the sense of security and wellbeing. Effective communication helps to create confidence by building a sense of trust between patients and staff. Not only is it important for patients to experience effective communication such that they understand the routine of day surgery and feel properly equipped with all the information they require, it is also important to patients that they feel the channels of communication are open to questions from themselves and from their families.

Flow, Safety and Creating Confidence have a unique relationship to each other. Patients describe the need for the process to flow efficiently from start to finish. They described this as being important to themselves, but also identified that they believe it is also a priority of the hospital to maintain a steady and efficient flow of patients. Although efficiency is important to creating a sense of confidence, patients also expressed that it is important that efficiency is never achieved by cutting corners in patient safety. This is also a critical element of creating confidence, that the flow of day surgery is achieved in a way that patients still feel very secure and confident that their individual needs as well as their safety are considered.

Chapter 5

5 Discussion

This chapter explores how themes from thematic analysis were used to generate items for the preliminary Patient Satisfaction Tool for Day-surgery Patients. Strengths, limitations and next steps are also discussed in this chapter.

5.1 Overall Concepts

The design of this study allows us to consider the patients' perception of the day-surgery experience. In our thematic analysis of patient interviews, some important insights came to light which helped to shape our understanding of patient satisfaction, and ultimately helped us generate items for our preliminary Patient Satisfaction Questionnaire. Firstly, it was very clear that patients often reflected on their previous experiences of being in a hospital setting to help form their expectations for the day of their surgery. They would often express confidence in our institution by citing their own positive experience, a friend or family member's positive experience, or simply the good "reputation" of the institution. Ultimately, this underscores the importance of careful attention to patient satisfaction as it seems likely that one positive patient experience can lay the foundation for further positive patient experiences.

Another important point that became clear throughout our analysis of data was that often events that occur outside the day of surgery seem to play a role in creating a satisfying day-surgery experience. Some of our interviewees spoke about how positive experiences with the surgeon's office, the surgical consultation itself, and the organization of the pre-admission clinic were all important in creating a sense of confidence in the institution. When a positive relationship between the patient and the institution was already established, patients felt more at ease and expected that positive experience to continue. It seems likely that the opposite may also be true; if patients have a poor experience in the events leading to the day of surgery, their expectations may be that this poor experience will continue. Even though these events fall outside the day of surgery, they represent the

initial encounter between patient and institution and thus this can be important in shaping the perspective from which patients approach the day of surgery and can in turn effect their overall experience. Previous researchers such as Cheung¹⁴ have made note of the fact that first impressions matter; Cheung conducted focus groups to facilitate the creation of a satisfaction survey for surgical inpatients and found that the admission process and hospital environment represented their patients' first encounter with the hospital, and thus profoundly influenced satisfaction with the hospital experience¹⁴. Our finding that events leading up to the day of surgery can also contribute to shaping the perspectives of patients and can also influence satisfaction has not been discussed by other authors and thus is a key contribution of this study.

5.2 Development of Preliminary Patient Satisfaction Questionnaire for Day-Surgery Patients

The six major themes, communication, responsiveness, compassionate care, safety, flow and creating confidence form the basis for our preliminary Patient Satisfaction Questionnaire for Adult Day-surgery Patients. Because of the unique design of this study, we are able to situate ourselves within the patients' perspective as we consider how each of these themes helps to create a satisfying experience for patients. As healthcare providers, we have inherent ideas about how communication, responsiveness, compassionate care, safety and a sense of confidence can be demonstrated during a patient's interaction with the health care system. It is paramount to consider that how we, as health care providers, perceive these factors likely differs from how patients perceive them.

For example, if we look at safety in ambulatory surgery from a health care provider perspective, we may create an item on our questionnaire that asks whether a Surgical Safety Checklist was completed, as this is (to us) a known metric of patient safety⁵⁵. However, through our thematic analysis of patient interviews, we know that most patients did not refer to an expectation of the Surgical Safety Checklist when they discussed their concept of safety at the time of surgery. Fears regarding performing the wrong procedure on the wrong patient or operating on the wrong side of the body were rarely expressed in our interviews. This demonstrates that the ways in which healthcare providers know they are

providing safe care are not the same ways in which patients know they are being treated safely. In our analysis, patients often associated safe care with feeling confident in those taking care of them. Therefore, in order to evaluate patients' satisfaction with safety on the day of surgery, a better question to include on our tool may be "How confident did you feel in the people taking care of you?" In this way, our thematic analysis of data shaped and guided our creation of items based on each theme for the preliminary Patient Satisfaction Questionnaire for Adult Day-Surgery Patients.

We will now discuss how each theme was captured from the patients' perspective in order to form items for our preliminary Patient Satisfaction Questionnaire for Adult Day-surgery Patients.

Communication

Patients felt that effective communication was a key expectation on the day of surgery. High quality communication before, during and after the day of surgery helped patients feel at ease, created confidence in the team caring for them and helped patients feel that they were being cared for with compassion. The following questions were derived from this theme:

1. I felt that I had all the information I needed **prior to arriving at hospital** for my scheduled surgery.
2. I felt that I had all the information I needed **while I was in hospital** for my scheduled surgery.
3. I felt that I had all the information that I needed **at the time of discharge** from hospital after my scheduled surgery.
4. I felt that staff were willing and able to answer my questions while I was in hospital
5. My family/loved ones felt that staff were willing and able to answer their questions while I was in hospital.
6. I felt that I knew what to expect at each stage of the day surgery process
7. I felt that overall, there was effective communication during the day-surgery process.

Responsiveness

Patients expected that staff caring for them on the day of surgery would be diligent in anticipating, attending to and responding to patients' needs. They expect that the staff caring for them will navigate patients' specific needs that arise during the day-surgery process, responding to them with professionalism and expertise. The following questions seek to capture this expectation.

1. I felt that staff were aware of and attentive to my unique needs.
2. I felt that my symptoms such as pain, nausea, ect. were addressed effectively in the PACU.
3. I felt that **prior to arriving at hospital** for my surgery I knew who to contact with any questions.
4. I felt that **at the time of discharge from hospital** after my scheduled surgery I knew who to contact with any questions.
5. I felt that overall that my questions and concerns were responded to throughout the day surgery process.

Compassionate Care

Patients expected to be treated with respect, dignity and kindness during their day of surgery. Staff demonstrating compassion towards patients and their individual needs helps to create confidence as well as help patients feel safe and secure. The following questions capture these expectations.

1. I felt that my dignity and privacy were respected throughout my stay in hospital.
2. I felt that the day-surgery environment (waiting rooms, PACU area ect.) was welcoming.
3. I felt that staff were professional and courteous.
4. I felt that staff people care of me were respectful of my individual needs.
5. I felt that people taking care of me treated me as a person.
6. I felt that overall the people taking care of me demonstrated compassion.

Safety

Patients expect a high standard of safety at their day-surgery. They expect staff to interact with them in a way that builds trust and confidence, and they expect to feel secure and well-taken care of by those in charge. The following questions capture patients' expectations for safety.

1. I felt confident in the people taking care of me.
2. I felt that the day-surgery environment (waiting rooms, PACU, operating room ect.) were clean and secure.
3. I felt that my belongings were secure during the day surgery process.
4. Overall, I felt that care was administered in a safe fashion.

Flow

Patients expected that the day of surgery would proceed smoothly, with efficiency but also with ample time for them to feel prepared and comfortable at each stage of the day-surgery process. They expect a sense of routineness when moving through the stages of day surgery, which helps build confidence in the process as a whole. The following questions capture these expectations.

1. I felt that the day progressed on time or within reasonable time.
2. I felt that there was enough time for me to prepare for surgery and recover from surgery prior to discharge.
3. I felt that things were happening according to plan on the day of surgery.
4. I felt that I was prepared for the next step at each stage of the day-surgery process.
5. Overall, I felt that the day flowed smoothly

Creating Confidence

Patients expected that they would have an experience that inspires confidence and trust. Effective communication, careful attention to safety, and demonstration of the knowledge and expertise of those caring for them are all important factors in creating this sense of confidence. The following questions capture this expectation.

1. I felt that the people taking care of me were experienced and knowledgeable.

2. I felt that the people taking care of me were efficient.
3. I felt there was enough interaction with my surgeon and their surgical team
4. I felt that the people taking care of me had everything under control
5. Overall, I felt confident in the people taking care of me.

The items generated for the preliminary Patient Satisfaction Questionnaire for Day-Surgery Patients can be found in Appendix E.

5.3 Patient Satisfaction and Quality: What our Tool Can and Cannot Do

We have set out to design our patient satisfaction tool from a very patient oriented perspective in hopes that it will be able to provide accurate data regarding patient satisfaction for those undergoing outpatient surgery. One thing that we must emphasize, is that patient satisfaction is not a proxy for quality in care, and therefore our tool is not designed to yield data on quality.

Health care provision is a multidimensional phenomenon involving a diversity of actors (i.e., health care providers, patients, administrators, etc.) who play different roles and respond to different goals. As such, each dimension should be considered carefully. For instance, patient satisfaction and quality, while related, are two important dimensions that might benefit from being studied separately when trying to develop measurement tools. As discussed previously, some research has shown that at times quality and patient satisfaction are at odds. Lyu's study demonstrated that high patient satisfaction scores are not necessarily associated with high performance on quality process measures⁹. It is important to realize that when an institution seeks to answer the question "how are we doing?", patient satisfaction data gives them valuable information, but cannot tell the entire story. As we migrate towards models of health care provision that place greater value on the patient experience, it becomes important to investigate areas such as patient satisfaction, where we must hear from the patient to understand information that only they can provide to us. It is also important to remember, however, that there are important metrics of quality that patients have no insight into and cannot comment upon. Thus, it should be noted that the tool designed for this study will ideally provide a window into one

important dimension - patient satisfaction with our outpatient surgical service - but also that this information must also be integrated with other perspectives and data when considering the overall improvement of outpatient surgical care.

5.4 Where our preliminary Patient Satisfaction Questionnaire for Day-Surgery Patients fits in with other tools.

To our knowledge, our questionnaire is the only patient satisfaction tool designed specifically for Canadian day-surgery patients. In addition, it is the only tool we have seen for adult day-surgery patients which is derived from an analysis of patient expectations.

5.4.1 Gathering Patient Satisfaction Data in Surgery: Strategies by Individual Researchers

An interest in collecting patient satisfaction data specifically for day-surgery patients grew as day-surgery became the preferred method for more and more common procedures. Beginning in the early 1990's, a number of studies were published examining patient satisfaction in day-surgery patients. Many of these studies, such as the one conducted by Holland, employed the use of a patient satisfaction questionnaire that was developed by the researchers themselves⁵⁶. Their questionnaire was developed based upon literature review as well as two patient focus groups employing the critical incident technique whereby data regarding critical incidents involving patient satisfaction were collected and used to formulate items for their survey. Their survey was pilot tested and did include measures of validation.

Although their survey was created in a somewhat similar fashion to ours, and is specific to day-surgery patients, there are a few factors that make it less than ideal for use in our setting. Firstly, this survey is not based upon patient expectations, which the writers mention is beyond the scope of their study. We have previously explained the importance of understanding patient expectations in order to assess their satisfaction. In addition to that, we suspect that expectations may vary greatly between the population that this study was validated for and our population. Firstly, the survey was created 25 years ago and thus may not capture the expectations of today's population and may lack a nuanced exploration

of patient satisfaction in today's modern hospital. Secondly, this tool was validated for use in American patients, and although geographically Canadian patients may be quite close to American patients, vastly differing health-care systems are likely to play a role in effecting patient expectations and perspectives. Thus, we feel it is important for our tool to be developed and validated amongst a Canadian population.

Another way in which researchers have sought to evaluate satisfaction in day-surgery patients is a straight-forward approach of asking what patients' overall satisfaction is, instead of exploring satisfaction with dedicated questionnaire or tool. In 2009, Lemos used this simple approach on a cohort of day surgery patients to evaluate which factors predicted satisfaction¹⁶. In their survey, patient satisfaction level regarding the entire surgical health care experience was evaluated with a single question using a 1 to 6 - point numerical scale. In their study, they found that there were very few respondents who rated below 4 and thus they redefined their variable to include the "totally satisfied" group which consisted of those who gave a rating of 6, and the "not totally satisfied" group who gave ratings of 1, 2, 3, 4, or 5.¹⁶ This finding is consistent with other studies that have found that asking more specific questions regarding satisfaction yields more nuanced results. Although this approach is straight-forward and likely can be applied easily across many different populations, it does not yield actionable information to those conducting the survey. This approach would be unsuitable for our purposes, as the hope in creating our satisfaction tool is that we can continue to explore in which aspects of the day-surgery experience we can improve patient satisfaction.

5.4.2 The Hospital Consumer Assessment of Healthcare Providers and Systems Survey

In the last 10 years, the most widely used Patient Satisfaction Tools have been derived from the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey¹⁰. This tool has been used widely across American and Canadian hospitals, and currently it is the only tool used by our institution to gather patient satisfaction data. The edition of the survey that is used by our institution can be found in Appendix F. The tool itself is divided into subsections with the following headings: Your Care from Nurses, Your Care from Doctors, The Hospital Environment, Your Experiences in This Hospital, When

You Left the Hospital, Overall Rating of Hospital, and Understanding Your Care when You Left the Hospital.

There are a number of reasons why this standardized and validated survey is not the ideal tool to capture patient satisfaction data from those patients undergoing day surgery at our institution. Firstly, it is a tool designed to evaluate the experience of those who have been inpatients at the hospital. This is problematic, because though the questions on this survey may have been rigorously developed using strategies to capture the experience of their target population, the experience of inpatients is clearly very different from the experience of those undergoing day-surgery. The following paragraphs will illustrate some of these differences in more detail.

When we begin to compare the HCAHPS survey with the themes that emerged from our analysis, this becomes quite clear. If we examine the questions on the HCAHPS that deal directly with communication, there are specific questions that ask whether doctors and nurses “listened carefully to you” and whether they “explained things in a way you could understand.” Our patient population however, indicated that a crucial aspect of effective communication was for hospital staff to be able and willing to respond to any questions that the patient or family may have. Compared with inpatient medicine, where new facets of treatment and care may be slowly tinkered with over time, and the environment remains fairly constant, the day-surgery experience is characterized by quicker decision making, and unfamiliar environments, thus the ability for our patients to voice their questions and have them addressed is a crucial part of how they experience effective communication on the day of surgery. This facet of communication is not adequately explored in the existing HCAHPS survey.

Another key theme that was important to our patients was Responsiveness. In the HCAHPS survey, there are some questions that may partially address this such as “During this hospital stay, after you pressed the call button, how often did you get help as soon as you wanted it?” and “During this hospital stay, how often did the hospital staff do everything they could to help you with your pain?” However, once again, our patients have demonstrated that they experience Responsiveness in a somewhat different way.

Responsiveness to our patients was less about how quickly needs were addressed, and more about how attentively they were addressed and whether the staff caring for patients were able to adequately anticipate those needs particularly in light of the fact that patients who are emerging from anesthesia are not often able to articulate those needs. In addition, although the HCAHPS survey touches on whether pain was adequately managed, our patients expected that their healthcare providers on the day of surgery would be able to respond to any and all symptoms that might arise, not only pain.

When we consider questions on the HCAHPS that address issues around safety, we again see that this tool, does not fully capture the perspective that our day-surgery patients expressed. For example, in the HCAHPS survey, there are questions that ask “Before giving you any new medicine, how often did the hospital staff tell you what the medicine was used for?” and “Before giving you any new medicine, how often did hospital staff describe possible side effects in a way you could understand?” The HCAHPS survey hones in on new medications as being an important aspect of care for their patient population, however in our interviews, patients did not identify that they felt this was a critical issue, and it did not seem to contribute to their impression of whether they were receiving safe care or not. We can see clearly how with general hospital inpatients, where titration and tailoring of medication regimes happens on a day by day basis, it would be important to assess that particular dimension of care. Aside from the expectation that their post-operative symptoms would be treated with medications in the recovery area, our patient population did not express that knowing the reasoning behind starting a medication or the side effect profile would be an important contributing factor to their satisfaction on the day of surgery. This once again underlines the notion that care providers and administrators approach patient safety from a different perspective than patients. Where healthcare workers look to measures such as adherence to appropriate pre-operative antibiotic usage, rate of complications, and handwashing statistics to know whether care was safely delivered, our patients tended to generate their measure of safety based on the impressions they received from the team caring for them and the environment around them. If they felt assured by those looking after them and secure in their environment, they felt that care was safe.

Questions such as “how often did your nurse/doctor treat you with courtesy and respect?” on the HCAHPS survey do begin to address the theme of compassionate care, however our day-surgery patients also emphasized the importance of feeling like an individual with distinct and unique needs. This is understandable, as in the day-surgery setting, as a number of patients are being processed efficiently throughout the day, it makes sense that patients would want to feel like they are more than just a number. Our patients also emphasized the importance of protecting their dignity and privacy, another concern that may have a greater importance in overall satisfaction as patients may feel quite vulnerable and exposed when they are in or recovering from surgery.

Other areas that were important to establishing a satisfying experience in our patient population that were not fully addressed in the HCHAPS survey were “creating confidence” and also “flow”. Once again, it is fairly clear to see how moving efficiently throughout the day-surgery process with adequate time for preparation but without undue delay would be a unique expectation of those patients undergoing outpatient surgery as opposed to an inpatient stay. In a similar fashion, creating confidence, while there is more time for patient interaction with healthcare providers, a more stable environment and where complex issues are targeted in an inpatient setting, clearly looks different from creating confidence for those patients undergoing outpatient surgery.

5.4.3 The Consumer Assessment of Healthcare Providers and Systems Outpatient and Ambulatory Surgery Survey

The Consumer Assessment of Healthcare Providers and Systems Outpatient and Ambulatory Surgery Survey or OAS CAHPS (Appendix G) is a standardized tool designed to measure patients’ experiences with care received from Medicare-certified hospital outpatient departments and ambulatory surgery centers in American hospitals⁵⁷. This survey is likely the closest to our ideal patient satisfaction tool, as it is validated for use specifically in day-surgery patients. The OAS CAHPS describes its process for survey development as a multipronged approach which included reviewing surveys submitted as a result of a public call for measures; reviewing existing literature; conducting focus groups with patients who had a recent outpatient surgery or procedure; conducting cognitive interviews with patients to test their understanding and ability to answer the questions; and

obtaining stakeholder input on the draft survey and other issues that may impact survey implementation (site). What is missing from this otherwise quite thorough approach is consideration of patient expectations. Without an exploration of patient expectations guiding the development of survey items, it is difficult to know with certainty that this questionnaire truly captures what is most important to patients experiencing out-patient surgery. Although the OAS CAHPS may capture some of the important expectations that our patients expressed for their day of surgery, there are areas that were significant to our patient population that are not well addressed in their survey.

Interestingly, the OAS CAHPS includes a series of questions that seeks out information regarding whether patients had symptoms following discharge. These questions include: “At any time after leaving the facility, did you have pain as a result of your procedure?”, “At any time after leaving the facility, did you have nausea or vomiting as a result of either your procedure or the anesthesia?”, “At any time after leaving the facility, did you have bleeding as a result of your procedure?” and “At any time after leaving the facility, did you have any signs of infection?”. In contrast, in our analysis, we found that our patients generally weren’t expecting to go home with zero post-operative symptoms. They were instead more focused on ensuring that their post-operative symptoms were manageable and controlled, and that they had the necessary information and tools to act if symptoms became out of control.

5.4.4 The Canadian Patient Experiences Survey on Inpatient Care

The Canadian Patient Experiences Survey on Inpatient Care (CPES-IC), is a tool that is developed by the Canadian Institute for Health Information (CIHI) and currently remains the only Canadian validated standardized tool used to collect patient satisfaction data from several institutions across the country²¹. The tool itself, which can be found in Appendix H, includes the first 25 items from the American HCAHPS survey and combines it with 15 additional questions that according to CIHI, are designed to address aspects of care that are of particular importance to Canadian patients. We have previously demonstrated why a survey specific to inpatient care would not be ideal for collecting patient satisfaction data in our population. Additionally, although it is common for those creating novel patient satisfaction tools to combine an existing tool with new items to generate a “new” tool, this

approach assumes that the questions in the existing tool equally capture the expectations of the target population in the way that new questions do. If using an existing tool as a jumping off point for a patient satisfaction survey, perhaps a more useful approach would be to select only the questions that were found to be relevant and important to your population of interest and then create additional questions that address the remaining breadth of patient expectations.

5.5 Limitations

In our original study design, we had planned to interview participants both before and after their day-surgery. As data collection proceeded, we decided to eliminate the second post-surgery interview for a few different reasons. Firstly, our intent in conducting a post-surgery interview was to gather data where the patient could draw upon their surgery experience to help elucidate their expectations for the day of surgery. We found that the majority of our patients had undergone previous surgery at some point, and many of them reflected on this experience to help explain their expectations even in the pre-surgery interview. Thus, we were able to capture this perspective without conducting two interviews. Secondly, we found that in the initial post-surgery interviews that were conducted, patients tended to focus more on trying to recount the exact events on the day of surgery, and a faceted discussion of expectations was often lacking. Thus, we found that the data regarding how past experiences shape future expectations that we were seeking was actually better captured in the pre-surgery interview, particularly in those who had experienced surgery before.

One limitation that we faced in our study design was within the recruitment of patients. Because of ethics regulations regarding potential participants receiving notification of an ongoing study prior to investigators making contact, we chose to recruit patients from those that attended in person a pre-admission clinic in Victoria Hospital, London Health Sciences Centre. This reflects the convenience nature of our sample which may have brought to light the perspectives of a particular kind of patient. Patients referred to the clinic tend to be more medically complex and may have more medical comorbidities than those that do not attend. They may be older, and they may have more experience with surgery than other patients who have their pre-admit appointment by phone or who do not go through the pre-

admission clinic at all. For our purposes, this may have been an advantage, as these patients often had rich experiences to draw from in their interviews. However, as a result, the perspectives of younger, healthy patients without medical comorbidities may be under-represented in our study.

5.6 Strengths

One of the most important strengths of our study and the resulting Patient Satisfaction tool, is that it is grounded in the patient experience. By designing our study to capture the perspective of the patient, we acknowledge that patients have different expectations, perceptions and attitudes from healthcare workers and hospital stakeholders. As we conducted our analysis, it became clear that our belief that patients and healthcare workers have different ideas on what makes a successful outpatient surgery experience is indeed accurate. In fact, there were times that patients themselves brought this idea forward, particularly when they discussed the timing and flow of events on the day of surgery. For example, patients eluded to the fact that while processing patients quickly and efficiently may be an important factor to healthcare workers and hospital stakeholders, this may be less critical to patients who are worried about feeling rushed through. In designing our study to capture what is most important to patients, we increase our confidence that the resulting preliminary Patient Satisfaction Tool reliably measures satisfaction and could be used to guide meaningful improvements in the outpatient surgery experience for our patient population.

Another strength of this study is that our rigorous methodology of examining patient expectations for survey creation, helps us to begin to establish face validity of our preliminary tool. Validation techniques are discussed in depth further below, but briefly, face validity can be established when “on its face” the tool appears to be able to provide measurement on the construct of interest.⁵⁸ By specifically examining patients’ expectations and deriving our questionnaire items from that analysis in order to capture those expectations, we are helping to ensure face validity by asking patients about the things they told us are the most important contributors to their satisfaction.

5.7 Future Directions

We have previously highlighted the importance of any tool seeking to measure patient satisfaction undergoing testing to ensure validity and reliability, thus next steps would include validation and pilot testing of our preliminary patient satisfaction tool. In order to ensure reliability, internal consistency of our patient satisfaction tool can be determined with the statistic Cronbach's α .

In order to establish validity, three types of validity should be considered and assessed: face validity, content validity and construct validity. Face validity is the extent to which a measurement method appears "on its face" to measure the construct of interest.⁵⁸ It is an informal and subjective assessment that tells us whether respondents or lay-persons feel that the questionnaire items are valid. Content validity refers to the extent to which the items in a survey are representative of the entire theoretical construct that the survey is designed to assess.⁵⁸ This would be assessed by a panel of experts that are familiar with patient satisfaction research. Evaluating content validity could be done subjectively, or through more quantitative methods such as a content validity form.²⁸ The construct validity of a questionnaire can be evaluated by estimating its association with other variables (or measures of a construct) with which it should be correlated positively, negatively, or not at all.²⁸ In order to determine this, our patient satisfaction questionnaire as well as pre-existing instruments that measure similar constructs (such as the OAS CAHPS), would be administered to the same group of individuals. Correlation matrices would then be used to examine the expected patterns of associations between different measures of the same construct.

Finally, after refinement of items in our questionnaire, our pilot testing and validation phase would also include cognitive interviews with participants.⁵⁹ These interviews seek to determine how potential respondents interpret the items and if their interpretation matches what we, the survey designers, have in mind.⁶⁰ Since themes are highly inter-related, we expect that the process of validation, pilot testing and cognitive interviews will help to establish any redundancy of questions and will allow for final refinement of our tool.

5.8 Summary

In this study, we conducted semi-structured interviews on adult patients scheduled for outpatient surgery to elicit their expectations for the day of surgery. They shared with us their expectations, often shaped by previous interactions with the health care system. We conducted a thematic analysis of data to distill six major themes which were important to patient satisfaction. From those themes, we then constructed our preliminary Patient Satisfaction Questionnaire for Day-Surgery Patients and proceeded to establish plans for pilot testing and validation of this novel tool.

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Appendices

Appendix A: REB Approval Letters



Date: 13 September 2018

To: Dr. Chris Bailey

Project ID: 111954

Study Title: Development of a Patient Satisfaction Questionnaire for Adult Surgical Patients

Application Type: HSREB Initial Application

Review Type: Delegated

Full Board Reporting Date: October 2, 2018

Date Approval Issued: 13/Sep/2018

REB Approval Expiry Date: 13/Sep/2019

Dear Dr. Chris Bailey

The Western University Health Science Research Ethics Board (HSREB) has reviewed and approved the above mentioned study as described in the WREM application form, as of the HSREB Initial Approval Date noted above. This research study is to be conducted by the investigator noted above. All other required institutional approvals must also be obtained prior to the conduct of the study.

Documents Approved:

Document Name	Document Type	Document Date	Document Version
LOI and Consent form Patient Expectations and Satisfaction V2	Written Consent/Assent	31/Aug/2018	2
Post-Surgery Interview Guide V1	Interview Guide	13/Jul/2018	1
Pre-Surgery Demographics Questionnaire V1	Paper Survey	13/Jul/2018	1
Pre-Surgery Interview Guide V1	Interview Guide	13/Jul/2018	1
Protocol for Patient Satisfaction and Expectations V2	Protocol	31/Aug/2018	2

No deviations from, or changes to, the protocol or WREM application should be initiated without prior written approval of an appropriate amendment from Western HSREB, except when necessary to eliminate immediate hazard(s) to study participants or when the change(s) involves only administrative or logistical aspects of the trial.

REB members involved in the research project do not participate in the review, discussion or decision.

The Western University HSREB operates in compliance with, and is constituted in accordance with, the requirements of the TriCouncil Policy Statement: Ethical Conduct for Research Involving Humans (TCPS 2); the International Conference on Harmonisation Good Clinical Practice Consolidated Guideline (ICH GCP); Part C, Division 5 of the Food and Drug Regulations; Part 4 of the Natural Health Products Regulations; Part 3 of the Medical Devices Regulations and the provisions of the Ontario Personal Health Information Protection Act (PHIPA 2004) and its applicable regulations. The HSREB is registered with the U.S. Department of Health & Human Services under the IRB registration number IRB 0000940.

Please do not hesitate to contact us if you have any questions.

Sincerely,

Karen Gopaul, Ethics Officer on behalf of Dr. Joseph Gilbert, HSREB Chair

Note: This correspondence includes an electronic signature (validation and approval via an online system that is compliant with all regulations).



Date: 13 September 2018

To: Dr. Chris Bailey

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Study Title: Development of a Patient Satisfaction Questionnaire for Adult Surgical Patients

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No deviations from, or changes to, the protocol or WREM application should be initiated without prior written approval of an appropriate amendment from Western HSREB, except when necessary to eliminate immediate hazard(s) to study participants or when the change(s) involves only administrative or logistical aspects of the trial.

REB members involved in the research project do not participate in the review, discussion or decision.

The Western University HSREB operates in compliance with, and is constituted in accordance with, the requirements of the TriCouncil Policy Statement: Ethical Conduct for Research Involving Humans (TCPS 2); the International Conference on Harmonisation Good Clinical Practice Consolidated Guideline (ICH GCP); Part C, Division 5 of the Food and Drug Regulations; Part 4 of the Natural Health Products Regulations; Part 3 of the Medical Devices Regulations and the provisions of the Ontario Personal Health Information Protection Act (PHIPA 2004) and its applicable regulations. The HSREB is registered with the U.S. Department of Health & Human Services under the IRB registration number IRB 00000940.

Please do not hesitate to contact us if you have any questions.

Sincerely,

Karen Gopaul, Ethics Officer on behalf of Dr. Joseph Gilbert, HSREB Chair

Note: This correspondence includes an electronic signature (validation and approval via an online system that is compliant with all regulations).

Appendix B: Pre-surgery Interview Guide Version 1

Events for Interview

- 1) Introduction to Study
- 2) Pre-Surgery Demographic Questionnaire
- 3) Conclusion

Introduction to Study

Interviewer will provide a brief summary of the purpose of the study, the study events, and why the study is being completed.

For example: “The goal of this study is to develop a patient expectation and satisfaction survey that can be implemented in the hospital to help continue to improve the care that the hospital is providing and meet patient needs. To help with the development of this questionnaire, we are recruiting surgical patients to share their experiences, as well as expectations, before and after surgery. Using this information, we are hoping to find commonalities across patients and develop specific questions that capture satisfaction and expectations that can be used in the questionnaire. This is one of two interviews we will be completing. The second interview will occur after you have had your scheduled surgery. This interview will include a brief demographic questionnaire and 9 questions that capture your pre-surgery expectations. At any point during the interview if you would like to stop or have any questions, please let me know.”

Pre-Surgery Interview Questions

1. What is your understanding/expectation regarding your hospital experience before you enter the hospital the day of the surgery?
 - ***Example of possible probes***
 - Parking, directions to reception, signage
2. What is your understanding/expectation regarding the admission and check-in process before your surgery?
 - ***Example of possible probes***
 - Admission staff/reception, waiting room conditions
3. What is your understanding/expectation regarding your preparation for surgery and the pre-surgery area?
 - ***Example of possible probes***
 - Staff’s ability to answer questions, wait times, cleanliness
4. What is your understanding/expectation for when you are in the operating room?

- *Example of possible probes*
 - Comfort/cleanliness of room
- 5. What is your understanding/expectation after the surgical procedure and the post-surgery area?
 - *Example of possible probes*
 - Pain/symptom management, care of the staff towards you and your family
- 6. What is your understanding/expectation regarding recovery in the hospital?
 - *Example of possible probes*
 - Length of stay, receiving assistance when requested
- 7. What is your understanding/expectation regarding the discharge process?
 - *Example of possible probes*
 - Discharge instructions, follow-up appointments
- 8. Can you rank your expectations from most important to least important?
 - ** Remind them of the expectations they have provided**
- 9. Do you have any additional comments regarding satisfaction and surgical expectations you would like to mention prior to the conclusion of this interview?

Conclusion

The interviewer will thank the patient for their participation in the interview and will remind them that the second interview will occur within 4 weeks from discharge. They will try to schedule an exact date for the next interview at this time.

Appendix C: Pre-surgery Interview Guide Version 2

Events for Interview

- 1) Introduction to Study
- 2) Pre-Surgery Demographic Questionnaire
- 3) Conclusion

Introduction to Study

Interviewer will provide a brief summary of the purpose of the study, the study events, and why the study is being completed.

For example: “The goal of this study is to develop a patient expectation and satisfaction survey that can be implemented in the hospital to help continue to improve the care that the hospital is providing and meet patient needs. To help with the development of this questionnaire, we are recruiting surgical patients to share their experiences, as well as expectations, before and after surgery. Using this information, we are hoping to find commonalities across patients and develop specific questions that capture satisfaction and expectations that can be used in the questionnaire. This interview will include a brief demographic questionnaire and 9 questions that capture your pre-surgery expectations. At any point during the interview if you would like to stop or have any questions, please let me know.”

Pre-Surgery Interview Questions

1. Please imagine that it is the day of your surgery – Could you walk me through what you expect your experience will be like from the time you leave your home, till the time you are in the operating room.
 - ***Example of possible probes***
 - Pre-hospital experience – parking, direction, signage
 - Admission and check in – waiting area conditions
 - Surgery prep area – staff, wait times, cleanliness
2. Do you have any worries or concerns regarding this first stage of the process?
3. What is most important to you about this first stage of the process?
4. Now please imagine that it is time for your surgery. What do you expect your experience will be like when you enter the operating room?
 - ***Example of possible probes***

- Comfort/cleanliness of room
5. Do you have any worries or concerns regarding the operating room?
 6. What is most important to you about this stage of the process?
 7. Now please imagine that your surgery is complete. Walk me through what you expect the experience will be like for you and your loved ones from the time you leave the operating room till the time you are discharged home.
 - *Example of possible probes*
 - In PACU - Pain/symptom management, care of the staff towards you and your family
 - Length of stay, receiving assistance when requested
 - Discharge Process - Discharge instructions, follow-up appointments
 8. Do you have any worries or concerns about this stage of the process?
 9. What is most important to you about this stage of the process?
 10. Now that we've gone over the whole process, overall, what is most important to you about your day surgery experience?
 11. Do you have any additional comments regarding satisfaction and expectations you would like to mention prior to the conclusion of this interview?

Conclusion

The interviewer will thank the patient for their participation in the interview.

Appendix D: Letter of Information and Consent for Participants

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 Division of Orthopaedics, Department of Surgery
 Victoria Hospital, London Health Sciences Centre
 800 Commissioners Road East
 London, Ontario N6C 2V5
 Phone: 519-685-8500 Ext. 55354



Letter of Information (LOI) and Consent Form

Title of Research Project: Development of a Patient Satisfaction Questionnaire for Adult Surgical Patients

Principal Investigator: Dr. Chris Bailey

Co-Investigators: Dr. Sarah Jones, Dr. Nick Power, Sayra Cristancho

We are inviting you to take part in a research project that is looking to create a satisfaction questionnaire for surgical patients. Before you decide, it is important that you should understand why this research study is being completed and what it will mean for you. Please take the time to read this information. Please ask us if anything is unclear or if you wish for any further information.

Introduction

Patient satisfaction has become a growing area of study within the health care field, due in large part to initiatives targeting patient quality and the a growing emphasis put on “value-based medicine”. Based on the difficulty of measuring overall patient satisfaction within the hospital, there lacks an overall “gold standard” measure for patient satisfaction. Moreover, the large hospital-wide satisfaction tools that do exist likely don’t provide the specificity and level of detail that various departments require to truly get a sense of where they stand in terms of patient satisfaction. Additionally, the literature suggests that the majority of satisfaction studies within surgery use non-validated questionnaire that may not consider what the patient feels are important in regards to their satisfaction. Further many of these studies fail to consider an important component associated with satisfaction, *patient expectations*.

Capturing patient expectations is an important piece in the assessment of overall quality of care and satisfaction. Understanding the expectations of the patient prior to their hospital encounter gives another level of detail when measuring satisfaction. For example, if a patient has very low expectations going into the hospital encounter, but the hospital meets their expectations the patient may be completely satisfied with the care or conditions at the hospital even though these services and conditions were below average. This can give an almost false sense of competency or satisfaction to underperforming hospital and hinder their ability to see what a patient’s expectations were, identify areas where expectations were not met, and further raise the expectations that future patients may have when they come to that hospital. Unfortunately, the literature on patient expectations within surgery is severely lacking and to our knowledge, a combined study looking at pre-surgery expectations and post-surgery satisfaction has not been done.

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We are approaching you to participate in this study because we feel as though getting the experiences and expectations of the patient as they go through the surgery process will help us to create a satisfaction questionnaire that captures what is truly important to the patient. In doing so the hope is that the results from this questionnaire can be used as evidence to continue to improve the surgery experience for our patients.

Study Objectives

The primary objective of this study is to identify themes and important areas of overall hospital and surgery experience and use this information to develop a patient expectation and satisfaction questionnaire.

Study Design and Procedures

This is a qualitative study looking at pre- and post-surgery expectations for surgical patients. The data collected from this study will be used for the development of a patient expectation and satisfaction questionnaire. The development process includes conducting interviews with surgical patients before and after surgery at Victoria Hospital, London Health Sciences Centre. If you choose to take part in this study, you will participate in two interviews. First, will be an interview before your surgery, which will occur within a 2-6 week time period, between your anaesthesia/pre-operative consultation at the hospital and before the date of your scheduled surgery. The second interview is within 4 weeks after your date of discharge.

Study Sample

This study will aim to recruit 15-40 surgery patients for pre- and post-surgery interviews. This study will only include surgical procedures from Orthopaedics, Urology, and General Surgery. You are eligible to participate in this study if you are 18 years of age and over, are undergoing an elective surgical procedure (inpatient or day surgery/outpatient), and are able to speak, read, and write in English. You are not eligible to participate in the study if you are under the age of 18 years old, require a substitute decision maker, and cannot read, write, or speak English. You will be removed from the study if you do not complete both interviews after providing written consent.

Procedures

Surgical Patient Interviews

Interviews will be completed either by phone or in person by the research support staff and are estimated to last a maximum of one hour. The *pre-surgery interview* will involve a brief demographics questionnaire to collect demographic data and will also include a series of questions aimed to capture your expectations at each stage of your processing through the hospital. There are 6 main areas you will experience during your hospital encounter and they include: 1. Arrival at hospital, 2. Admission/Check-

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in, 3. Pre-Operative area, 4. Surgery/Operating room, 5. Post-Operative area, and 6. Discharge. We will ask you to provide us with your expectations in terms of care and services at each of these areas. Additionally, we will also ask you to rate your expectations by importance.

The *post-surgery interview* will also be either a phone or in person interview asking you questions about your recent experience at the hospital. Additionally, we will also ask you a series of questions and again ask you to confirm your previous expectations, mention any new expectation, re-rank your expectations based on your experience, and provide feedback on whether your expectations were met during your hospital encounter.

Each of the two interviews, in person and by phone, will be audio recorded for the purpose of data collection. Audio recording is a mandatory part of the study; if you do not wish to be audio recorded you will not be included in the study. The audio recording will be transferred into written form by a member of the research team, which will then be used to identify important pieces of content that can be used to help develop the patient satisfaction questionnaire.

Review and Develop Preliminary Questionnaire

After you have completed your two interviews, we will use this information to identify themes regarding your expectations and satisfaction with surgical care. From the interview content, we will categorize the themes and develop questions directly from the interview content. Next, we will create a pre-operative questionnaire (expectations of the patient) and post-operative questionnaire (satisfaction of the patient) for adult surgery patients.

Risks/Complications

There are no direct risks to you by participating in this study.

Benefits

There are no direct benefits to you by participating in this study. There may be long-term benefits to society as a result of your participation in this study. Your assistance with the development of this patient expectation and satisfaction tool may help in identifying where the hospital and its staff can improve the care experience for its patients.

Alternatives to participation

Your decision to participate in this study is completely voluntary. If you decide not to take part you do not have to give a reason and no one will be upset.

Confidentiality

All information which is collected about you and your experiences during the course of the research will be kept strictly confidential. Any time personal identifiers are being collected, there is a risk of a

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breach of privacy, however we have taken certain precautions to minimize this risk. You have the legal right to inform us that you are leaving the study without explaining your reasons. Signing the consent form does not remove your legal rights, it means you agree to participate in the study as a volunteer.

Your name will not appear on any research material or published work that results from this study. If there are direct or paraphrased quotes that will appear in publications, we will use pseudonyms to protect your identity. No direct transcripts or audio recordings that may contain your name or identifying characteristics will be released for research purposes. This information will remain at Victoria Hospital, LHSC. Any electronic or paper-based data collected during the research study will be stored on secure hospital servers or locked filing cabinet and will be kept for 15 years after completion to meet the data retention policy at Lawson Health Research Institute. Consent forms will be stored in the locked office of the Research Coordinator. Your first and last name will not be used for any study analysis and will only be stored on a master list, securely located on the hospital network drive, behind institutional firewalls. The master list is required in the event that you need to be identified during the study or for representative of Western University's Health Sciences Research Ethics Board and Lawson Health Research Institute's Quality Assurance Education Program to monitor the research.

If you agree to take part, we will ask you to sign a consent form which indicates your agreement to take part in the research project. We will give you a copy of this document for your files. Your decision on whether to participate in the study or not, will have no effect on the current or future care you receive.

Decision to leave the study

Your participation is voluntary; you are free to withdraw your participation from this study at any time. If you withdraw we will also remove all of your data and audio recordings that have been collected up until your withdrawal.

How the findings will be used

The results of the study will be used for scholarly purposes only. The results from the study will be presented in educational settings and at professional conferences, and the results might be published in a professional journal in the field of surgery, medicine, or medical education. Participant information will remain de-identified.

Contact information

If you have concerns or questions about this study please contact the Research Coordinator: Jake Davidson at Jacob.Davidson@lhsc.on.ca or the Primary Investigator (PI) Dr. Chris Bailey at Chris.Bailey@lhsc.on.ca.

Chris Bailey, MD, FRCSC, MSc
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If you have any questions about your rights as a research participant or the conduct of this study, you may contact the Patient Experience Office at LHSC at (519) 685-8500 ext. 52036 or access the online form at: <https://apps.lhsc.on.ca/?q=forms/patient-experience-contact-form>.”

Compensation/Reimbursement

There are no costs to participate in this study. You will not be compensated by the study team for your participation in the study.

Participation

It is up to you to decide whether you would like to take part in this research study. A decision not to take part, will not affect your opportunity to participate in other research studies at London Health Sciences Centre.

Conflict of Interest

Dr. Chris Bailey and the other research team members, have no conflict of interest to declare.

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Study Consent Form

Title of Research Project: Development of a Patient Satisfaction Questionnaire for Adult Surgical Patients

Principal Investigator: Dr. Chris Bailey

Co-Investigators: Dr. Sarah Jones, Dr. Nick Power, Sayra Cristancho

Consent:

By signing this form, I agree that:

- You have explained this study to me. You have answered all my questions.
- You have explained the possible harms and benefits (if any) of this study.
- I understand that I have the right to refuse participation in this study. I also have the right to withdraw from the study at any time.
- I am free now, and in the future, to ask questions about the study.
- I have been told that any personal information collected during the study will be kept private except as described to me.
- I have been told that the interview will be audio recorded for data collection purposes.
- I understand that no information identifying myself will be given to anyone or be published without first asking my permission.
- I have read and understood this consent form. I agree, or consent, to take part in this study.

Printed Name of Study Participant

Signature

Date

Printed Name of Person who Obtained Consent

Signature

Date

Appendix E: Preliminary Patient Satisfaction Questionnaire for Day-Surgery Patients

Please rate the following statements from 1-5 where,

1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, and 5 = Strongly Agree.

1. I felt that I had all the information I needed **prior to arriving at hospital** for my scheduled surgery.
2. I felt that I had all the information I needed **while I was in hospital** for my scheduled surgery.
3. I felt that I had all the information that I needed **at the time of discharge** from hospital after my scheduled surgery.
4. I felt that staff were willing and able to answer my questions while I was in hospital
5. My family/loved ones felt that staff were willing and able to answer their questions while I was in hospital.
6. I felt that I knew what to expect at each stage of the day surgery process
7. I felt that overall, there was effective communication during the day-surgery process.
8. I felt that staff were aware of and attentive to my unique needs.
9. I felt that my symptoms such as pain, nausea, ect. were addressed effectively in the PACU.
10. I felt that **prior to arriving at hospital** for my surgery I knew who to contact with any questions.
11. I felt that **at the time of discharge from hospital** after my scheduled surgery I knew who to contact with any questions.
12. I felt that overall that my questions and concerns were responded to throughout the day surgery process.
13. I felt that my dignity and privacy were respected throughout my stay in hospital.

14. I felt that the day-surgery environment (waiting rooms, PACU area ect.) was welcoming.
15. I felt that staff were professional and courteous.
16. I felt that the people caring for me were respectful of my individual needs.
17. I felt that people taking care of me treated me as a person.
18. I felt that overall, the people taking care of me demonstrated compassion.
19. I felt confident in the people taking care of me.
20. I felt that the day-surgery environment (waiting rooms, PACU, operating room ect.) were clean and secure.
21. I felt that my belongings were secure during the day surgery process.
22. Overall, I felt that care was administered in a safe fashion.
23. I felt that the day progressed on time or within reasonable time.
24. I felt that there was enough time for me to prepare for surgery and recover from surgery prior to discharge.
25. I felt that things were happening according to plan on the day of surgery.
26. I felt that I was prepared for the next step at each stage of the day-surgery process.
27. Overall, I felt that the day flowed smoothly
28. I felt that the people taking care of me were experienced and knowledgeable.
29. I felt that the people taking care of me were efficient.
30. I felt there was enough interaction with my surgeon and their surgical team.
31. I felt that the people taking care of me had everything under control.
32. Overall, I felt confident in the people taking care of me.

Appendix F: The Hospital Consumer Assessment of Healthcare Providers and Systems Survey

HCAHPS Survey

SURVEY INSTRUCTIONS

- ◆ You should only fill out this survey if you were the patient during the hospital stay named in the cover letter. Do not fill out this survey if you were not the patient.
- ◆ Answer all the questions by checking the box to the left of your answer.
- ◆ You are sometimes told to skip over some questions in this survey. When this happens you will see an arrow with a note that tells you what question to answer next, like this:
 - Yes
 - No → *If No, Go to Question 1*

*You may notice a number on the survey. This number is used to let us know if you returned your survey so we don't have to send you reminders.
Please note: Questions 1-25 in this survey are part of a national initiative to measure the quality of care in hospitals. OMB #0938-0981*

Please answer the questions in this survey about your stay at the hospital named on the cover letter. Do not include any other hospital stays in your answers.

YOUR CARE FROM NURSES

- | | |
|---|---|
| <p>1. During this hospital stay, how often did nurses treat you with <u>courtesy and respect</u>?</p> <p>1 <input type="checkbox"/> Never
 2 <input type="checkbox"/> Sometimes
 3 <input type="checkbox"/> Usually
 4 <input type="checkbox"/> Always</p> <p>2. During this hospital stay, how often did nurses <u>listen carefully to you</u>?</p> <p>1 <input type="checkbox"/> Never
 2 <input type="checkbox"/> Sometimes
 3 <input type="checkbox"/> Usually
 4 <input type="checkbox"/> Always</p> | <p>3. During this hospital stay, how often did nurses <u>explain things</u> in a way you could understand?</p> <p>1 <input type="checkbox"/> Never
 2 <input type="checkbox"/> Sometimes
 3 <input type="checkbox"/> Usually
 4 <input type="checkbox"/> Always</p> <p>4. During this hospital stay, after you pressed the call button, how often did you get help as soon as you wanted it?</p> <p>1 <input type="checkbox"/> Never
 2 <input type="checkbox"/> Sometimes
 3 <input type="checkbox"/> Usually
 4 <input type="checkbox"/> Always
 9 <input type="checkbox"/> I never pressed the call button</p> |
|---|---|

YOUR CARE FROM DOCTORS

5. During this hospital stay, how often did doctors treat you with courtesy and respect?

¹ Never
² Sometimes
³ Usually
⁴ Always

6. During this hospital stay, how often did doctors listen carefully to you?

¹ Never
² Sometimes
³ Usually
⁴ Always

7. During this hospital stay, how often did doctors explain things in a way you could understand?

¹ Never
² Sometimes
³ Usually
⁴ Always

THE HOSPITAL ENVIRONMENT

8. During this hospital stay, how often were your room and bathroom kept clean?

¹ Never
² Sometimes
³ Usually
⁴ Always

9. During this hospital stay, how often was the area around your room quiet at night?

¹ Never
² Sometimes
³ Usually
⁴ Always

YOUR EXPERIENCES IN THIS HOSPITAL

10. During this hospital stay, did you need help from nurses or other hospital staff in getting to the bathroom or in using a bedpan?

¹ Yes
² No → If No, Go to Question 12

11. How often did you get help in getting to the bathroom or in using a bedpan as soon as you wanted?

¹ Never
² Sometimes
³ Usually
⁴ Always

12. During this hospital stay, did you need medicine for pain?

¹ Yes
² No → If No, Go to Question 15

13. During this hospital stay, how often was your pain well controlled?

¹ Never
² Sometimes
³ Usually
⁴ Always

14. During this hospital stay, how often did the hospital staff do everything they could to help you with your pain?

¹ Never
² Sometimes
³ Usually
⁴ Always

15. During this hospital stay, were you given any medicine that you had not taken before?

- ¹ Yes
² No → If No, Go to Question 18

16. Before giving you any new medicine, how often did hospital staff tell you what the medicine was for?

- ¹ Never
² Sometimes
³ Usually
⁴ Always

17. Before giving you any new medicine, how often did hospital staff describe possible side effects in a way you could understand?

- ¹ Never
² Sometimes
³ Usually
⁴ Always

WHEN YOU LEFT THE HOSPITAL

18. After you left the hospital, did you go directly to your own home, to someone else's home, or to another health facility?

- ¹ Own home
² Someone else's home
³ Another health facility → If Another, Go to Question 21

19. During this hospital stay, did doctors, nurses or other hospital staff talk with you about whether you would have the help you needed when you left the hospital?

- ¹ Yes
² No

20. During this hospital stay, did you get information in writing about what symptoms or health problems to look out for after you left the hospital?

- ¹ Yes
² No

OVERALL RATING OF HOSPITAL

Please answer the following questions about your stay at the hospital named on the cover letter. Do not include any other hospital stays in your answers.

21. Using any number from 0 to 10, where 0 is the worst hospital possible and 10 is the best hospital possible, what number would you use to rate this hospital during your stay?

- ⁰ 0 Worst hospital possible
¹ 1
² 2
³ 3
⁴ 4
⁵ 5
⁶ 6
⁷ 7
⁸ 8
⁹ 9
¹⁰ 10 Best hospital possible

22. Would you recommend this hospital to your friends and family?

- Definitely no
 Probably no
 Probably yes
 Definitely yes

**UNDERSTANDING YOUR CARE
 WHEN YOU LEFT THE HOSPITAL**

23. During this hospital stay, staff took my preferences and those of my family or caregiver into account in deciding what my health care needs would be when I left.

- Strongly disagree
 Disagree
 Agree
 Strongly agree

24. When I left the hospital, I had a good understanding of the things I was responsible for in managing my health.

- Strongly disagree
 Disagree
 Agree
 Strongly agree

25. When I left the hospital, I clearly understood the purpose for taking each of my medications.

- Strongly disagree
 Disagree
 Agree
 Strongly agree
 I was not given any medication when I left the hospital

ABOUT YOU

There are only a few remaining items left.

26. During this hospital stay, were you admitted to this hospital through the Emergency Room?

- Yes
 No

27. In general, how would you rate your overall health?

- Excellent
 Very good
 Good
 Fair
 Poor

28. In general, how would you rate your overall mental or emotional health?

- Excellent
 Very good
 Good
 Fair
 Poor

29. What is the highest grade or level of school that you have completed?

- 8th grade or less
 Some high school, but did not graduate
 High school graduate or GED
 Some college or 2-year degree
 4-year college graduate
 More than 4-year college degree

30. Are you of Spanish, Hispanic or Latino origin or descent?

- ¹ No, not Spanish/Hispanic/Latino
² Yes, Puerto Rican
³ Yes, Mexican, Mexican American, Chicano
⁴ Yes, Cuban
⁵ Yes, other Spanish/Hispanic/Latino

31. What is your race? Please choose one or more.

- ¹ White
² Black or African American
³ Asian
⁴ Native Hawaiian or other Pacific Islander
⁵ American Indian or Alaska Native

32. What language do you mainly speak at home?

- ¹ English
² Spanish
³ Chinese
⁴ Russian
⁵ Vietnamese
⁶ Portuguese
⁹ Some other language (please print):

THANK YOU

Please return the completed survey in the postage-paid envelope.

[NAME OF SURVEY VENDOR OR SELF-ADMINISTERING HOSPITAL]

[RETURN ADDRESS OF SURVEY VENDOR OR SELF-ADMINISTERING HOSPITAL]

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Appendix G: The Consumer Assessment of Healthcare Providers and Systems Outpatient and Ambulatory Surgery Survey

SURVEY INSTRUCTIONS

Answer all the questions by checking the box to the left of your answer.

You are sometimes told to skip over some questions in this survey. When this happens you will see an arrow with a note that tells you what question to answer next, like this:

- Yes
 No → If No, go to #1

This survey asks about your experience at the facility named in the cover letter. For this survey, we use the term "procedure" for diagnostic, surgical or other procedures. We refer to "facility" as the place where you had your procedure.

Please answer these questions only for the procedure(s) you had on the date included in the cover letter. Do not include any other procedures in your answers.

I. BEFORE YOUR PROCEDURE

The first few questions are about getting ready for your procedure. **Include any information you received before and on the day of your procedure.**

1. Before your procedure, did your doctor or anyone from the facility give you all the information you needed about your procedure?
- 1 Yes, definitely
 2 Yes, somewhat
 3 No

2. Before your procedure, did your doctor or anyone from the facility give you easy to understand instructions about getting ready for your procedure?
- 1 Yes, definitely
 2 Yes, somewhat
 3 No

II. ABOUT THE FACILITY AND STAFF

The next questions ask about the day of your procedure.

3. Did the check-in process run smoothly?
- 1 Yes, definitely
 2 Yes, somewhat
 3 No
4. Was the facility clean?
- 1 Yes, definitely
 2 Yes, somewhat
 3 No
5. Were the clerks and receptionists at the facility as helpful as you thought they should be?
- 1 Yes, definitely
 2 Yes, somewhat
 3 No
6. Did the clerks and receptionists at the facility treat you with courtesy and respect?
- 1 Yes, definitely
 2 Yes, somewhat
 3 No

7. Did the doctors and nurses treat you with courtesy and respect?

¹ Yes, definitely
² Yes, somewhat
³ No

8. Did the doctors and nurses make sure you were as comfortable as possible?

¹ Yes, definitely
² Yes, somewhat
³ No

III. COMMUNICATIONS ABOUT YOUR PROCEDURE

As a reminder, please include any information you received before and on the day of the procedure.

9. Did the doctors and nurses explain your procedure in a way that was easy to understand?

¹ Yes, definitely
² Yes, somewhat
³ No

10. Anesthesia is something that would make you feel sleepy or go to sleep during your procedure. Were you given anesthesia?

¹ Yes
² No → If No, go to #13

11. Did your doctor or anyone from the facility explain the process of giving anesthesia in a way that was easy to understand?

¹ Yes, definitely
² Yes, somewhat
³ No

12. Did your doctor or anyone from the facility explain the possible side effects of the anesthesia in a way that was easy to understand?

¹ Yes, definitely
² Yes, somewhat
³ No

13. Discharge instructions include things like symptoms you should watch for after your procedure, instructions about medicines, and home care. Before you left the facility, did you get written discharge instructions?

¹ Yes
² No

IV. YOUR RECOVERY

14. Did your doctor or anyone from the facility prepare you for what to expect during your recovery?

¹ Yes, definitely
² Yes, somewhat
³ No

15. Some ways to control pain include prescription medicine, over-the-counter pain relievers or ice packs. Did your doctor or anyone from the facility give you information about what to do if you had pain as a result of your procedure?
- ¹ Yes, definitely
² Yes, somewhat
³ No
16. At any time after leaving the facility, did you have pain as a result of your procedure?
- ¹ Yes
² No
17. Before you left the facility, did your doctor or anyone from the facility give you information about what to do if you had nausea or vomiting?
- ¹ Yes, definitely
² Yes, somewhat
³ No
18. At any time after leaving the facility, did you have nausea or vomiting as a result of either your procedure or the anesthesia?
- ¹ Yes
² No
19. Before you left the facility, did your doctor or anyone from the facility give you information about what to do if you had bleeding as a result of your procedure?
- ¹ Yes, definitely
² Yes, somewhat
³ No
20. At any time after leaving the facility, did you have bleeding as a result of your procedure?
- ¹ Yes
² No
21. Possible signs of infection include fever, swelling, heat, drainage or redness. Before you left the facility, did your doctor or anyone from the facility give you information about what to do if you had possible signs of infection?
- ¹ Yes, definitely
² Yes, somewhat
³ No
22. At any time after leaving the facility, did you have any signs of infection?
- ¹ Yes
² No

V. YOUR OVERALL EXPERIENCE

23. 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?
- 0 Worst facility possible
 1
 2
 3
 4
 5
 6
 7
 8
 9
 10 Best facility possible
24. Would you recommend this facility to your friends and family?
- 1 Definitely no
2 Probably no
3 Probably yes
4 Definitely yes

VI. ABOUT YOU

25. In general, how would you rate your overall health?
- 1 Excellent
2 Very good
3 Good
4 Fair
5 Poor
26. In general, how would you rate your overall mental or emotional health?
- 1 Excellent
2 Very good
3 Good
4 Fair
5 Poor
27. What is your age?
- 1 18 to 24
2 25 to 34
3 35 to 44
4 45 to 54
5 55 to 64
6 65 to 74
7 75 to 79
8 80 to 84
9 85 or older
28. Are you male or female?
- 1 Male
2 Female
29. What is the highest grade or level of school that you have completed?
- 1 8th grade or less
2 Some high school, but did not graduate
3 High school graduate or GED
4 Some college or 2-year degree
5 4-year college graduate
6 More than 4-year college degree

30. Are you of Hispanic, Latino, or Spanish origin?
- 1 Yes, Hispanic, Latino, or Spanish
- 2 No, not Hispanic, Latino, or Spanish → **If No, go to #32**
31. Which group best describes you?
- 1 Mexican, Mexican American, Chicano
- 2 Puerto Rican
- 3 Cuban
- 4 Another Hispanic, Latino, or Spanish origin
32. What is your race? You may select one or more categories.
- 1 White
- 2 Black or African American
- 3 American Indian or Alaska Native
- 4 Asian Indian
- 5 Chinese
- 6 Filipino
- 7 Japanese
- 8 Korean
- 9 Vietnamese
- 10 Other Asian
- 11 Native Hawaiian
- 12 Guamanian or Chamorro
- 13 Samoan
- 14 Other Pacific Islander
33. How well do you speak English?
- 1 Very well
- 2 Well
- 3 Not well
- 4 Not at all
34. Do you speak a language other than English at home?
- 1 Yes
- 2 No → **If No, go to #36**
35. What is that language?
- 1 Spanish
- 2 Other Language (PLEASE SPECIFY):
- _____
- (Please print.)*
36. Did someone help you complete this survey?
- 1 Yes
- 2 No → **If No, go to END.**
37. How did that person help you? Check all that apply.
- 1 Read the questions to me
- 2 Wrote down the answers I gave
- 3 Answered the questions for me
- 4 Translated the questions into my language
- 5 Helped in some other way: (EXPLAIN):
- _____
- (Please print.)*
- 6 No one helped me complete this survey
- END**

Appendix H: The Canadian Patient Experiences Survey — Inpatient Care

Canadian Patient Experiences Survey — Inpatient Care Survey Instructions

- ◆ You should fill out this questionnaire only if you were the patient named on the envelope. You may need to get help from a family member or friend to answer the questions. That's okay.
- ◆ Answer all the questions by checking the box to the left of your answer.
- ◆ Your response to this survey is voluntary but will provide us with important information.
- ◆ You are sometimes told to skip over some questions in this survey. When this happens, you will see an arrow with a note that tells you what question to answer next, like this:

- Yes
- No → If No, go to Question 1

Placeholder for jurisdiction comments.

Please answer the questions about your recent stay at the hospital named on the cover letter. Do not include any other hospital stays in your answers.

YOUR CARE FROM NURSES

- 1. During this hospital stay, how often did nurses treat you with courtesy and respect?**

- Never
 Sometimes
 Usually
 Always

- 2. During this hospital stay, how often did nurses listen carefully to you?**

- Never
 Sometimes
 Usually
 Always

- 3. During this hospital stay, how often did nurses explain things in a way you could understand?**

- Never
 Sometimes
 Usually
 Always

- 4. During this hospital stay, after you pressed the call button, how often did you get help as soon as you wanted it?**

- Never
 Sometimes
 Usually
 Always
 I never pressed the call button

YOUR CARE FROM DOCTORS

5. During this hospital stay, how often did doctors treat you with courtesy and respect?
- Never
 Sometimes
 Usually
 Always
6. During this hospital stay, how often did doctors listen carefully to you?
- Never
 Sometimes
 Usually
 Always
7. During this hospital stay, how often did doctors explain things in a way you could understand?
- Never
 Sometimes
 Usually
 Always

THE HOSPITAL ENVIRONMENT

8. During this hospital stay, how often were your room and bathroom kept clean?
- Never
 Sometimes
 Usually
 Always
9. During this hospital stay, how often was the area around your room quiet at night?
- Never
 Sometimes
 Usually
 Always

YOUR EXPERIENCES IN THIS HOSPITAL

10. During this hospital stay, did you need help from nurses or other hospital staff in getting to the bathroom or in using a bedpan?
- Yes
 No → If No, go to Question 12
11. How often did you get help in getting to the bathroom or in using a bedpan as soon as you wanted?
- Never
 Sometimes
 Usually
 Always
12. During this hospital stay, did you need medicine for pain?
- Yes
 No → If No, go to Question 15
13. During this hospital stay, how often was your pain well controlled?
- Never
 Sometimes
 Usually
 Always
14. During this hospital stay, how often did the hospital staff do everything they could to help you with your pain?
- Never
 Sometimes
 Usually
 Always

15. During this hospital stay, were you given any medicine that you had not taken before?

- Yes
 No → If No, go to Question 18

16. Before giving you any new medicine, how often did hospital staff tell you what the medicine was for?

- Never
 Sometimes
 Usually
 Always

17. Before giving you any new medicine, how often did hospital staff describe possible side effects in a way you could understand?

- Never
 Sometimes
 Usually
 Always

WHEN YOU LEFT THE HOSPITAL

18. After you left the hospital, did you go directly to your own home, to someone else's home or to another health facility?

- Own home
 Someone else's home
 Another health facility → If Another health facility, go to Question 21

19. During this hospital stay, did doctors, nurses or other hospital staff talk with you about whether you would have the help you needed when you left the hospital?

- Yes
 No

20. During this hospital stay, did you get information in writing about what symptoms or health problems to look out for after you left the hospital?

- Yes
 No

OVERALL RATING OF HOSPITAL

Please answer the following questions about your stay at the hospital named on the cover letter. Do not include any other hospital stays in your answers.

21. Using any number from 0 to 10, where 0 is the worst hospital possible and 10 is the best hospital possible, what number would you use to rate this hospital during your stay?

- 0 Worst hospital possible
 1
 2
 3
 4
 5
 6
 7
 8
 9
 10 Best hospital possible

22. Would you recommend this hospital to your friends and family?

- Definitely no
- Probably no
- Probably yes
- Definitely yes

In this next section, we ask several more questions about your stay at the hospital.

YOUR ARRIVAL AT THE HOSPITAL

23. When you arrived at the hospital, did you go to the emergency department?

- Yes → **If Yes, go to Question 26**
- No ↓ **If No, please continue below**

24. Before coming to the hospital, did you have enough information about what was going to happen during the admission process?

- Not at all
- Partly
- Quite a bit
- Completely

25. Was your admission into the hospital organized?

- Not at all
- Partly
- Quite a bit
- Completely

Go to Question 30

Answer questions 26 to 29 only if you were admitted through the emergency department.

26. When you were in the emergency department, did you get enough information about your condition and treatment?

- Not at all
- Partly
- Quite a bit
- Completely

27. Were you given enough information about what was going to happen during your admission to the hospital?

- Not at all
- Partly
- Quite a bit
- Completely

28. After you knew that you needed to be admitted to a hospital bed, did you have to wait too long before getting there?

- Yes
- No

29. Was your transfer from the emergency department into a hospital bed organized?

- Not at all
- Partly
- Quite a bit
- Completely

Continue with Question 30

DURING YOUR HOSPITAL STAY

30. Do you feel that there was good communication about your care between doctors, nurses and other hospital staff?

- Never
 Sometimes
 Usually
 Always

31. How often did doctors, nurses and other hospital staff seem informed and up-to-date about your hospital care?

- Never
 Sometimes
 Usually
 Always

32. How often were tests and procedures done when you were told they would be done?

- Never
 Sometimes
 Usually
 Always
 I did not have any tests or procedures

33. During this hospital stay, did you get all the information you needed about your condition and treatment?

- Never
 Sometimes
 Usually
 Always

34. Did you get the support you needed to help you with any anxieties, fears or worries you had during this hospital stay?

- Never
 Sometimes
 Usually
 Always
 Not applicable

35. Were you involved as much as you wanted to be in decisions about your care and treatment?

- Never
 Sometimes
 Usually
 Always

36. Were your family or friends involved as much as you wanted in decisions about your care and treatment?

- Never
 Sometimes
 Usually
 Always
 I did not want them to be involved
 I did not have family or friends to be involved

LEAVING THE HOSPITAL

37. Before you left the hospital, did you have a clear understanding about all of your prescribed medications, including those you were taking before your hospital stay?

- Not at all
 Partly
 Quite a bit
 Completely
 Not applicable

38. Did you receive enough information from hospital staff about what to do if you were worried about your condition or treatment after you left the hospital?

- Not at all
- Partly
- Quite a bit
- Completely

39. When you left the hospital, did you have a better understanding of your condition than when you entered?

- Not at all
- Partly
- Quite a bit
- Completely

YOUR OVERALL RATINGS

40. Overall, do you feel you were helped by your hospital stay? Please answer on a scale where 0 is “not helped at all” and 10 is “helped completely.”

Overall . . . (Please circle a number)

Not helped at all	Helped completely
0	10
1	9
2	8
3	7
4	6
5	5
6	4
7	3
8	2
9	1
10	0

41. Overall . . . (Please circle a number)

I had a very poor experience	I had a very good experience
0	10
1	9
2	8
3	7
4	6
5	5
6	4
7	3
8	2
9	1
10	0

ABOUT YOU

42. In general, how would you rate your overall physical health?

- Excellent
- Very good
- Good
- Fair
- Poor

43. In general, how would you rate your overall mental or emotional health?

- Excellent
- Very good
- Good
- Fair
- Poor

44. What is the highest grade or level of school that you have completed?

- 8th grade or less
- Some high school, but did not graduate
- High school or high school equivalency certificate
- College, CEGEP or other non-university certificate or diploma
- Undergraduate degree or some university
- Post-graduate degree or professional designation

45. What is your gender?

- Male
- Female
- Other

46. What is your year of birth?

(Please write in; for example, "1934.")

47. Was your most recent stay at this hospital for a childbirth experience?

Yes

No

48. People living in Canada come from many different cultural and racial backgrounds. The following question will help us to better understand the experiences of the communities that we serve. Do you consider yourself to be . . .

(Check all that apply)

First Nation

Inuit

Métis

Indigenous/Aboriginal
(not included above)

Arab

Black (North American, Caribbean,
African, etc.)

Chinese

Filipino

Japanese

Korean

Latin American

South Asian (East Indian, Pakistani,
Sri Lankan, etc.)

Southeast Asian (Vietnamese,
Cambodian, Malaysian, Laotian, etc.)

West Asian (Iranian, Afghan, etc.)

White (North American, European,
etc.)

Other

49. Is there anything else you would like to share about your hospital stay?

Questions 1 to 22 and 43 are adapted from the HCAHPS (Hospital Consumer Assessment of Healthcare Providers and Systems) questionnaire.

Questions 23 to 49 (excluding question 43) were adapted and/or developed by the Canadian Institute for Health Information in consultation with an interjurisdictional committee of experts.