QUALITY WITHIN COST CONTAINMENT: A STUDY OF
THE SATISFACTION OF PATIENTS AND HEALTHCARE
PROVIDERS WITH THE INTRODUCTION OF A
PRE-ADMISSION PROGRAM AT ST. CLARE'S
MERCY HOSPITAL

CENTRE FOR NEWFOUNDLAND STUDIES

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Quality Within Cost Containment: A Study of the Satisfaction of
Patients and Healthcare Providers With the Introduction of a
Pre-Admission Program at St. Clare's Mercy Hospital.

by

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ABSTRACT

Surgery patients constitute a large percentage of in-house hospital patients. While once customary, admitting elective surgical patients' one to two days before surgery is no longer an accepted practice. With pressure increasing to contain health care costs, hospital stays are becoming shorter. As health care dollars decrease and shortages of surgical beds increase, most hospitals are looking for ways to improve their efficiency with decreasing resources. As a result, same day admission for many procedures is rapidly becoming a commonplace hospital cost containment program. In such programs, patients undergoing elective surgery receive preoperative testing, preparation, and education on an outpatient basis. Patients are admitted to hospital on the day of surgery. St. Clare's Mercy Hospital, in St. John's, Newfoundland, Canada, introduced its pre-admission clinic in November 1993. The Same Day Admission program now consists of two components: the pre-admission clinic visit and the same day admission service. This study endeavoured to determine the effectiveness and the effects of a cost containment strategy on the quality of patient care of the Same Day Admission program, at St. Clare's Mercy Hospital. The objective of the study was to detect any problems in the process and quality of patient care and to make recommendations for continuous improvement."Plan-Do-Check-Act" (PDCA) Cycle (Walton, 1986) was the conceptual framework used to focus the research.

The research questions were placed in the "Check" phase of the PDCA Cycle. Conclusions were drawn about the efficiency, the effectiveness, and the quality of patient care for this program through a review of a) patient outcomes and clinical indicators, and b) patient and healthcare provider satisfaction with the program. The population for the patient interviews was patients who were prepared for surgery in the Pre-Admission Clinic (PAC) and admitted to hospital on the day of surgery during the first six months of the program. The population for the healthcare provider focus groups and interviews was physicians who referred patients to the Same Day Admission program and a stratified sample of other healthcare providers who provided services to these patients. Information obtained from the patient and healthcare provider focus groups, patient and physician interviews, and a review of clinical indicators allowed the researcher to answer the following research questions:

- 1. Do the program outcomes indicate patient satisfaction with the process?
- 2. Do the program outcomes indicate healthcare provider satisfaction with the process?
- 3. Do patient clinical indicators indicate quality health care?
- 4. Do decreased length of hospital stay and low re-admission rates support the program as a cost containment program?
- 5. Do the program outcomes indicate attainment of program objectives?

The analysis of the data was presented according to the research questions of this study. Patients' interview statements were examined and displayed through frequency and relative frequency distributions. The overall degree of patient satisfaction was very high at 90.73 %. The interview and focus group data were analyzed, according to the healthcare subgroup, using procedures outlined by Zemke and Kramlinger (1985). Most of the physicians' statements were very positive. They perceived the Same Day Admission program as being very positive for patients. Patients were accessing the necessary services, consultations were being organized, and patients were being educated about their entire surgical experience. Healthcare providers had both positive and negative perceptions of the care being provided to these patients. Their perceptions of the advantages of the program included the following: early identification of patients with discharge needs; patients were more educated as to what would be happening to them before, during, and after their surgical procedures; patients were more prepared for their surgery and their return to the community; services needed for patients' discharges were being identified before admissions to hospital; with decreasing lengths of hospital stay, more patients were accessing the services; improvement in patients' satisfaction; and improved access to preoperative consultations. Healthcare providers were also concerned with the assessment criteria for referring patients to the Pre-Admission and Same Day Admission program versus inpatient admissions. Nurses and therapists also voiced concerns with the incompleteness or absence of information for preoperative and

postoperative patient assessment and care. Physicians did identify areas needing amelioration. These areas were: 1) dedicated medical resources for patient assessment and completing the History and Physical in the clinic; 2) internist and anaesthetist schedules to include Pre-admission consultations; and 3) increased resources (human and financial) to continue the work of the program. The objectives of the program focused on improved bed utilization, improved patient satisfaction, and enhanced quality patient care. These objectives were to be achieved through early identification of preoperative medical problems, initiation of early discharge planning, and provision of patient and family education Among the recommendations made was consideration be given to establishing an appropriate forum to address healthcare providers' concerns with the incompleteness or absence of information needed for preoperative and postoperative patient assessment and care. The researcher also recommended the Pre-Admission Committee establish protocols or assessment criteria for determining appropriateness of referring patients to the Pre-Admission and Same Day Admission program versus inpatient admissions. Consideration should also be given to further studying the length of hospital stays for same day admission patients and comparable Case Mix Groups of inpatients.

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This study is dedicated to the memory of the late Dr. Austin Harte, Associate Professor, Memorial University of Newfoundland.

"You will always touch the future; You inspired and we achieved".

----Greta Valvasori

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CHAPTER 1

INTRODUCTION

The results of a recent survey of all acute care hospitals in Canada, by the Canadian Hospital Association, discovered that the majority, 59 percent, had some organized day surgery program and a further 15 percent were doing surgery on a day basis, but without a formal program (Wilson, 1989). This trend in same day admission drastically reduces the amount of time in which crucial information can be presented to and absorbed by the patient. Nurses are responsible for meeting the educational needs of the patient as well as for preparing the patient physically and emotionally for surgery (Haines, 1992). Having sufficient nursing and ancillary staff to manage the early morning workload for Same Day Admission (SDA) patients was a major pressing concern. Prior to surgery, patient's demographic and visit specific data must be entered in the hospital database, the necessary forms and consent have to be processed, and the necessary diagnostic and laboratory tests have to be completed and results verified as normal. Staff must also be sure the patient is comfortable with his/her surgical procedure and understands just what will be happening before, during and after the surgical intervention. Page and Bereford (1988) identified that there are "unique professional challenges" for day surgery nurses. They believe that day surgery has decreased the available time for patient care, but the need for assessment and intervention has not decreased.

To respond to these multiple problems, hospitals in the mid 1980s began to reorganize their procedures for patient assessment and instruction to take advantage of what could be done more effectively before patients were admitted for elective surgery. To organize the pre-admission process, pre-admission programs were implemented. The concept of pre-admission has been around for a number of years, but has historically functioned only in a screening role (Allison, 1992). In recent years, it has evolved to become a clinic or program with a set of activities aimed at meeting specific patient needs and achieving specific objectives. Through this program, patients scheduled for elective inpatient surgery are fully prepared on an outpatient basis and admitted to hospital on the morning of surgery.

The age of healthcare restructuring and regionalization has arrived in Newfoundland. Throughout the province, and indeed throughout Canada, plans are unfolding rapidly to consolidate or close hospitals in order to achieve efficiency and overall cost reduction. St. Clare's Mercy Hospital, St. John's, Newfoundland, like other Canadian health care organizations, must seek creative new ways to provide quality services at a reduced cost. SDA programs have demonstrated significant reduction in patient's length of stay and promoted effective bed utilization (Allison, 1992; Le Noble, 1991). Therefore, with the increased emphasis on outpatient services and the need to reduce cost, St. Clare's Mercy Hospital introduced its Pre-Admission Clinic (PAC) in November, 1993. The SDA Program now consists of two components: The PAC visit and the SDA service. The PAC is a multidisciplinary outpatient clinic that provides preoperative preparation for elective

surgical patients. This preparation includes nursing assessment, preoperative education, discharge planning, diagnostic testing, and anaesthetic assessment and consultation when required. The SDA is a program within the Outpatient Department where the patients are admitted to Surgical Day Care on the morning of surgery, prepared for their surgical procedure and transported to the operating room. The SDA patients are admitted as inpatients and transferred to an inpatient unit postoperatively.

To identify potential problems with the pre-admission assessment process and interdepartmental collaboration, the SDA program operated as a pilot from November, 1993 to January, 1994. The study included SDA patients from the pilot. During the pilot 104 patients were prepared for surgery in the clinic. Prior to the PAC, forty-two of these patients would have been admitted to hospital twenty-four hours prior to surgery and sixty-two patients would have been admitted as inpatients following their surgical procedure. The program began conservatively with patients requiring surgical intervention for non urgent health problems. This group of patients is also referred to as 'elective' patients. As the program matured and developed, other services were added. The program objectives focused on improved bed utilization, improved patient satisfaction, and enhanced quality patient care. The objectives were to be achieved through early identification of preoperative medical problems, initiation of early discharge planning, and provision of patient and family education.

Statement of the Problem

To determine the effectiveness, and the effects of a cost containment strategy on the quality of patient care of the PAC and SDA program at St. Clare's Mercy Hospital, a study was completed. This study has endeavoured to draw conclusions about the efficiency, the effectiveness, and the quality of patient care through a review of: a) program outcomes and patient clinical indicators; and b) patient and healthcare provider satisfaction with the programs. More specifically, the following questions were addressed:

- 1. Do the program outcomes indicate patient satisfaction with the process?
- 2. Do the program outcomes indicate healthcare provider satisfaction with the process?
- 3. Do patient clinical indicators indicate quality health care?
- 4. Do decreased length of hospital stay and low re-admission rates support the program as a cost containment program?
- 5. Do the program outcomes indicate attainment of program objectives?

Rationale for the Study

Since economizing on operations has become such a dominant force in shaping our health care programs, health care organizations must ensure they are not involved in the abandonment of quality patient care to achieve cost saving measures (Finegan, 1992).

Any cost containment program that is blind to quality is a risk to the health of the public. However, health organizations can no longer afford continued increases in volume of care without ensuring its effectiveness. A rational course is to continue cost containment and quality evaluation together. Lohr and Schroeder (1990) define quality of care as the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge. A critical aspect of this definition is its emphasis on outcomes of care that are desired by patients.

Due to the embryonic status of pre-admission clinics in the health care system, there is much to be done in evaluating the effectiveness and efficiency of these types of programs (Allison, 1992). At the current time, much of the literature on pre-admission programs focuses on descriptive reviews of individual programs and the cost containment benefits, such as reduced length of stay and bed utilization. By comparison, the volume of research literature on the effectiveness and the quality of these programs is sparse. Therefore, this lack of empirical data limits the generalizations health care organizations can make about the desired patient outcomes of pre-admission clinics and same day admission surgery programs. Research "themes" need to focus on the effectiveness as well as the efficiency of these types of programs. According to Zimmer (1980), effectiveness is the extent to which pre-established objectives, that is, outcomes, are attained as a result of specific activity. Efficiency is the cost of the activities and other resources that are used to achieve the outcomes (Zimmer, 1980). Since cost reduction

strategies should be introduced in the health care setting only after careful consideration of effects of the strategy on the quality of patient care (Noon & Paul, 1992), a review of this new program was necessary.

Significance of the Study

Senior administration, management, and physicians at St. Clare's Mercy Hospital have long recognized the fact that quality service must be provided to patients at a reduced cost. Therefore, St. Clare's Mercy Hospital introduced its PAC to respond to the demand for increased outpatient services and cost containment. Efficiency, such as the cost of this service and resources to achieve the program objectives, could be readily identified. However, the effectiveness of the program was more difficult to determine. Since, cost containment strategies are introduced into the organization only after careful consideration of the effect of the strategy on the quality of patient care and continued only when outcome evaluation indicates achievement of objectives a study was necessary. St. Clare's Mercy Hospital needed to ensure the PAC and SDA program was providing quality patient care and patients were achieving desired health outcomes.

This study provided the hospital with a review of how well the program's objectives were being achieved from a user and provider perspective. The study was also intended to identify direction for continuous quality improvement for the pre-admission program.

Delimitations of the Study

This study was delimited to participants of St. Clare's Mercy Hospital PAC and SDA program. The researcher did not engage in comparative understanding of different PAC and SDA programs. Since the sample was not intended to be reflective of the entire population, this precludes generalizations to a larger patient population and different healthcare settings. External validity will be left to readers and those who wish to apply the findings to other situations.

Limitations of the Study

The research study was intended to review a new program. Therefore, problems with the process may not be evident within the first six months, or the employees may have been committed initially to the goals of the program. This commitment may not be sustained over a longer period. Since the review only included patients who visited the program within the first six months and included mostly patients from one geographic location and culture, there may be difficulty with the consistency of the phenomena and replication of the study. In addition, responses to the interview and focus groups questions may be based on the most recent or most vivid experiences or impressions.

Definition of Terms

Pre-Admission Clinic. Pre-Admission Clinic (PAC) is a program or an outpatient visit for elective patients, that includes medical history, physical examination, diagnostic testing, anaesthesia assessment or consultation, any required medical consultation, nursing history and assessment, discharge planning, and preoperative education (Allison & Latham, 1991).

Same Day Admission. Same Day Admission (SDA) is a program that facilitates the admission of the patient on the morning of surgery, thus eliminating the preoperative inpatient day(s).

Elective. An elective patient is any patient who requires a non urgent intervention for an identified health problem. The intervention is scheduled to accommodate the patient, the physician, and the hospital.

Length Of Stay. (LOS) The total number of days of hospitalization, including the day of admission and excluding the day of discharge.

Preoperative. The period of inpatient assessment and preparation prior to surgical intervention.

Postoperative. The period of inpatient rehabilitation and convalescence following surgical intervention.

Preoperative Education. Preoperative education is a process of informing patients and their families about the surgical intervention, disease, and treatment; instructing them

on how to adhere to the preoperative and postoperative regimes; and helping them change their behaviors.

Quality Health Care. Care or service with characteristics that meet specific requirements and, given the current state of knowledge and available resources, fulfil reasonable expectations for maximizing benefits and minimizing risk to the health and well-being of the customer (Canadian Hospital Association, 1989).

Outcome. The consequence, result, or impact of an intervention(s) that may be intended and/or unintended (Canadian Council on Health Facilities Accreditation, 1992).

Clinical Indicator. A clinical indicator is defined as a measurement tool, an instrument that is used to access a measurable aspect of patient care as a guide to assessing performance of the health care organization or individual practitioners within the organization (Marder, 1990).

Healthcare Provider. A provider is any health professional (physician, nurse, occupational therapist) who provides direct care to the pre-admission and same day admission surgery patient.

Cost Containment. Cost containment strategies are programs or policies implemented to achieve a balance between providing needed services to a group of patients and containing cost associated with these services. In such programs constraints are tightened on care decisions at the individual level and policies focus on the characteristics of a population of patients and services provided are governed by principles applicable to that aggregate.

Case Mix Groups. Grouping of patients who are similar in terms of medical condition, length of hospital stay, and resources used during their hospital stay.

Primary Procedure. The most significant procedure the patient under went during hospital stay.

Complicating Diagnosis. Any medical condition arising after hospital admission which significantly impacted the patient's course in hospital and length of hospital stay.

This chapter has outlined the rationale for the study, identified the problem and indicated how the study results can be significant in assisting St. Clare's Mercy Hospital to ensure that the PAC and SDA program was providing quality patient care and patients were achieving desired health outcomes.

A review of literature related to the overall premises of the study follows in Chapter II. Chapter III describes the design of the study and Chapter IV presents the analysis of data. Finally, in Chapter V, the researcher summarizes the overall results of the data, offers conclusions and makes recommendations for follow-up.

CHAPTER 2

REVIEW OF RELATED LITERATURE

The objective of the literature review was to focus on pre-admission and same day admission programs and quality outcomes for these programs. To review quality outcomes it was necessary to review the historical perspective of health care quality management. Since a majority of the Pre-Admission Clinic objectives focused on pre-admission discharge planning and pre-admission preoperative education, the literature review also included these areas.

Historical Perspective of Health Care Quality Management

Health care quality assessment and management strategies can be viewed as having occurred in three phases:

Phase One: Systematic Evaluation.

Florence Nightingale, in 1863, was the first to call for systematic inquiry into the nature of care processes that might be related to outcome variability (Merry, 1992). Ernest Codman's efforts had more direct impact. He was a 20th century Boston surgeon, who called for a systematic evaluation process with a view toward improving patient care. Codman's ideas were embodied in the founding of the American College of Surgeons in

1913. This body set the task of establishing quality standards. In 1917, the College established a four part "minimum standard" and the Hospital Standardization Program was developed. This program evolved to become the Joint Commission on Accreditation of Hospitals and included the Canadian Hospital Association (Merry, 1992). The Canadian Hospital Association later departed to sponsor its own program.

Phase Two: Monitoring and Evaluation.

Accreditation standards evolved slowly through the 1950's and 1960's. During this period, Donabedian formulated a theoretical framework for patient care evaluation (Donabedian, 1980). He is best recognized for his structure, process, and outcome model of quality evaluation. Accreditation standards reflected the structure and process elements of this model. These standards did not address patient outcomes directly. The process was built on the assumption that, if proper structures and processes were in place, good outcomes would follow.

Phase Three: Continuous Quality Improvement.

Healthcare professionals often use the terms Total Quality Management (TQM) and Continuous Quality Improvement (CQI) interchangeably. However, quality experts identify TQM as a structured system for creating organization-wide continuous improvement and process to meet and exceed patient needs; while CQI is identified with the daily management portion of total quality management (King, 1992). CQI is first a mind set and second a process. It is proactive, seeks excellence, and is rigorous in its assessment of quality outcomes. Until recently, the quality evaluation and risk

management approaches initiated by accreditation and regulatory processes have relied upon peer review and statistical monitoring techniques to define and assess quality. The proactive concept of quality is now reshaping health care quality management (Merry, 1992). CQI is an internal, organization based, professionally led effort to improve many small processes of care in a ceaseless cycle of examination and change. In TQM, the focus is on the problems in the systems of health care delivery rather than problems of individual patients.

The more contemporary CQI models are rooted in the modern ideas on industrial quality improvement championed by Deming (1986) and Crosby (1979), among others. These models are founded on the premise that inspection to improve quality is inadequate in ensuring quality health care. Problems are currently built into the delivery system. Therefore, the approach to CQI must be systemic and opportunities to build in quality to all processes must be continually sought.

Pre-Admission Programs

The implementation of pre-admission and same day admission services in hospitals has been increasing gradually over the past decade. The major economic focus of the pre-admission program is the reduction in length of hospital stay through improved bed utilization (Allison, 1992). In the healthcare environment it is recognized that each

hospital day has an associated cost. Therefore, reducing inpatient hospital days can be translated into saved health care dollars.

A number of studies have been completed to evaluate clinical outcomes associated with same day admission (SDA) by comparing patients in SDA programs to similar patients receiving traditional inpatient surgical care (Llewellyn, Berger, Glandon, Keithley & Levin, 1989; Mandzuk, 1990; Conway, Goldberg, & Chung, 1992; Livingstone, Harvey, Kitchin, Shah, & Wastell, 1993). Livingston et al. (1993) found pre-admission clinics to be of value in increasing the efficiency of inpatient management and minimizing the hospital stay of elective patients. They also felt, in general, patients are alerted to the reality of their admission and feel reassured by the structured preparation. Conway et al. (1992) concluded pre-admission and same day admission has the potential to reduce operative delays and cancellations and to significantly reduce hospital costs by making more efficient use of available resources in a manner which is well accepted by patients. Llewellyn et al. (1989) demonstrated a lower infection rate and decreased length of stay (LOS). However, they did recommend subsequent studies should have a more refined set of clinical indicators to reduce measurement error and further assess re-admission rates in a larger sample. In summary, Llewellyn et al. (1989) found that, in a matched sample of patients undergoing surgery via SDA and traditional admitting procedures, negative clinical outcomes were no more likely to occur among SDA patients than among the traditionally admitted patients.

Becker (1983) saw the benefits of SDA in terms of time, cost and convenience, as well as in psychological effects. Dennis (1985) and Driscoll (1986) also agreed that there are psychological benefits for the patient. Smith (1987) identified two other benefits as 1) minimal separation from family and support networks and 2) minimal interruption to their normal routines. LeNoble (1991) outlined PAC benefits as a decrease in test duplication, shortened admission procedures, and a decrease in last minute surgery cancellations due to abnormal diagnostic reports.

Pre-Admission Discharge Planning

Discharge planning is the professional activities that prepare the patient and family for the transition from hospital to home (Smeltzer & Flores, 1986). Discharge Planning activities include: a) assessment of the patient's and/or family's adjustment to the disease process; b) treatment of the disease; c) determination of the need for referrals to community agencies; and d) patient's and/or family's educational needs.

Fagan (1984) states that "discharge planning is a process that is based on a time frame" (p. 5). She identifies three stages in which discharge planning information can be collected: 1) prior to admission; 2) during the admission assessment; and 3) during hospitalization. Data gathered during the first two stages are centred around the screening process. Fagan (1984) concluded that information gathered from the assessment, prior to

the patient being admitted to the hospital, could identify the need for community resources to facilitate early or timely patient discharge.

Research findings regarding discharge planning effects on the patients' length of stay (LOS) have been inconsistent. Schrager, Halman, and Myers (1978) examined the effects of the timing of referrals to social services on the patients' LOS. The experimental group's LOS was 5 days less than the control group. Schuman, Ostetd, and Willard (1976) reported that discharge planning may reduce the LOS in hospital. However, findings were not statistically significant. Cable and Mayers (1983) compared the LOS at several hospitals. The results demonstrated that the effects of discharge planning on the LOS were not consistent from hospital to hospital. Smeltzer and Flores (1986) found by combining the pre-admission testing and discharge planning programs, patient's average LOS decreased by approximately 0.5 days. Therefore, they concluded pre-admission discharge planning is one variable that has been identified as having an effect on length of hospital stay.

Although studies on the effects of discharge planning on patients' LOS are not conclusive, complex patient care, requiring community services or nursing home placement, takes time to arrange. If these patients are not identified early, arrangements are usually delayed, and the patients will stay in hospital longer than medically necessary. The goal of the discharge program is to assure that each patient's discharge needs are identified, adequate education by appropriate discipline is provided, and referrals are completed so that the patient is prepared for discharge in a timely manner. The incentive

for planning the patient's discharge in a timely and effective manner is that prolonged hospital stays can be decreased or prevented, thus reducing the hospital cost.

Pre-Admission Preoperative Education

According to Bartlett (1986) patient education is a process of informing patients and their families about the illness and treatment, instructing them on how to adhere to the regimes, and helping them change their behaviors. Prior to a study by Lindeman and Van Aernam (1971) on the effects of structured and unstructured preoperative education, there was only meager and inconclusive research available on the effects of preoperative education. For over 20 years, nursing research has attempted to measure the effects of preoperative education on postoperative outcomes (Haines & Viellion, 1990). Devine and Cook (1983) documented the effectiveness of psychoeducational intervention on reducing length of hospital stay. Even modest psychological interventions favourably affected the patient's recovery (Mumford, Schlesinger, & Glass, 1982). Salient among the components of these interventions are such activities as providing information about the procedures and events the patient may experience, teaching skills to reduce pain, and providing psychosocial support. Johnson's (1984) recurring theme is the increased effectiveness noted when psychotherapeutic and educational approaches are combined. Hathaway's (1986) meta-analysis of 68 studies, examining the effects of preoperative instruction on postoperative outcomes, showed that preoperative instruction does have a very positive effect on postoperative outcomes.

Providing education and psychological support is an integral part of nursing practice. However, disappointing levels of such care are evident in studies of clinical nursing practice (Dison & Kinnaird, 1980). Nursing must resolve this discrepancy between practice standards and practice. Lipetz, Bussigel, Bannerman, and Risley (1990), in their study of barriers to patient education, reported that 81% of the nurses in their sample believed that patients were not in the hospital long enough to be given adequate information and/or instructions. To allow patients the necessary time needed to learn and to practice new behaviors it is reasonable to provide this information prior to their hospital admission. Timing is very important in patient education. Surgery can produce fear and anxiety, as well as feelings of isolation, nervousness, and disruption. Simms (1988) identified some fundamental facts about the effects of surgery:

- . To become ill is to lose control of one's life.
- . Operations are dreaded events with uncertain outcomes.
- . All of us hide our fears in different ways.
- . Stress that becomes distress can be harmful.

Pre-admission programs have been established in hospitals to replace the inpatient testing, education and assessment period (Anderson & Zimbra, 1986; Connaway & Blackledge, 1986; Worley, 1986). Numerous studies have documented how inpatient preoperative education, structured and unstructured, helps to relieve fear and anxiety,

decrease stress, enhance psychological well-being, and promote postoperative recovery (Goulart, 1987; Moss, 1986; Orr, 1986; Raab, 1985).

The literature review focused on quality frameworks and outcomes of pre-admission and same day admission programs. To monitor the quality of pre-admission and same day admission programs, research efforts will have to become more directed toward finding out what impact health care interventions have on health status. Most quality assessment work of the past two decades has not stressed outcome evaluation, but has focused on the processes or structure of health care delivery. Research findings regarding discharge planning effects on patients' length of stay have been inconsistent (Schrager, Halman, & Myers, 1978; Schuman, Ostetd, & Willard, 1976; Cable & Mayers, 1983; Smeltzer & Flores, 1986). Prior to a study by Lindeman and Van Aernam (1971) on the effects of structured and unstructured preoperative teaching, there was only meager and inconclusive research available on the effects of preoperative teaching. Further research in the 1980s, however was very favourable and showed that even modest psychotherapeutic and educational interventions favourably affected the patient's recovery (Mumford, Schlesinger, & Glass, 1982; Devine & Cook, 1983; Johnson, 1984; Hataway, 1986).

CHAPTER 3

DESIGN OF STUDY

Introduction

The quality of health care may be viewed from the perspective of the structure of the delivery system, the operating processes within the system, and outcomes of care (Donabedian, 1988). Most quality assessment work of the past two decades has not stressed outcome evaluation, but has focused on the processes or structure of health care delivery. According to Geigle and Jones (1990) outcome measures are any measurement system used to uncover or identify the health outcome of treatment for the patient. Merry (1987) suggests a conceptual model for measuring the quality of health care that includes a combination of patients' perceptions and outcome screening. A recent review of studies of patients as sources of information for quality assessment purposes (Lohr, 1988), documents that people can respond reliably to carefully constructed questionnaires. The review concludes that data from patients will be vital to examining interpersonal components of quality and will provide a valuable supplement to data from health care providers and documentation on the technical process of care.

Conceptual Framework

The "Plan-Do-Check-Act" (PDCA) Cycle (Walton, 1986) was the conceptual framework used to focus the research. During the 1920's, Walter Shewhart developed

innovative statistical process control methodologies and invented the now famous PDCA Cycle (Walton, 1986). This endlessly recurring cycle, an adaptation of scientific method (hypothesis - experiment - measure - conclusion or new knowledge), is at the core of the continuous quality improvement process. This model depicts the fact that once initiated, PDCA never stops. It seeks improved performance, quality, and excellence through planning, implementation, evaluation/outcome, and action. Shewhart's PDCA Cycle is best known through the work of his student, W. Edward Deming, a philosopher of quality management and the learning organization (Merry, 1992). Deming (1986) has classified the activities of quality improvement as improving existing products and services, improving existing processes, creating new and better products and services, and creating new and better processes.

Shewhart's PDCA Cycle contains four phases arranged to form a circle (Figure 3.1). These four phases are: 1) Plan- where goals and targets are set and methods of attaining these goals are identified; 2) Do- following user education, the plan is implemented; 3) Check- outcome measures are evaluated to determine the effects of the implementation process and attainment of goals; 4) Act- based on the outcomes, appropriate action is identified and implemented to improve the processes of care.

In the Pre-Admission (PAC) and Same Day Admission (SDA) program review, the research questions were placed in the "Check" phase of the PDCA Cycle. In this phase, outcome measures were evaluated to determine the effects of planning, education, and implementation processes. There is no single measure of health outcome. Therefore, in

order to develop reliable and valid outcome measures, data were combined from a variety of sources, such as: 1) patients' perceptions; 2) healthcare professionals' perceptions; and 3) health documents.

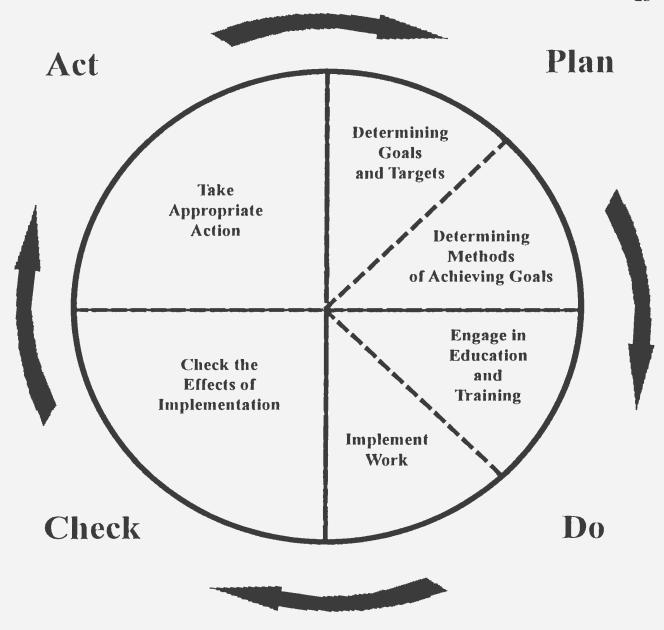


Figure 3.1 Shewhart's PDCA Cycle. From <u>The Deming Management Method</u> by M. Walton, 1986, New York: The Putman Publishing Company.

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Population/Sample

The population for this study was healthcare professionals and patients at St. Clare's Mercy Hospital. The sample was comprised of the following groups: 1) physicians who referred patients to the PAC and SDA program; 2) a stratified sample of other healthcare providers who provided services to these patients; and 3) a randomly selected sample of patients who were prepared for surgery in PAC and admitted to hospital on the day of surgery during the first six months of the program, November, 1993 to April, 1994. Table 1 displays the number of individuals interviewed by classification.

Table 1

Frequency Distribution of Interviews by Classification for 167 Subjects

Classification	Frequency (n)	Relative Frequency %
Physicians	15	8.99
Nurses	12	7.19
Therapeutic Services	6	3.59
Discharge Planning/ Social Workers	4	2.4
Patients	130	77.84
Total	167	100

Methodology

The research design selected for the study included quantitative and qualitative procedures. To obtain both breadth and depth of information the researcher used patient and healthcare provider focus groups, patient and physician interviews, and a review of patient data to determine desired patient outcomes. Focus groups are defined by Stewart and Shamdasni (1990) as "group depth interviews". Using Calder's "phenomenological" approach to focus group qualitative research (1977, p. 419), which is concerned with everyday knowledge from the shared perceptions of particular respondent subgroups, the researcher viewed the PAC and SDA program as respondents experienced the program. Interviews were used to obtain insights, perceptions, and explanations from patients and healthcare providers on satisfaction with the process. An analysis of the patient focus group data was used to identify concepts and themes for the patient interview questions. An analysis of the healthcare provider focus group data was used to draw conclusions about provider satisfaction. The interviews for the physicians were face-to-face exchanges; the interviews for the patients were carried out on the telephone. The responses to the interview questions were used to measure subjective attitudes towards the PAC and SDA experience.

To measure patient outcomes several procedures were used. Concurrent data were collected to determine the number of surgery reschedules and availability of inpatient bed

following completion of surgical procedure. Retrospective data were collected to determine patients' length of stay, complicating diagnosis, and re-admission rates.

Patient Focus Group

Since the discussion of the patient focus group was to be general in nature, 10 patients were invited to participate. A random sample of patients was used to help ensure a nonbiased cross section sample. This random sample was contacted by telephone. The concept and objectives of the group discussion was explained. Those who volunteered to attend were again contacted by letter, a week prior to the group interview (See Appendix F). This group interview focused on patient satisfaction with the process and included the following core topics: 1) pre-admission process; 2) patient education; 3) preparedness for discharge; and 4) patients' perceptions of their outcomes. Questions were sequenced to allow maximum insight. The researcher/moderator allowed the patients to become familiar with the topic by presenting an outline of the discussion. Each patient was encouraged to present his/her personal view. During the discussion patients were given individual opportunity to recollect personal experiences and to listen to the viewpoints of others in the group. The researcher led the group by asking key questions related to the core topics of interest and then allowed opportunity for final summary questions by each patient. To ensure that the researcher understood the intent of patients' responses they were given an opportunity to respond to the researcher's summary of key points while still in the focus group.

During the patient focus group, data were captured by a secretary and additional notes were taken by the moderator. Debriefing occurred immediately between the moderator and assistant moderator (secretary) to capture the first impressions. The secretary then transcribed the shorthand notes into longhand. To allow the researcher to selectively retrieve and review information pertaining to related topics across all focus groups a database was created and axial coding was used when entering the data. Axial coding, systematically coding central themes and concepts, allowed the researcher to fracture the data and to reassemble it in new ways (Kruger, 1994). From the patient focus group data, themes and concepts were identified for the patient interview questions.

Healthcare Provider Focus Groups

Post Anaesthesia Recovery Room Nurses

Since the post anaesthesia recovery room (PARR) nurses were knowledgeable participants, a mini-focus group was used. Five PARR nurses were randomly selected. This number was considered sufficient since these nurses had intense experience with the topic of discussion; 1) availability of inpatient beds postoperatively; and 2) PARR nurses satisfaction with the program. The researcher/moderator allowed the nurses to become

familiar with the topic by presenting an outline of the discussion. Each nurse was encouraged to present his/her personal view. During the discussion nurses were given individual opportunity to recollect personal experiences and to listen to the viewpoint of others in the group. Questions were sequenced to allow maximum insight. The researcher led the group by asking key questions related to the core topics of interest and then allowed opportunity for final summary questions by each nurse. To ensure that the researcher understood the intent of nurses' responses they were given an opportunity to respond to the researcher's summary of key points while still in the focus group.

During the PARR nurses focus group, data were recorded by an assistant moderator and additional notes were taken by the moderator. Debriefing occurred immediately between the moderator and assistant moderator to capture the first impressions. Interview/focus group reporting form (See Appendix D) was completed post discussion. Using axial coding, the data were then entered into the database.

Therapist Group

A stratified sample of healthcare providers from Occupational Therapy, Physiotherapy, and Respiratory Therapy was selected for this focus group. Since the discussion was to be general in nature eight participants were invited. This group interview focused on healthcare provider satisfaction with the process and included the following core topics:

1) preoperative assessment; 2) patient education; 3) discharge planning; and 4) therapist

satisfaction with the program. The researcher/moderator allowed the participants to become familiar with the topic by presenting an outline of the discussion. Each therapist was encouraged to present his/her personal view. During the discussion each therapist was given individual opportunity to recollect personal experiences and to listen to the viewpoint of others in the group. Questions were sequenced to allow maximum insight. The researcher led the group by asking key questions related to the core topics of interest and then allowed opportunity for final summary questions by each therapist. To ensure that the researcher understood the intent of participant responses they were given an opportunity to respond to the researcher's summary of key points while still in the focus group.

During the therapist focus group, data were recorded by an assistant moderator and additional notes were taken by the moderator. Debriefing occurred immediately between the moderator and assistant moderator to capture the first impressions. Interview/focus group reporting forms (See Appendix D) were completed post interview. Using axial coding, the data were then entered into the database.

Anaesthesia Group

Anaesthetists (physicians) providing service to the PAC and SDA program were selected for this focus group. This group interview focused on healthcare provider satisfaction with the process and included the following core topics: 1) preoperative

assessment; 2) patient education; and 3) anaesthetist satisfaction with the program. The researcher/moderator allowed the participants to become familiar with the topic by presenting an outline of the discussion. Each anaesthetist was encouraged to present his/her personal view. During the discussion each anaesthetist was given individual opportunity to recollect personal experiences and to listen to the viewpoint of others in the group. Questions were sequenced to allow maximum insight. The researcher led the group by asking key questions related to the core topics of interest and then allowed opportunity for discussion.

During the anaesthetist focus group, data were recorded by the moderator. Interview/focus group reporting forms (See Appendix D) were completed post interview. To ensure that the researcher understood the intent of participant responses the Anaesthology Department was given an opportunity to respond to the researcher's conclusions by being provided with a written copy of the interview questions, researcher's summary, and physicians' quotes supporting the summary. Using axial coding, the data were then entered into the database.

Healthcare Providers Interviews

Discharge Planning

A stratified sample of healthcare providers from Social Work and Discharge Planning was selected for individual interviews and schedules were established. The interview

questions focused on healthcare provider satisfaction with the process and included the following core topics: 1) preoperative assessment of discharge needs; 2) patient education; 3) discharge planning; and 4) providers satisfaction with the program. The researcher addressed questions to the interviewee and the spoken responses were then recorded. To ensure the researcher understood the intent of participant responses he/she was given an opportunity to respond to the researcher's summary of key points while still in the interview. Interview/focus group reporting forms (See Appendix D) were completed following each interview. Using axial coding, the data were then entered into the database.

Physicians

Physicians who referred patients to the PAC and SDA program, during the first six months of the program, were selected for individual interviews and schedules were established. The interview questions focused on healthcare provider satisfaction with the process and included the following core topics: 1) preoperative assessment and care provided to these patients; 2) program advantages and disadvantages for patients; and 3) physician satisfaction with the program. The researcher addressed questions to the interviewee and the spoken responses were then written. Interview/focus group reporting forms (See Appendix D) were completed during each interview. To ensure that the researcher understood the intent of responses, the interviewee was given an opportunity to

respond to a written copy of the researcher's summary of key points and physicians' quotes supporting the summary. Using axial coding, the data were then entered into the database.

Patient Interviews

The population included patients who were prepared for surgery in the pre-admission clinic and admitted to hospital on the day of surgery, during the first six months of the program. One hundred and twenty-five patients were randomly selected from the population for telephone interviews. The interview statements focused on patients' perception of satisfaction in the following areas: 1) pre-admission process; 2) postoperative education; 3) discharge planning; and 4) overall satisfaction with the program. The interviewer made a positive statement, as they were written in an interview schedule, and then using a Likert scale of 1 to 5 respondents were asked to rate their degree of agreement with the statement. A Likert scale was used to measure the degree of patient satisfaction; where 1 = Strongly Disagree (SD); 2 = Disagree (D); 3 = No Opinion (N); 4 = Agree (A); 5 = Strongly Agree (SA).

Cost Containment and Quality Healthcare

To determine if this PAC and SDA program was effective and efficient the researcher reviewed the following data: 1) rate of surgery cancellations and reschedules; 2) length of

hospital stays (LOS); 3) complicating diagnosis; and 4) percent of patients being re-admitted to hospital within thirty and sixty days following discharge.

Since PAC was introduced to reorganize assessments, provide education, and to organize discharge planning for SDA patients, there was some relevancy to comparing LOS to periods when patients were admitted to hospital prior to similar surgical procedures. Therefore, 1992-93 data were not used for comparative LOS analysis. Prior to April 1994, data on SDA patients were not submitted to the Canadian Institute of Health Information. Therefore, LOS for Case Mix Groups were not available to the researcher and could not be used for comparison. Using the primary procedure codes, the median LOS for the sample population was compared with same primary procedure codes for years 1990-91 and 1991-92. Complicating diagnoses were identified by the patients' physicians and recorded on discharge. Patients' charts were not reviewed for postoperative complications. To determine rate of surgery cancellations, the scheduled surgery dates were compared with the actual surgery dates. To determine if low rates of re-admission to hospital could support the program as a cost containment program, re-admissions to the hospital were obtained retrospectively from the clinical information system. This inquiry was conducted at thirty and sixty days after the patient was discharged from hospital.

Validity and Reliability

Validity

To ensure the questions measured what the researcher intended to measure, patient and healthcare provider satisfaction with the program, the researcher attempted to ensure content validity. Items for interview questions were developed based on the program objectives, patient focus group data, review of related literature, and experts. The experts included nurses and physicians involved in the PAC and SDA program and clinical epidemiologists. They carefully reviewed the process used in developing the items and made a judgement concerning how well items represented the intended content areas. The experts concluded all sub-areas were included and in the correct proportions. Items for the focus group questions were developed based on related literature and program objectives. They were intended to gain insight, perceptions and explanations.

Reliability

A pilot study was conducted to establish reliability. The patient interview questions were tested on a randomly selected sample of ten patients. The sample was randomly selected from patients who received service during the first six months of the program. To eliminate, were possible, sources of errors, ambiguous interview questions were reworded

or removed from the interview schedule. A second pilot study was then conducted on a randomly selected sample of ten patients. To establish inter-rater reliability, a second interviewer interviewed the second group of patients. The Kappa co-efficient was reviewed for each question. Since as many observations as cells were needed for Kappa co-efficient to be calculated, and only 10 patients were interviewed, the table was collapsed to a 3 x 3 table (SD-D, N, A-SA). Theoretically, at least 25 patients were necessary for completeness. However, with the small sample population this was not feasible. Most of the question co-efficients were 1.0, and a few were > 0.75, suggesting a very high inter-rater reliability. The nearer the value of the co-efficient to 1.0, the greater the degree of respondent consistency and, hense, the greater the overall reliability of the instrument. The questions with co-efficients <1.0 were reviewed and reworded.

Pilot testing of the focus group interview questions was accomplished by using senior administration staff who were familiar with the purpose of the study and also familiar with the types of participants involved in the study. To add to pilot testing, final comments were obtained from participants at the conclusion of each focus group. The open-ended questioning format was used with the intent of encouraging individuals to respond, based on their specific situation. The questioning route ensured the questions were exactly what the researcher intended and eliminated subtle differences in language that could have altered the intent of the questions. The researcher used this format in an attempted to produce a more efficient analysis.

The "Plan-Do-Check-Act" (PDCA) Cycle (Walton, 1986) was the conceptual framework used to focus the research. In the PAC and SDA program study, the research questions were placed in the "Check" phase of the PDCA Cycle. In this phase, outcome measures were evaluated to determine the effects of planning, education, and implementation processes. The research design selected for the study included quantitative and qualitative procedures. To obtain both breadth and depth of information from patients and healthcare professionals, on their perception of satisfaction with the pre-admission process, the researcher used patient and healthcare provider focus groups, patient and physician interviews, and a review of patient outcome indicators.

CHAPTER 4

ANALYSIS OF THE DATA

Findings of the research are outlined in this chapter. The analysis of data was presented in accordance with the research questions of this study. Data were obtained from patient and healthcare provider focus groups, patient and physician interviews, and a review of patient clinical indicators to determine perceptions of satisfaction and desired patient outcomes. The questions addressed by the study included the following:

- 1. Do the program outcomes indicate patient satisfaction with the process?
- 2. Do the program outcomes indicate healthcare provider satisfaction with the process?
- 3. Do patient clinical indicators indicate quality health care?
- 4. Do decreased length of hospital stays and low re-admission rates support the program as a cost containment program?
- 5. Do the program outcomes indicate attainment of program objectives?

 The analysis of the data in response to each of the above questions is discussed in detail.

Question 1. Do the program outcomes indicate patient satisfaction with the process?

Interviews were conducted with patients who were prepared for surgery in the Pre-Admission Clinic (PAC) and admitted to hospital on the day of surgery during the

first six months of the program. Table 2 displays the population sample and the number of patients interviewed.

Table 2

<u>Frequency Distribution of Pre-Admission and Same Day Admission Patients</u>

Patient Population	Frequency (n)	Relative Frequency (%)
Individual Interviews	95	63
Focus Group Interview	15	10
Validity/Reliabilty Testing	20	13
Deceased Patients	3	2
Unable to Interview	2	1
Unable to Contact	17	11
Total Patients	152	100

Patients' Perceptions of Satisfaction Interview Statements, Items 1 to 20, were designed to elicit their subjective measurement of satisfaction (Appendix B). Items 1 to 7, were planned to obtain specific responses on the pre-admission process, while Items 8 to 12, were included to elicit specific responses on patient education. Items 13 to 17 sought specific responses on discharge planning, and Items 18 to 20 evoked specific responses on pre-admission program general satisfaction.

Patients' Interview statements were analyzed using frequency and relative frequency distributions. The researcher tabulated the number of times each rating occurred, frequency (F), and determined the percentage, relative frequency (RF), of the total number of responses falling into each rating. The frequency and relative frequency

findings are presented, by theme, in Tables 3 through 6. The patients' responses for individual statements were then collapsed into three categories; 1) Strongly Disagree and Disagree (SD-D); 2) Neutral (N); 3) Agree and Strongly agree (A-SA). These findings are presented in Bar Graphs in Appendix E. The overall degree of patient satisfaction was very high, at 90.73 %. The degree of patient satisfaction with pre-admission process was 93.74 %; patient education was 90.66 %; discharge planning was 86.72 %; and program general satisfaction was 90.70 %.

Table 3

Frequency Distribution of Responses for Items 1 - 7, Pre-Admission Process, for 95

Patients

Item	1	2	3	4	5	6	7
Question Response	F/RF						
Strongly Disagree			1/1.1	1/1.1	1/1.1		1/1.1
Disagree	4/4.2	1/1.1	2/2.1	2/2.1	3/3.2		5/5.3
Neutral	3/3.2	2/2.1	1/1.1	3/3.2	7/7.4	1/1.1	
Agree	24/25.3	29/30.5	29/30.5	17/17.9	30/31.6	26/27.4	17/17.9
Strongly Agree	64/67.4	63/66.3	60/63.2	70/73.7	53/55.8	64/67.4	71/74.7
No Response			2/2.1	2/2.1	1/1.1	1/1.1	1/1.1
Total	95/100	95/100	93/97.9	93/97.9	94/98.9	94/98.9	94/98.9

Table 4

Frequency Distribution of Responses for Items 8 - 12, Patient Education, for 95

Patients

Item	8	9	10	11	12
Question Response	F/RF	F/RF	F/RF	F/RF	F/RF
Strongly Disagree			2/2.1		
Disagree	5/5.3	3/3.2	4/4.2	2/2.1	4/4.2
Neutral	6/6.3	7/7.4	7/7.4	1.1.1	3/3.2
Agree	28/29.5	10/10.5	23/24.2	14/14.7	19/20.0
Strongly Agree	55/57.9	74/77.9	58/61.1	77/81.1	68/71.6
No Response	1/1.1	1/1.1	1/1.1	1/1.1	1/1.1
Total	94/98.9	94/98.9	94/98.9	94/98.9	94/98.9

Table 5

Frequency Distribution of Responses for Items 13 - 17, Discharge Planning, for 95

Patients

Item	13	14	15	16	17
Question Response	F/RF	F/RF	F/RF	F/RF	F/RF
Strongly Disagree					
Disagree	8.84	5/5.3	11/11.6	3/3.2	6/6.3
Neutral	11/11.6	10/10.5	3/3.2	1/1.1	4/4.2
Agree	30/31.6	38/40.0	32/33.7	25/26.3	21/22.1
Strongly Agree	44/46.3	41/43.2	48/50.5	65.68.4	62/65.3
No Response	2/2.1	1/1.1	1/1.1	1/1.1	2/2.1
Total	93/97.9	94/98.9	94/98.9	94/98.9	93/97.9

Table 6

Frequency Distribution of Responses for Items 18 - 20, Program General

Satisfaction, for 95 Patients

Item	18	19	20
Question Response	F/RF	F/RF	F/RF
Strongly Disagree		3/3.2	
Disagree	6/6.3	5/5.3	1/1.1
Neutral	3/3.2	5/5.3	3/3.2
Agree	18/18.9	9/9.5	10/10.5
Strongly Agree	65/68.4	72/75.8	80/84.2
No Response	3/3.2	1/1.1	1/1.1
Total	92/96.8	94/98.9	94/98.9

Question 2. Do the program outcomes indicate healthcare provider satisfaction with the process?

The population for the healthcare provider focus groups and interviews was physicians who referred patients to the PAC and Same Day Admission (SDA) program and a stratified sample of other healthcare providers who provided services to these patients. The interview and focus group data were analyzed, according to healthcare subgroup, following procedures described by Zemke and Kramlinger (1985). The findings of healthcare provider focus groups and interviews are reported by subgroup, using descriptive reporting. The descriptive report included a summary paragraph for each

question and illustrative quotes. The quotes selected were intended to help the reader understand the way in which respondents answered the question. Following descriptive reporting, by question for all healthcare subgroups, the researcher then used interpretive reports. The interpretive reports are a summary of the researcher's understanding of what the data mean. This method was used to provide greater depth in data analysis. This analysis was then used to identify themes of satisfaction and/or dissatisfaction with the program.

Healthcare Provider Focus Groups and Interviews Descriptive Summary

Subgroup 1. Post Anaesthesia Recovery Room Nurses

Question 1. How do you view the Pre-Admission Clinic and Same Day Admission program in relation to care you provide to these patients?

The Post Anaesthesia Recovery Room (PARR) nurses verbalized concerns with the patients' assessments. There appeared to be less documentation. The assessments were not as complete as inpatient assessments. The check system was not as informative as narrative notes. PARR nurses were not as informed as they would like to be. Pre-Admission patients were not added to the PARR assessment form and nurses were unable to review patients' charts until after the patients' surgical procedure. Some of the supporting quotes included:

"History and Physical not as complete"

"History and Physical may not be as complete as an inpatient"

"Check system not as informative as notes"

"Question, Do previous history points get missed with check system?"

"Difficult to get accurate view of patient"

"Nurses are now being informed of patients condition, surgical procedure,

history and physical, while completing postoperative interventions".

Question 2. What do you feel are the major advantages of this program for patients?

PARR nurses could not identify any individual patient advantages from the PAC and SDA program. Nurses felt the major advantages of the program were related to decreasing lengths of hospital stay for patients. Therefore, more patients were accessing the services. Nurses voiced concern with the criteria for referring patients to the program. Some of the supporting quotes included:

"Program is not appropriate for all patients"

"Sick, frail, elderly, may be better cared for by being admitted"

"This program is appropriate for minor surgery procedures, not all procedures"

"Query, the established criteria for referring patients to PAC versus admitting them"

"Same Day Admission no advantage for patient having major surgery"

"Elderly would be more settled if they were admitted as inpatients"

"With shorter hospital stays more patients are accessing the services".

<u>Question 3</u>. What do you feel are the major disadvantages of this program for patients?

PARR nurses were not as informed as they would like to be. Patients were not added to PARR assessment form and nurses were unable to review patients' charts until after surgery. Patients' interventions often took priority over reviewing records. Some of the supporting quotes included:

"Difficult to get accurate view of patient"

"Nurses are now being informed of patients condition, surgical procedure, history physical, while completing postoperative interventions"

"Patients' are not on PARR assessment forms. Staff not aware of medical history, medications, allergies, etc."

"No computerized assessment profiles. This is a major advantage for the inpatient group".

Question 4. How do you perceive this type of program in terms of patient education and your expectation post surgery?

PARR nurses verbalized concerns with patient preparation for the postoperative recovery experience. Patients were perceived as viewing their surgery as minor in terms of discomfort and pain. Some of the supporting quotes included:

"Patients unaware of the degree of pain and discomfort"

"Patients are not prepared for the fact that there will be pain and nausea. Many think they can go home the same day"

"Many think this surgery is a breeze"

"Patients are much more difficult to settle postoperative"

"Patients are restless, higher blood pressures, need more pain medication than the admitted inpatient group"

"Patients having complex surgery do not do as well as admitted inpatients"

"Patients very tense, more so than inpatient group".

Question 5. Has inpatient bed availability been an issue in management and flow of patients from the Post Anaesthesia Recovery Room?

The availability of postoperative inpatient bed was not an issue for planned admissions. The process had been well organized. Some of the supporting quotes included:

"Well organized"

"Available beds have not been an issue for planned postoperative admissions"

"There is an occasional short wait, but no major problem".

Subgroup 2. Therapists

Question 1. How do you view the Pre-Admission Clinic and Same Day Admission Surgery program in relation to care you provide to these patients?

The therapists were not as involved, as they would like to be, in the PAC and SDA program. They would prefer to have a broader role in patient preoperative assessment and education. Some of the difficulties encountered in patients' assessments were due to patient appointments not being booked with the various therapy departments. Some of the supporting quotes included:

"There are increasing numbers of patients with no preoperative Occupational (OT) education. For example, the two months prior to PAC being implemented, OT had 100 referrals. Then we had 70 from April to June."

"The postoperative phase is more difficult due to lack of instruction"

"We have more anxious patients to access"

"There are a certain group of patients Respiratory must see and without appointments, patients often have to wait"

"Appointments must be arranged, with increasing numbers it will be more difficult to accommodate them".

Question 2. What do you feel are the major advantages of this program for patients?

Patients visiting PAC were better educated and more prepared for surgery. Therefore, they should have had a positive surgical experience and improved quality of life. For this advantage to be fully achieved, all therapy services need to be involved in the PAC process. Therapists quotes included the following:

"If patients are educated about the entire process, they will have a better quality of life"

"The entire process will be more efficient if planned"

"Therapists need to be a part of the PAC process".

Question 3. What do you feel are the major disadvantages of this program for patients?

Therapist verbalized concerns with the PAC process and their limited involvement in patients' preoperative assessments. The focus of the program appeared to be more on

preparation for surgery and diagnostic screening. There was a perception of less emphasis on discharge planning and patients' quality of life after surgery. Some of the supporting quotes included:

"History and Physical is very scant and lacking significant information on deficits from a Physiotherapy and Occupational Therapy perspective"

"Patients are not seen preoperative, then care is based on the documentation, and this is often lacking"

"Patients need to be assess, hips, knees, and joints to determine their mobility before surgery"

"Postoperative assessments difficult when patients are anxious and in pain"

"Patients need to know expectations, this is often lacking when we are not part of the preoperative education process"

"Occupational Therapy patients often need multiple pieces of home equipment.

This should be arranged before surgery"

"Discharges are often rushed and not organized"

"Rush creates unhappy patients and families"

"Focus must not be on getting patients in and out. It must be on their quality of life after surgery".

Question 4. How do you perceive this type of program in terms of patient education and your expectation post surgery?

The therapists were not significantly involved in the PAC and SDA program. Therapist felt more education would improve the postoperative recovery period and unless patients were better scheduled and all healthcare providers were involved in the process, patients may be more disadvantaged in the long term. The PAC needed more resources for planning and clerical duties. Some of the supporting quotes included:

"Patients need appointments for Therapy Services"

"PAC must be reviewed, we cannot have complex patients coming to surgery from PAC without education and discharge planning from Occupational Therapy and Physiotherapy"

"We need a planned approach to Respiratory Therapy. We can only accommodate a small number and patients must be aware of the length of time to complete these procedures"

"Its time to review the program. It needs to move from a diagnostic focus to multidisciplinary education and discharge preparedness focus"

"It is difficult to get patients to be a part of their recovery and disease process.

They need more education"

"Patients often don't listen when being informed. Therefore, actual demonstrations are often more effective"

"The more patients learn, the more they are involved. The more they take control, then the better they do".

Subgroup 3. Discharge Planning

Question 1. How do you view the Pre-Admission Clinic and Same Day Admission program in relation to care you provide to these patients?

Discharge planning staff played a limited role in the PAC and SDA program. Referrals were identified by the PAC nurse and were for concrete services. Community needs were being identified and there was no increase in the number of urgent referrals to the department. Discharge planning identified a concern with the lack of any dispute mechanism to resolve patient and hospital conflict. Patients may insist on elective surgical procedures, even if they could not arrange community support to leave the hospital. Some of the supporting quotes included:

"Referrals are appropriate for concrete services"

"With shorter hospital stays there has not been any increase in the number of urgent community referrals"

"The role of discharge planning must be expanded as services are provided to more complex patients".

Question 2. What do you feel are the major advantages of this program for patients?

Services needed for patients' discharges were identified prior to admission to hospital. These services were not being organized prior to hospitalization. Patients were aware of what they would need and what could be provided in the community. Some of the supporting quotes included:

"Services are identified early"

"Screening by the PAC nurse is effective"

"Patients are aware of what they will need and what can be provided"

"Patients are more educated about what to expect after surgery".

Question 3. What do you feel are the major disadvantages of this program for patients?

The program had no disadvantages from the discharge planning healthcare providers perspective. Patients were still being screened and referred by nursing staff and referrals were appropriate for concrete services. Some of the supporting quotes included:

"PAC patients are assessed by nursing staff, this is the same as inpatients"

"Referrals for concrete services are appropriate".

<u>Question 4</u>. How do you perceive this type of program in terms of patient education?

Social Workers viewed their roles in the PAC and SDA program in a broader social context and identified the need for PAC to be involved in social assessment and counselling, as well as providing concrete services. All patients needed to be informed of what services they could access, if the need should arise. This education would decrease patients anxiety and improve their decision making. Some of the supporting quotes included:

"Patients with psychological concerns and issues may be overlooked if patients are not assessed for this need"

"All patients need to be informed of services available"

"Need for broader role, this would have an additional cost"

"More education could decrease anxiety and help with decision making"

"There is a need for a multidisciplinary tool to identify a multitude of needs"

"Maybe all patients need to be assessed. With the stress of surgery any social problem or issue will only create more problems".

Subgroup 4. Anaesthetist

Question 1. How do you view the Pre-Admission Clinic and Same Day Admission program in relation to your preoperative assessment and care you provide to these patients?

Anaesthetists voiced concern with the lack of work completed prior to the PAC visit.

There was often inadequate assessment to determine which patients were appropriate for PAC and SDA program. Some of the supporting quotes included:

"Are appropriate patients being referred to the clinic or should some be admitted"

"Patients with complex problems may not be appropriate"

"Adequate assessment has two focus: 1) appropriate for PAC visit; and 2) appropriate work-up prior to coming to PAC for anaesthesia assessment".

PAC visits were occurring one to two days prior to surgical procedures. With limited work-up prior to the PAC visit, there was often a lack of information to base an assessment decision on. This lack of information was often due to patients' prior charts and information from other institutions not being available. Some of the supporting quotes included:

"Patients with earlier PAC appointments have better assessments, often returning for follow up visits, and have more referrals"

"Lack of information, incomplete information, no prior charts, or chart from other institutions were not available"

"PAC work up not ready and little work up prior to PAC"

"Old charts were not available"

"Patients need earlier appointments"

"With PAC visit only a day or two before surgery there is very little information available to base an assessment on".

Question 2. What are your views on this program? Does it enhance or impede your care?

There was often a lack of complete information on which to base an assessment and decision. The medical fee structure did not provide resources for Anaesthetist assessment in PAC. Therefore, assessments were often arranged around an already busy schedule.

Some of the supporting quotes included:

"Incomplete information, lack old charts"

"No prior assessment"

"We are not primary care givers"

"No fee structure for PAC assessment, this needs to be improved"

"Now patients wait long periods for assessments"

"Assessments are not done until after OR work is completed".

Anaesthetists were developing guidelines for patient referral to this service. More education for physicians would ensure more appropriate referrals and better utilization of the programs. Some of the supporting quotes included:

"Guidelines will outline what we would like to see done prior to our assessment"

"Try to ensure appropriate referrals are made"

"Must ensure its not a dumping ground for patient assessment"

"Provide more education for users of the service and its intended use".

Question 3. What do you feel are the major advantages of this program for patients?

The anaesthetists felt it is more convenient for patients to come to PAC and SDA program, than to be admitted to hospital because patients' were better educated as to their surgical procedures and hospital stays. Some of the supporting quotes included:

"Convenient for patients"

"They do not wish to be in hospital longer than they have to"

"They get acquainted with the hospital and staff prior to hospitalization"

"Patients get necessary consultations"

"Patients are provided with more information"

"They get their questions answered"

"Much better understanding of surgery and postoperative expectations"

"Better prepared for surgery"

"Ms, D doing excellent job with these patients".

Question 4. What do you feel are the major disadvantages of this program for patients?

Some of the disadvantages of the program were due to unrealistic physician expectations and appointments too close to surgery dates. This was creating longer than necessary PAC visit times and inappropriate investigations. Appointments were not being organized in advance of the PAC visit for diagnostic procedures. Some of the anaesthetists quotes included:

"Patients arriving not properly worked up and decisions not made on proper work up. Therefore, more test being done, more visits and consultations, longer visits, more patient waiting"

"Focus is now on diagnostic work up"

"Needs more emphasis on education and less on work up"

"Patients need appointments for diagnostic procedures prior to day of visit".

Question 5. What are some of your concerns with the PAC and SDA program?

Concerns focused on two areas: 1) appropriateness of patients entering the system through Same Day Admission versus inpatient admission; and 2) changing the attitudes of governments and hospital administrators to provide the necessary resources, human and financial, to support these types of programs. Some of the supporting quotes included:

"Patients require better assessment prior to being referred to PAC"

"Certain patients are not appropriate for this program, the complexity of patient illness should be a factor and not necessarily the surgical procedure being done"
"There needs to be less focus on diagnostic work up"

"Government needs to change current fee structure to cover this type of service"

"Program is saving inpatient dollars, need to redirect to this program"

"Patients' assessment now being completed after Operating Room (OR) work

completed"

"There is no additional staff or fees to do PAC assessments"

"PAC now part time staff, very over worked"

"The program needs more staff"

"The program needs increase resources for physicians assessments, nurses, and clerical time".

Ouestion 6. What would you like to see changed or improved?

The anaesthetist would like to develop and implement a pre-admission assessment tool and physician guidelines for referring patients to the PAC nad SDA program. Some of the supporting quotes included:

"Currently a form is being developed to collect information we need to make an anaesthetic decision"

"Guidelines are needed to ensure appropriate patients are referred to OR from PAC"

"Guidelines would include type patients, nature surgery, anaesthetic class"

"Class III patients may be appropriate if only minor procedure being done".

Subgroup 5. Physicians

Question 1. How do you view the Pre-Admission Clinic and Same Day Admission program in relation to your preoperative assessment and care you provide to these patients?

Most of the physicians' statements were very positive. They perceived the PAC and SDA program as being very positive for patients. Patients were accessing the necessary services, consultations were being organized, and patients were being educated about their entire surgical experience. There was some early misconception about the role of the program. Some of the supporting quotes included:

"Very effective program"

"From my view the program works very well, patients are accessing care"

"Patients are very prepared, especially with education and knowledge"

"Patients are getting consultations and assessments"

"Ms. D is very astute, she doesn't miss anything"

"Some early growing pains with patients' History and Physical"

"Consultations are being completed".

Question 2. What are your views on this program? Does it enhance or impede your care?

Several physicians voiced concerns with not visiting and reassessing patients preoperative. There appeared to be a special concern for patients who were assessed initially by the surgeon and then added to a lengthy waiting list. The patients general

medical status may have changed during the period between assessment and surgery.

Some of the supporting quotes included:

"Do we need to revisit patients in PAC?"

"This would add to patients waiting"

"Are we then referring appropriate patients to Same Day Admission?".

Several physicians voiced concerns for patients who travel long distances for PAC visits. Many of these patients are complex and it is often difficult to make the appropriate decision to refer to SDA or to admit to hospital preoperative. Some of the supporting quotes included:

"Nature of patients, they are often too complex for PAC"

"Some patients are not appropriate for referral"

"Less out of town patients are being referred to PAC"

"I am reluctant to bring these patients to PAC, three or four days before surgery, and have them go home again".

Question 3. What do you feel are the major advantages of this program for patients?

Physicians identified several advantages of the PAC and SDA programs for patients. Some of the advantages were: 1) improved patient education; 2) shorter hospital stays; 3) better access to consultations; and 4) improved patient satisfaction. Some of the supporting quotes included:

"Less time in hospital, less personal disruption for the patient"

"Patients would prefer to be at home as long as possible"

"Patients are less anxious"

"Patients feel better about the individualized care provided"

"Education is not only about the procedure, but what will be happening prior, during, and after surgery"

"Nurses role in providing education is enhanced"

"Extremely valuable role of education is being rewarded with positive results"

"Patients are given a lot of education, this make the entire process smoother for the individual and their family"

"Patients feel confident in time being spent addressing their concerns"

"Patient consultations get organized"

"Reasonably well organized process, education and assessment"

"The screening of patients prevent late cancellations, less waste of OR time, more patients are benefiting"

"Due to less cancellations and less time in hospital more patients are having surgery"

"Mind set of patients are different, heightened awareness they are here for medical reasons. They are more prepared to go home"

"Due to education discharge planning is improved"

"Role of education is very important in preparing patients for surgery".

Question 4. What do you feel are the major disadvantages of this program for patients?

Physicians identified two disadvantages of the PAC and SDA program for patients: 1)

patients from out of town could have a problem with travelling to the PAC and again for their SDA; and 2) since a significant numbers of patients were being admitted to hospital after their surgical procedure, medical students and residents were restricted in the number of preoperative assessments. This was creating a gap in their educational opportunities. Some of the physicians' quotes included:

"The PAC work up time is short, especially for patients coming from Labrador or great distances"

"St. John's has a large catchment area for patients. The distance to travel creates problems"

"To visit PAC could generate several trips, this could be a problem for some patients"

"If problems presented during PAC then cancellations could occur, this is at a significant cost to patients"

"Elderly, certainly must not travel distance. They often need several days for assessment and interventions prior to surgery"

"There are ideas of all certain types of surgeries coming to PAC. Many will still require admission"

"Many complex patients will still need preoperative admissions. Distance patients are more difficult to access for PAC"

"St. Clare's is a teaching hospital. With many patients coming through PAC are we losing educational opportunities for medical students?"

"Housestaff are unfamiliar with the patient before surgery"

"Difficult to assess patients postoperative".

Question 5. What are some of your concerns with the PAC and SDA program?

Several physicians voiced concerns with role of medical students in the PAC and SDA program. Housestaff were leaving their duties to complete patients' assessments in PAC. Increasing numbers of patients were being admitted to hospital after their surgical procedures and medical students were not having opportunities to provide preoperative care to these patients. Some of the supporting quotes included:

"Housestaff leave duties to complete PAC assessments"

"Residents do not see patients before surgery"

"Need dedicated time for housestaff consults. Problem with this is the number of housestaff we have"

"Qualified MD should be hired to facilitate this process"

"If we had assessment in PAC by MD it would improve waiting time"

"Fine tuning protocols for PAC have improved the assessment, but not entirely resolved it"

"Especially, if patients have been on a waiting list for a long period they need to be seen by a physician"

"Need more of a focus on appropriate patients for PAC, this may improve assessment process".

Question 6. What would you like to see changed or improved?

Physicians readily supported the concepts of the PAC and SDA program. Physicians did identify areas needing amelioration. These areas were: 1) dedicated medical resources for assessment and completing the patients' History and Physical in the clinic; 2) internist and anaesthetist schedules to include PAC consultations; and 3) increase resources, human and financial, to continue the work of the program. Some of the supporting quotes included:

"PAC is a fact of life, we need to improve patient assessment and care"

"We need dedicated resources to have assessments done in PAC"

"If we had a MD to do assessment, patient visits would be shorter, and more patients could be seen"

"PAC now has growing issues, its role is being clarified. However, it needs resources to continue with the volume of work"

"PAC need more permanent space with more examining rooms, more consultation rooms, and more educational facilities and tools"

"I would like to see additional resources so more Therapists could be involved, especially Physiotherapy"

"PAC need more administrative support so patients can be scheduled for diagnostic appointments.

"Staff in PAC do a good assessment. We must ensure the demands do not exceed the resources. If this happens, patients will not benefit as individuals"

"Internist and anaesthetist need to address the scheduling and the volume of

consultations in PAC"

"As more complex patients are seen in PAC, consultations will need more organization and priority".

Healthcare Provider Focus Groups and Interviews Interpretive Summary

Healthcare providers had both positive and negative perceptions of the care being provided to patients in the PAC and SDA program.

Healthcare providers were concerned with the incompleteness or absence of information for preoperative and postoperative patient assessment and care. Investigations ordered by the surgeon, based on his/her assessment of the patients' problems and criteria for pre-admission investigations, frequently were not available to the anaesthetist at the time of consultation. Also missing were relevant data concerning the patients' preoperative medical status, such as prior physician assessments and old records. There was a perception that part of this problem was being created by the scheduling of appointments. Patients' PAC appointments were occurring too close to their scheduled surgery dates.

Therapist verbalized their role in the PAC visit was very limited due to appointments to the therapist departments not being arranged prior to the PAC visit. They felt postoperative care was more difficult due to lack of preoperative instructions and postoperative care was being implemented based on documentation. Mobility deficits were frequently not assessed and documented prior to surgery.

The Post Anaesthetic Recovery Room (PARR) nurses had no access to patient information prior to their surgical procedure. Many of the patients accessing PAC and SDA program were being classified as high-risk patients and the PARR nurses had no preoperative information to plan recovery care. These patients were not added to the PARR assessment form. Nurses often found the History and Physical incomplete or not as informative as narrative notes. Typical comments by registered nurses (RN), physiotherapist (PT) and doctors (MD) on interviews included:

History and Physical not as complete (RN, Sept. 27)

History and Physical may not be as complete as an inpatient (RN, Sept 27)

Check system not as informative as notes (RN, Sept 27)

Question, Do previous history points get missed with check system?

(RN, Sept. 27)

Difficult to get accurate view of patient (RN, Sept. 27)

Nurses are now being informed of patients condition, surgical procedure, history and physical, while completing postoperative interventions (RN, Sept. 27)

Patients' are not on PARR assessment forms. Staff not aware of medical history, medications, allergies, etc. (RN, Sept. 27)

No computerized assessment profiles. This is a major advantage for the inpatient group (RN, Sept. 27)

History and Physical is very scant and lacking significant information on deficits from a physiotherapy and occupational therapy perspective (OT, Oct. 5)

If patients are not seen preoperatively, then care is based on the documentation, and this is often lacking (PT, Oct. 5)

Adequate assessment has two focuses: 1) appropriate for PAC visit; and 2) appropriate work up prior to coming to PAC for anaesthesia assessment (DR, Jan. 10)

Lack of information, incomplete information, no prior charts, or chart from other institutions not available (DR, Jan. 10)

PAC work up not ready and little work up prior to PAC (DR, Jan. 10)

Old charts were not available (DR, Jan. 10)

Patients need earlier appointments (DR, Jan. 10)

With PAC visit only a day or two before surgery there is very little information available to base an assessment on (DR, Jan. 10).

Healthcare providers were concerned with the assessment criteria for referring patients to the PAC and SDA program versus inpatient admissions. PAC was instituted to accommodate the shift toward the increase use of ambulatory surgery facilities and same day admissions. With this trend, also came acceptance of more medically ill patients in these centres. Healthcare providers voiced concern with the lack of guidelines, deemed necessary, to identify which high-risk patients were appropriate for PAC and SDA. Typical comments by healthcare providers included:

Program is not appropriate for all patients (RN, Sept. 27)

Sick, frail, elderly, may be better cared for by being admitted (RN, Sept. 27)

This program is appropriate for minor surgery procedures, not all procedures (RN, Sept. 27)

I query, the established criteria for referring patients to PAC versus admitting them (RN, Sept. 27)

Same Day Admission has no advantage for patient having major surgery (RN, Sept. 27)

Elderly would be more settled if they were admitted as inpatients (RN, Sept. 27)

Patients having complex surgery do not do as well as admitted inpatients

(RN, Sept. 27)

Are appropriate patients being referred to the clinic or some should be admitted (DR, Feb. 10)

Patients with complex problems may not be appropriate (DR, Jan. 10)

Try to ensure appropriate referrals are made (DR, Jan. 10)

Patients require better assessment prior to being referred to PAC (DR, Jan. 10)

Certain patients are not appropriate for this program, the complexity of patient

illness should be a factor and not necessarily the surgical procedure being done

(DR, Jan. 10)

Guidelines are needed to ensure appropriate patients are referred to OR from PAC

(DR, Jan. 10)

Guidelines would include type patients, nature surgery, anaesthetic class

(DR, Jan.10)

Some patients are not appropriate for referral (DR, Feb 12)

Nature of patients, they are often too complex for PAC (DR, Mar 10)

Elderly, certainly must not travel distance. They often need several days for assessment and interventions prior to surgery (DR, Feb. 10)

Idea of all types of surgery coming to PAC. Many will still require admission (DR, Feb. 10)

Need more of a focus on appropriate patients for PAC, this may improve the assessment process (DR, Mar. 4).

Healthcare providers perceptions of the advantages of PAC and SDA program included the following: 1) early identification of patients with discharge needs; 2) patients were better educated as to what would be happening to them before, during, and after their surgical procedures; 3) patients were more prepared for their surgery and their return to the community; 4) with decreasing lengths of hospital stay more patients were accessing the services; 5) improvement in patients' satisfaction; and 6) improved access to preoperative consultations. Typical comments by healthcare providers included:

With shorter hospital stays more patients are accessing the services (RN, Sept. 27)

If patients are educated about the entire process, they will have a better quality of life (OT, Oct. 5)

The more patients learn, the more they are involved. The more they take control, then the better they do (PT, Oct. 5)

Services are identified early (DP, Mar. 10)

Screening by the PAC nurse is effective (DP, Mar. 10)

Patients are aware of what they will need and what can be provided (DP, Mar 10)

Patients are more educated about what to expect after surgery (DR, Jan. 10)

Patients get necessary consultations (DR, Jan. 10)

Patients are provided with more information (DR, Jan. 10)

The patients' questions are answered (DR, Jan. 10)

Much better understanding of surgery and postoperative expectations

(DR, Feb. 11)

Better prepared for surgery (DR, Feb. 10)

Patients are very prepared, especially with education and knowledge

(DR, Feb. 10)

Patients are getting consultations and assessments (DR, Feb. 21)

Less time in hospital, less personal disruption for the patient (DR, Jan. 10)

Patients are less anxious (DR, Mar. 8)

Patients feel better about the individualized care provided (DR, Mar. 9)

Education is not only about the procedure, but what will be happening prior,

during and after surgery (DR, Feb. 6)

Nurses role in providing education is enhanced (DR, Feb. 6)

Extremely valuable role of education is being rewarded with positive results

(DR, Mar. 7)

Patients are given a lot of education, this make the entire process smoother for the individual and their family (DR, Feb. 6)

Patients feel confident in time being spent addressing their concerns (DR, Feb. 21)

Patient consultations get organized (DR, Feb. 6)

Reasonably well organized process, education and assessment (DR, Feb. 21)

The screening of patients prevent late cancellations, less waste of OR time, more patients are benefiting (DR, Mar. 9)

Due to less cancellations and less time in hospital more patients are having surgery (DR, Feb. 21)

Mind set of patients are different, heightened awareness, they are here for medical reasons. They are more prepared to go home (DR, Feb. 6)

Due to education, discharge planning is improved (DR, Mar. 8).

Physicians identified two disadvantages with the Pre-Admission and Same Day Admission program for patients: 1) patients from outside the St. John's region could have a problem with travelling to PAC, returning home, and travelling again for SDA and 2) since a significant number of patients were being admitted to hospital after their surgical procedure, medical students and residents were assessing fewer preoperative patients. This was creating a gap in the educational opportunities for medical students and a lack of continuity of care for patients. Typical comments by healthcare providers included:

The PAC work up time is short, especially for patients coming from Labrador or great distances (DR, Mar. 9)

St. John's has a large catchment area for patients. The distance to travel often creates problems (DR, Feb. 21)

To visit PAC could generate several trips, this could be a problem for some patients (DR, Jan. 10)

If problems presented during PAC then cancellations could occur, this is sometimes at a significant cost to patients (DR, Mar. 9)

Elderly, certainly must not travel distance. They often need several days for assessment and interventions prior to surgery (DR, Feb. 21)

Distance patients are more difficult to access for PAC (DR, Mar. 9)

St. Clare's is a teaching hospital and with many patients coming through PAC we are losing educational opportunities for medical students (DR, Mar. 8)

Housestaff are unfamiliar with the patient before surgery (DR, Mar. 9)

Difficult to assess patients postoperatively (DR, Mar. 9).

Question 3. Do patient clinical indicators indicate quality health care?

The researcher did not have access to patients' records for concurrent or retrospective audits of postoperative complications, nor the clinical expertise to determine quality outcomes for the surgical procedures. Therefore, two clinical indicators were analyzed for quality care: 1) the number of patients having had rescheduled surgical procedures; and 2) the number of patients with complicating diagnosis as reported by physician.

Rescheduled Surgical Procedures

Table 7 includes twenty patients who had surgical procedures completed earlier or later than the original scheduled dates. Since the data sample was small and had extreme values, the median was used as the measure of central tendency. The median reschedule for each procedure is presented in ascending order. The patients who had surgical procedures completed either earlier or later than their original schedule dates, had a median reschedule of two days.

Table 7

Median of Rescheduled Procedures for Twenty Patients

Observation	Rescheduled Procedure	Rescheduled Days	Median
1	Lapraoscopic Cholecystectomy	-1	
2	Lapraoscopic Cholecystectomy	-1	
3	Lapraoscopic Cholecystectomy	-3	
4	Contrast Myelogram	1	
5	Other Nonoperative Bronchoscopy	1	
6	Repair Inguinal Hernia, Unqualified	1	
7	Percutaneous Biopsy Of Liver	1	
8	Angiography, Contrast	1	
9	Open Cholecystectomy	2	
10	Reapir Inquinal Hernia, Unqualified	2	2 Days
11	Repair of Incisional Hernia	2	
12	Total Knee Replacement	5	
13	Excision of Hemorrhoids	6	
14	Total Hip Replacement	6	
15	Thyroidectomy, Unqualified	7	
16	Other Excision of Bunion	7	
17	Laparoscopic Cholecystectomy	7	
18	Repair Diaphragmatic Hernia	14	
	Abdominal Approach		
19	Excision of Hemorrhoids	18	
20	Ligation & Stripping of Varicose Vein(s)	27	
Total 20			Median 2 Days

Complicating Diagnosis

Patients with complicating diagnoses were identified by physicians. The complicating diagnoses were recorded upon discharge and the data were provided to the researcher. Patients' records were not reviewed for postoperative complications. The patient group included one hundred and fifty-two patients. Ten patients (6%) were identified as having had a complicating diagnosis. Table 8 is a frequency distribution of patients, categorized by complicating diagnosis.

Table 8

Frequency Distribution of Complicating Diagnosis for Ten Patients

Complicating Diagnosis	Frequency (n)	Relative Frequency (%)
Wound Infection	2	20
Urinary Tract Infection	2	20
Acute Post Hemorrhagic Anaemia	1	10
Reaction Spinal Puncture	1	10
Fat Embolism	1	10
Acute Pharyngitis	1	10
Cardiac Complications	1	10
Nausea/Vomiting/Flatulence	1	10
Total	10	100

Question 4. Do decrease length of hospital stays and low re-admission rates support the program as a cost containment program?

Decreased Length of Hospital Stays

In the healthcare environment it is recognized that each hospital day has an associated cost and any decrease in patients' length of stays can be translated into saved health care dollars. A difference of one day in LOS for PAC and SDA patients would be expected due to the same day admission. To determine if the LOS could support the PAC and SDA program as a cost containment program, using the primary procedure codes, the median LOS for the sample population was compared to the same primary procedure codes for years 1990-91 and 1991-92. When the median LOS for SDA primary procedures was compared to the same primary procedures for 1990-91, 73% had a decreased LOS of more than one day. When the median LOS for SDA primary procedures was compared to the same primary procedures for 1991-92, 77% had a decreased LOS of more than one day. A significant number of the PAC and SDA patients had a shorter hospital stay than the expected one day. The LOS and days less of hospitalization for the primary procedure groups are presented in Appendix F (Table F-1 and Table F-2).

Re-Admission Rates

To determine if low rates of re-admission to hospital could support the PAC and SDA program as a cost containment program, re-admissions to the hospital were obtained retrospectively from the clinical information system. This inquiry was conducted at thirty and sixty days after the patient was discharged from hospital. The inquiry included one hundred and fifty-two patients. Six patients (4%) were re-admitted to hospital within thirty days after discharge. No patients had re-admissions to hospital within thirty to sixty days after discharge. Only two patients (1%) were re-admitted due to the SDA surgical procedure. Table 9 is a frequency distribution of patients re-admitted to hospital.

Table 9

Frequency Distribution of Re-Admissions to Hospital for Six Patients

Re-Admission Category	Frequency (n)	Relative Frequency %
Procedure Related	2	33.3
Procedure Unrelated	2	33.3
Scheduled Re-Admissions	2	33.3
Total	6	99.9

Question 5. Do the program outcomes indicate attainment of program objectives?

Attainment of Program Objectives

As drawn from the Pre-Admission Program policies the objectives of the program include the following:

1. Improve bed utilization by:

- reducing the preoperative length of stay through utilization of Surgical Day Care resources
- contributing to reduction of inpatient length of stay through early discharge planning, teaching and identification of community resource needs.

2. Improve patient satisfaction by:

- providing patients and family with an organized non-stressful atmosphere where teaching and individual assessment will assist them to prepare for their surgical experience
- reducing preoperative and postoperative length of stay thus facilitating less time away from home, family, and work
- initiating effective discharge planning to facilitate the transition from hospital to home.

3. Enhance the quality of patient care by:

- early identification of concurrent medical problems which may affect the surgical plan
- initiating discharge planning which will help to identify the needs of the patient and family
- providing information and education about the surgical experience which will help allay fears and anxieties.

(St. Clare's Mercy Hospital, 1994).

When the median LOS for SDA primary procedures was compared to the same primary procedures for 1990/91, 73% had a decreased LOS of more than one day. When the median LOS for SDA primary procedures were compared to the same primary procedures for 1991/92, 77% had a decreased LOS of more than one day. A significant number of the PAC and SDA program patients had shorter hospital stays than the expected one day.

Discharge planning healthcare providers played a limited role in the PAC and SDA program. Referrals were identified by the PAC nurse and were for concrete services, such as home nursing care and equipment. Services needed for patients' discharges were identified prior to admissions to hospital. However, these services were not organized prior to hospitalization. Community needs for patients' discharges were identified and there was no increase in the number of urgent referrals to the department. Patients were aware of what they would need for discharge and what could be provided in the community.

Healthcare providers indicated it is more convenient for patients to come to PAC and SDA program, than to be admitted to hospital. Patients were better educated as to their surgical procedures and hospital stays. Physicians identified several advantages of the PAC and SDA program for patients. Some of the advantages were: 1) improved patient education; 2) shorter hospital stays; 3) better access to consultations; and 4) improved patient satisfaction.

The Patients' Perceptions of Satisfaction Interview Statements were designed to elicit patients' subjective measurement of satisfaction with the PAC and SDA program. The statement items were designed to elicit specific responses on the pre-admission process, patient education, discharge planning, and program general satisfaction. The overall degree of patient satisfaction was very high at 90.73 %. The degree of patient satisfaction with pre-admission process was 93.74 %; patient education was 90.66 %; discharge planning was 86.72 %; and program general satisfaction was 90.70 %.

Do the program outcomes, then, indicate attainment of program objectives? The objectives of the program focused on improved bed utilization, improved patient satisfaction, and enhanced quality patient care. These objectives were to be achieved through early identification of preoperative medical problems, initiation of early discharge planning, and provision of patient and family education. The study findings supported attainment of program objectives.

CHAPTER 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This study investigated the effectiveness, and the effects of a cost containment strategy on the quality of patient care of the Pre-Admission (PAC) and Same Day Admission (SDA) program, at St. Clare's Mercy Hospital. The objective of the study was to detect any problems in the pre-admission process and quality of patient care. The study was also intended to identify directions and make recommendations for continuous quality improvement for the program. Conclusions were drawn about the efficiency, the effectiveness, and the quality

of patient care through a review of program objectives, outcome indicators, and patient and healthcare provider satisfaction with the program.

The "Plan-Do-Check-Act" (PDCA) Cycle, developed by Walter Shewhart in the 1920's, (Walton, 1986) was the conceptual framework used to focus the research. This endlessly recurring cycle, an adaptation of scientific method is at the core of the continuous quality improvement process. This model depicts the fact that once initiated, PDCA never stops. It seeks improved performance, quality, and excellence through planning, implementation, evaluation/outcome, and action. In the PAC and SDA program study, the research questions were placed in the "Check" phase of the PDCA Cycle. The

information obtained from the study allowed the researcher to answer the following questions:

- 1. Do the program outcomes indicate patient satisfaction with the process?
- 2. Do the program outcomes indicate healthcare provider satisfaction with the process?
- 3. Do patient clinical indicators indicate quality health care?
- 4. Do decreased length of hospital stay and low re-admission rates support the program as a cost containment program?
- 5. Do the program outcomes indicate attainment of program objectives?

The related literature review supported the findings of this study. The literature indicated that pre-admission and same day admission programs have the potential to reduce hospital cost by making more efficient use of available resources in manners which are accepted by healthcare providers and patients. The literature stressed that ideal programs, from a cost containment perspective, were programs that reduce cost without reducing quality patient care. To ensure these programs are effective, the evaluation of program outcomes must focus on improved patient satisfaction and enhanced quality patient care. The literature indicated patient satisfaction and quality can be achieved by improving the pre-admission process, providing patient education, and initiating early discharge planning. The related literature review on the effects of patient education on postoperative recovery, espouses the benefits of preoperative education as a means to

relieve fear and anxiety, decrease stress, enhance psychological well-being, and promote postoperative recovery. Preoperative patient education improves the quality of patients postoperative care and therefore, decreases hospital stay.

The sample for the patient interviews was patients who were prepared for surgery in the PAC and admitted to hospital on the day of surgery during the first six months of the program. The sample for the healthcare provider focus groups and interviews was physicians who referred patients to the PAC and SDA program and a stratified sample of other healthcare providers who provided services to these patients.

Summary

The research questions in this study were addressed through an analysis of data from patient and healthcare provider focus groups, patient and physician interviews, and a review of patient outcome indicators. Data were analyzed to determine perceptions of satisfaction, desired patient outcomes, and attainment of the program objectives. The patient interview statements were administered to 95 PAC and SDA program patients. Frequency distributions indicating patients' responses were shown. Healthcare provider data were collected through individual interviews and focus groups. The interview and focus group data were analyzed applying procedures described by Zemke and Kramlinger (1985). Data reduction was completed by providing descriptive and interpretive reports of healthcare provider satisfaction.

Research findings indicated the overall degree of patient satisfaction with the PAC and SDA program was very high at 90.73 %. Data indicated patient satisfaction with pre-admission process was 93.74 %; patient education was 90.66 %; discharge planning was 86.72 %; and program general satisfaction was 90.70 %.

Research findings indicated healthcare providers were concerned with the incompleteness or absence of information for preoperative and postoperative patient assessment and care.

Anaesthetists verbalized investigations ordered by the surgeon, based on his/her assessment of the patients' problems and criteria for pre-admission investigations, were frequently unavailable to the anaesthetist at the time of consultation. Also missing were relevant data concerning the patients' preoperative medical status, such as prior physician assessments and prior records. There was a perception that part of this problem was being created by the scheduling of PAC appointments, which were occurring too close to the patients' scheduled surgery dates.

Therapists voiced dissatisfaction with their role in the PAC visit. This role was very limited due to appointments to therapy services not being arranged prior to the PAC visit. They felt postoperative care was more difficult due to lack of preoperative instructions and postoperative care was being implemented based on documentation. Frequently patients' preoperative mobility deficits were not being assessed and documented prior to surgery.

The Post Anaesthetic Recovery Room (PARR) nurses had no access to patient information prior to their surgical procedure. Many of the patients accessing the PAC and SDA program were perceived as high-risk patients and the PARR nurses had no preoperative information to plan post anaesthetic recovery care. These patients were not added to the PARR assessment form. Nurses often found the patient's History and Physical incomplete or not as informative as narrative notes.

Healthcare providers verbalized dissatisfaction with the lack of protocols or assessment criteria for referring patients to the PAC and SDA program versus inpatient admissions. PAC was instituted to accommodate the shift toward the increase use of ambulatory surgery facilities and same day admissions. With this trend, also came acceptance of more medically ill patients in these centres. Healthcare providers were concerned with the lack of defined protocols, needed to identify which high-risk patients were appropriate for PAC and SDA.

Healthcare providers' perceptions of the advantages of PAC and SDA program included the following: 1) early identification of patients with discharge needs; 2) patients were more educated as to what would be happening to them before, during, and after their surgical procedures; 3) patients were more prepared for their surgery and their return to the community; 4) with decreasing lengths of hospital stay more patients were accessing the services; 5) improvement in patients satisfaction; and 6) improved access to preoperative consultations.

Physicians' perceptions of the disadvantages of PAC and SDA program included the following: 1) patients from outside the St. John's region could have a problem with travelling to PAC, returning home, and travelling again for SDA and 2) since a significant number of patients were being admitted to hospital after their surgical procedure, medical students and residents were assessing fewer numbers of preoperative patients. This was perceived as creating a gap in the educational opportunities for medical students and a lack of continuity of care for patients.

The research finding supported the PAC and SDA program as a cost containment program. When the median length of stay (LOS) for SDA primary procedures was compared to the same primary procedures for 1990-91, 73% had a decreased LOS of more than one day. When the median LOS for SDA primary procedures was compared to the same primary procedures for 1991-92, 77% had a decreased LOS of more than one day. Since patients spent the preoperative night at home, a difference of one day was expected due to same day admission. A significant number of the PAC and SDA patients had shorter hospital stays than the expected one day, suggesting that these patients were discharged from hospital earlier than the traditionally admitted inpatients.

Low rates of re-admission to hospital did support the PAC and SDA program as a cost containment program. When re-admissions to hospital were obtained retrospectively from the clinical information system, six patients (4%) were re-admitted to hospital within thirty days post discharge. No patients had re-admissions to hospital within thirty to sixty

days post discharge. Only two patients (1%) were re-admitted to hospital due to the SDA surgical procedure.

The objectives of the program focused on improved bed utilization, improved patient satisfaction, and enhanced quality patient care. These objectives were to be achieved through early identification of preoperative medical problems, initiation of early discharge planning, and provision of patient and family education. The research findings supported attainment of PAC and SDA program objectives.

Conclusion

The following conclusions can be drawn from findings of this study.

- 1. Patient satisfaction with the PAC and SDA program was very high, with 90.73 % of respondents agreeing or strongly agreeing with positive statements, designed to measure subjective attitudes of satisfaction.
- 2. St. Clare's Mercy Hospital is reducing hospital cost by making more efficient use of available resources. Through implementation of the PAC, which is accepted by healthcare providers and patients, the organization is reducing LOS.
- 3. Despite the fact LOS may be influenced by changes in technology, changes in healthcare practice, different criteria for determining readiness for discharge, and declining resources, a significant percent of the PAC and SDA patients had shorter hospital stays than the expected one day. These finding indicated SDA patients

were being discharged from hospital earlier than the traditionally admitted inpatients.

- 4. Low re-admissions to hospital did support the program as a cost containment program. Two patients (1%) were re-admitted to hospital due to the SDA surgical procedure.
- 5. Healthcare providers were concerned with the incompleteness or absence of information for preoperative and postoperative patient assessment and care.
- 6. Healthcare providers were concerned with the lack of protocols or assessment criteria for referring patients to the PAC and SDA program versus inpatient admission.
- 7. Advantages of the PAC and SDA program as identified by physicians were:
- early identification of patients with discharge needs
- patients were more educated as to what would be happening to them before, during, and after their surgical procedures
- patients were more prepared for their surgery and their return to the community
- decreasing length of hospital stays and more patients were accessing the services
- improvement in patient satisfaction
- improved access to preoperative consultations.
- 8. Disadvantages of the PAC and SDA program as identified by physicians were:
- patients from outside the St. John's region may have a problem with travelling to the PAC, returning home, and travelling again for SDA.

- a significant number of patients were being admitted to hospital after their surgical

procedure. Medical students and residents were assessing fewer numbers of preoperative patients. This was creating a gap in the educational opportunities for medical students and a lack of continuity of care for patients.

9. The PAC and SDA program objectives were achieved.

The program objectives were to be achieved through early identification of preoperative medical problems, initiation of early discharge planning, and provision of patient and family education. Program advantages were identified as being: a) early identification of patients with discharge needs; b) patients were better educated as to what would be happening to them before, during, and after their surgical procedures; and c) improved access to preoperative consultations.

Recommendations

To organize the patients' pre-admission process for same day admission patients, PAC and SDA programs were implemented. Hospitals in the mid 1980s began to reorganize their procedures for patient assessment and instruction to take advantage of what could be done more efficiently before patients were admitted for surgery. Hospitals in the 1990s are equally concerned with the effectiveness as well as the efficiency of these types of

programs. In view of the desire to improve the quality of patient care in the PAC and SDA program, and based on the study findings and literature review, the following recommendations are made:

- 1. That an appropriate forum be established to address healthcare providers' concerns with the incompleteness or absence of information needed for preoperative and postoperative patient assessment and care.
- 2. Consideration should be given to automating the PAC ssessment and care plan.

 This automated documentation would enable Post Anaesthetic Recovery Room

 (PARR) nurses to access essential patient specific information needed for planning post anaesthetic recovery care.
- 3. A study should be undertaken to further investigate PARR nurses' perceptions, that SDA patients experienced more anxiety and pain during post anaesthetic recovery than comparable admitted inpatients.
- 4. The Pre-Admission Committee establish protocols or assessment criteria for determining appropriateness of referring patients to the PAC and SDA program versus inpatient admissions.
- 5. Consideration should be given to further studying the LOS for SDA patients and comparable Case Mix Groups of inpatients.
- 6. Consideration should be given by the Department of Surgery and the Pre-Admission Committee to review and enhance the role of medical students (clerks, interns, and residents) in PAC and SDA program.

- 7. Subsequent PAC and SDA studies should include more refined clinical outcome indicators. A prospective study, including observations of clinical parameters, is needed to more accurately measure postoperative complications and desired patient outcomes.
- 8. Similar studies should be undertaken in other settings before generalizations can be made about all pre-admission and same day admission programs.

The objective of the PAC and SDA study was to detect any problems in the pre-admission process and quality of patient care. The study identified areas needing amelioration and made recommendations for action. In view of the desire to improve the quality of patient care in the program, and based on the study findings, the above recommendations should be given consideration.

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APPENDICES

APPENDIX A CONSENT FORMS

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Consumer Consent Form

I am a graduate student in the Faculty of Education at Memorial University, completing a thesis under the supervision of Dr. Austin Harte, Associate Professor. I am interviewing patients/consumers of St. Clare's Mercy Hospital's Pre-Admission Surgery Program. The intent of the interview is to investigate your satisfaction and/or dissatisfaction with the program. I am requesting your permission to take part in this study.

I am interested in determining if the program met your needs in preparing you for your surgical procedure, your hospital stay, and your return home. I will be collecting information such as your surgical procedure, length of hospital stay, any complications following surgery, and any readmissions to hospital. However, this information will be provided to me and I will not have access to your hospital chart. The information provided to me will not have your name associated with it. All information gathered in this study is strictly confidential and at no time will you be identified as an individual. The findings of this study will be used to suggest possible improvements to the program.

Your participation is voluntary and will consist of my asking you specific questions and you responding to predetermined answers. You will also be given an opportunity to provide comments on your personal experience with the program. However, you have the right to withdraw from the study at any time without incurring prejudice of any kind. You are under no obligation to respond to all questions or provide comments. You can choose to stop the interview at any point. This activity will take approximately 20 minutes of your time.

This study has received the approval of the Faculty of Education's Ethics Review Committee and St. Clare's Human Investigation Committee. A summary of the results of my research will be made available to you on request. If you have any questions or concerns please do not hesitate to contact me at 778-3460. If at any time you wish to speak to a resource person not associated with the study please contact Dr. Patricia Canning, Associate Dean, Research and Development, Faculty of Education, Memorial University of Newfoundland at 737-3402.

I sincerely thank you for your	participation in this study.
Yours sincerely;	
Greta Valvasori Graduate student, Memorial Universi	ty.
is meeting the needs of patients be understand that participation is er	, hereby give consent to participate in a Surgery Program to determine how the program eing prepared for surgery as outpatients. Intirely voluntary and that I can withdraw at the confidential and no individual will be
Date	Informant's Signature

Healthcare Provider Consent Form

I am a graduate student in the Faculty of Education at Memorial University, completing a thesis under the supervision of Dr. Austin Harte, Associate Professor. I am interviewing healthcare providers who referred or provided services to patients of St. Clare's Mercy Hospital's Pre-Admission Surgery Program. The intent of the interviews is to investigate your satisfaction and/or dissatisfaction with the program. I am requesting your permission to take part in this study.

I am interested in determining from a healthcare provider perspective if this program meets its objectives in providing efficient and effective quality care to pre-admission patients. This information will be used to suggest possible improvements to the program to better meet patient needs.

Your participation is strictly voluntary, you have the right to withdraw from the study at any time without incurring prejudice of any kind, and you are free to refrain from answering any questions you prefer omitted. This activity will take approximately 45 minutes of your time. Your participation will consist of my interviewing you and using a tape recorder or written notes to record you responses. You will also be given an opportunity to provide input into the interview questions developed to determine patient satisfaction.

All information gathered in this study is strictly confidential and at no time will you be identified as an individual. The tape recordings will not be disclosed to any person and will be erased as soon as the findings are entered into a database. The recordings will not be submitted for publication.

This study has received the approval of the Faculty of Education's Ethics Review Committee and St. Clare's Human Investigation Committee. The results of my research will be made available to you on request. If you have any questions or concerns please do not hesitate to contact me at 778-3460. If at any time you wish to speak to a resource person not associated with the study please contact Dr. Patricia Canning, Associate Dean, Research and Development, Faculty of Education, Memorial University of Newfoundland at 737-3402.

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I sincerely thank you for your par	ticipation in this study.
Yours sincerely;	
Greta Valvasori Graduate student, Memorial University.	
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Date	Informant's Signature

October 3, 1994

Dr. Sean Conroy Executive Director (Acting) St. Clare's Mercy Hospital St. John's, Nfld.

Dear Dr. Conroy;

I am a graduate student in the Faculty of Education at Memorial University, completing a thesis under the supervision of Dr. Austin Harte, Associate Professor. This study will attempt to determine the effectiveness, and the effects of the cost containment strategy on the quality of patient care of the pre-admission clinic and same day surgery programs at St. Clare's Mercy Hospital. Conclusions will be drawn about the efficiency, the effectiveness and the quality of patient care for these programs through a review of a) program outcomes and patient clinical indicators, and b) patient and healthcare provider satisfaction. I am requesting your permission to undertake this research at St. Clare's Mercy Hospital.

I am interested in determining from healthcare provider and patient perspective if this program meets its objectives in providing efficient and effective quality care to pre-admission patients. This information will be used to suggest possible improvements to the program to better meet patient needs.

The research design selected for the study will include patient and healthcare provider focus groups, patient and physician interviews, and review of patient documents to determine quality patient outcomes. The document review will be completed to determine length of stay, postoperative complications, and re-admission rates for patients who were prepared for surgery in the pre-admission clinic and admitted to hospital on the day of surgery. This data will not identify individual patients and will be provided to me. I will not personally review patients' charts.

All information gathered in this study will be strictly confidential and at no time will patients or healthcare providers be identified as individuals. Patient and healthcare provider participation will be strictly voluntary. Subjects have the right to withdraw from the study at any time without incurring prejudice of any kind, and they are free to refrain from answering any questions they prefer omitted. The tape recordings, focus group reports, and interview/focus group reporting forms will be disclosed only to myself as researcher and to an assistant moderator/secretary who will be assisting with recordings during the focus groups. All tape recordings will be erased as soon as the findings are entered into a database. The recordings will not be submitted for publication.

If permission is granted by St. Clare's Mercy Hospital to undertake this research, all phases of this study will be submitted to the Faculty of Education's Ethics Review Committee, Memorial University and Human Investigation Committee, St. Clare's Mercy Hospital for approval. The results of my research will be made available to St. Clare's Mercy Hospital.

If you have any questions or concerns please do not hesitate to contact me at 778-3460. If at any time you wish to speak to a resource person not associated with the study please contact Dr. Patricia Canning, Associate Dean, Research and Development, Faculty of Education, Memorial University of Newfoundland at 737-3402.

Yours Sincerely;

Greta Valvasori

Graduate student, Memorial University



St. Clare's Mercy Hospital LeMarchant Road St. John's, Newfoundland Canada A1C 5B8 Phone (709) 778-3111 Fax (709) 738-0080

October 7, 1994

Mrs. Greta Valvasori Graduate Student, Memorial University c/o St. Clare's Mercy Hospital St. John's, Newfoundland A1C 5B8

Dear Mrs. Valvasori,

Thank you for your letter of October 5th, 1994, wherein you outline a description of your research proposal, "Determination of the effectiveness and the effects of the cost containment strategy on the quality of patient care of the pre-admission clinic and same day surgery programs at St. Clare's Mercy Hospital."

This will acknowledge that you have been granted provisional approval to begin your study at St. Clare's, with the added provision that approval is recommended by the Faculty of Education at Memorial University.

Your research proposal will be circulated to the members of the Human Investigation Committee at St. Clare's.

Yours sincerely,

Sean Conroy, M.D.

Executive Director (Acting) and Medical Director

Din GARAY

and Medical Direct

/vps



St. Clare's Mercy Hospital LeMarchant Road St. John's, Newfoundland Canada A1C 5B8 Phone (709) 778-3111 Fax (709) 738-0080

January 16, 1995

Ms. Greta Valvasori Graduate Student, Memorial University c/o St. Clare's Mercy Hospital St. John's, Newfoundland A1C 5B8

Dear Ms. Valvasori,

Re: Research Application #: none

Name of Principal Investigator: As Above

Title of Investigation: "Determination of the Effectiveness and the Effects of the Cost Containment Strategy on the Quality of Patient Care of the Pre-Admission Clinic and Same-

Day Surgery Programs at St. Clare's Mercy Hospital."

We are pleased to inform you that at the St. Clare's Medical Advisory Committee Meeting of December 12th, 1994, the Committee approved your research application, entitled, "Determination of the Effectiveness and the Effects of the Cost Srategy on the Quality of Patient Care of the Pre-Admission Clinic and Same-Day Surgery Programs at St. Clare's Mercy Hospital."

This approval shall be in effect for a period of two years maximum. If your study exceeds this length of time, you are asked to request updated approval, based on the previous submission, from the St. Clare's Human Investigation Committee.

You are also asked to provide St. Clare's Human Investigation Committee with the results of your findings when your study has been completed.

We wish you every success with your research.

Ri- CAMB-->

Yours sincerely.

S. Conroy, M.D.

Executive Director (Acting) and Medical Director

/vps

APPENDIX B

PATIENTS

FOCUS GROUP/INTERVIEW STATEMENTS

Pre-Admission and Same Day Admission Program Focus Group Topic Guide Patients

I. Introduction

- Moderator and Assistant Moderator
- Role of Both
- Outline Discussion
 - a) key topics
 - b) patients' viewpoints
 - c) reality of program
- Objectives for Discussion Group

II. Participants Perceptions

A. Scheduling

- 1. How can the scheduling of Pre-Admission Clinic appointments be more patient orientated?
- 2. How did the time frame between appointment and scheduled surgery meet your needs?
 - A) Education?
 - B) Family Arrangements?
 - C) Work Schedules?
 - D) Would you prefer longer/shorter period? Why?

B. Pre-Admission Process

- 3. Where did you learn what this visit would involve?
- 4. How did you find the appointment organization and length of time?
- 5. How did you locate departments for procedures? (EKG, LAB, DI)
- 6. What can we do to make this visit more organized for new patients?

Focus Group Topic Guide Patients

C. Education

- 7. What did you learn about your surgical procedure from your Pre-Admission visit?
 - A) Did you learn new information?
 - B) Did you have additional questions answered or any new questions?
- 8. Did you know what would be happening before, during and after your surgery?
- 9. What could we have done to improve your knowledge? Explain?
- 10. How do you feel this visit helped in making you less anxious about your surgery?
 - A) If it helped, how?
 - B) If it did not help, why not?
- 11. How do you feel about having a "support" person visit the Pre-Admission Clinic with you?

D. Admission

- 12. How do you feel about coming to hospital the day of surgery instead of the day prior to surgery?
- 13. Were you comfortable with instructions given for home preparations?
 - A) Fasting?
 - B) Any special instructions? Preparations?
 - C) What to do about your medications? Taking or Not?
- 14. Were you informed about the admission procedures for the day of surgery?
 - A) Where to come?
 - B) When to come?
- 15. How were you informed about how long you would be in hospital?
- 16. Were you prepared for your length of hospital stay? Too short? Too long?

Focus Group Topic Guide Patient

E. Discharge Planning

- 17. Were you informed about any "home visits" you would need before surgery?
- 18. Were the necessary arrangement made for you to leave hospital?

CUES:

Education

Family member at home (if needed)

Home Care nurse visits

Equipment/Supplies

Follow up appointments

- 19. Summary of questions
- 20. Have we missed anything?
- 21. Is there anything you would like to add?
- 22. What advise do you have for us?

Patients' Perceptions of Satisfaction Interview Statements

Interviewer Directions

- ► Introduce Self and Interview Topic
- ► Obtain Participant's Consent
- ► Explain Concept of Positive Statements and Rating Scale
- ► Read Interview Statements
- ► Using "Likert Rating Scale" Circle Participant's Response to Each Statement:
 - 1 Strongly Disagree with this statement (SD)
 - 2 Disagree with this statement (D)
 - 3 Neither agree nor disagree with this statement (N)
 - 4 Agree with this statement (A)
 - 5 Strongly Agree with this statement (SA)

Note: Question Responses Requiring Secondary Question. Ask Question and Record Participant's Response.

Thank Patient for Participating in the Interview

Pre-Admission and Same Day Admission Program Patients' Perceptions of Satisfaction

Demographic Information: Code: SD - Strongly Dis	sagree				
Record Number D - Disagree					
Age <50 50-65 >65 N - Neither Agree	e nor l	Disa	gree		
Was this your first time having surgery? YNA - Agree					
SA - Strongly Ag	ree				
			*********	***********	
PRE-ADMISSION PROCESS	SD	D	N	A	SA
My doctor did explain to my satisfaction the reason I needed to come to the Pre-Admission Clinic.	1	2	3	4	5
2. I feel this visit was necessary to prepare me for my surgery and hospital stay	. 1	2	3	4	5
3. I feel the visit was planned and organized to meet my needs.	1	2	3	4	5
4. It was convenient for me to come to the clinic.	1	2	3	4	5
5. I did not have any problems going to other locations within the hospital.				4	5
**If patient responds 1 or 2 ask the following question. Which locations did you have problems finding?					
6. In my opinion I did not have to wait too long in any one department for test.	1	2	3	4	5
**If patient responds 1 or 2 ask the following question. Where did you have to wait too long?					
7. The complete visit did not take too long.	1	2	3	4	5
EDUCATION	SD	D	N	A	SA
8. I had a good understanding of my surgery before I came to the clinic.	1	2	3	4	5
9. I did learn new information at the clinic.	1	2	3	4	5
10. I had no unanswered questions after the visit.	1	2	3	4	5

Pre-Admission and Same Day Admission Program Patients' Perceptions of Satisfaction

**If patient repsonds 1 or 2 ask the following question. What questions did you still have?	SD	D	N	A	SA
11. I knew what to do to prepare for my surgery, such as fasting taking my medications, any preparations.	i	1 2	3	3 4	5
**If patient responds 1 or 2 ask the following question. What did you have questions or concerns about?					
12. I felt comfortable with what to expect during my surgery and hospital stay.	1	2	3	4	5
DISCHARGE PLANNING	SD	D	N	A	SA
13. I was informed about any home care visits, check ups, and services available during my clinic visit.	1	2	3	4	5
14. If my surgery went as expected I knew how long I would be in hospital.	1	2	3	4	5
15. When I was discharged from hospital I felt ready to go home.	1	2	3	4	5
16. I knew what activities I could or could not do after my surgery.	1	2	3	4	5
17. When I went home I knew where to call if I had any questions or concerns.	1	2	3	4	5
PROGRAM GENERAL SATISFACTION	SD	D	N	A	SA
18.I feel this visit helped in making me feel prepared for my surgery, such as pair involved, early movement, less anxiety, how long in hospital, etc.	n :	1 2	3	3 4	5
19. I would prefer to come to hospital the day of surgery and not the night before	e. 1	2	3	4	5
**If patient responds 1 or 2 ask the following question. Why would you prefer to come to hospital before surgery?					
20. I would recommend all patients come to this clinic before surgery.	1	2	3	4	5

APPENDIX C HEALTHCARE PROVIDERS FOCUS GROUPS/INTERVIEWS TOPIC GUIDE

Focus Group Topic Guide Healthcare Provider - Post Anaesthesia Recovery Room Nurses

I. Introduction

- Moderator and Assistant Moderator
- · Role of Both
- Outline Discussion
 - a) key topics

- b) participant viewpoints
- Objectives of Discussion

II. Participants Perceptions

- 1. How do you view the Pre-Admission Clinic and Same Day Admission Surgery program in relation to care you provide to these patients?
 - A. Patient Preoperative Assessment?
- B. Care Planning for the patient post surgery?
- C. Explain how this program has enhanced or impeded your care?
- 2. What do you feel are the major advantages of this program for patients?
- 3. What do you feel are the major disadvantages of this program for patients?
- 4. How do you perceive this type of program in terms of patient education and your expectation post surgery?

III. Postoperative Inpatient Bed Availability

- 5. Has inpatient bed availability been an issue in management and flow of patients from the Post Anaesthesia Recovery Room?
 - A. Has beds been available?
- B. If no, numbers and waiting time?
- C. Effects of waiting for bed on patients?

- 6. Summary of questions
- 7. Have we missed anything?
- 8. Is there anything you would like to add?
- 9. What advise do you have for us?

Focus Group Topic Guide Healthcare Provider - Therapists

I. Introduction

- Moderator and Assistant Moderator
- Role of Both
- Outline Discussion
 - a) key topics
- b) participant viewpoints
- Objectives of Discussion

II. Participants Perceptions

- 1. How do you view the Pre-Admission Clinic and Same Day Admission Surgery program in relation to care you provide to these patients?
 - A. Patient Preoperative Assessment?
 - B. Planning care for the patient post surgery?
 - C. Explain how this program has enhanced or impeded your care?
- 2. What do you feel are the major advantages of this program for patients?
- 3. What do you feel are the major disadvantages of this program for patients?
- 4. How do you perceive this type of program in terms of patient education and your expectation post surgery?

- 5. Summary of questions
- 6. Have we missed anything?
- 7. Is there anything you would like to add?
- 8. What advise do you have for us?

Focus Group Topic Guide Healthcare Provider - Anesthetist

I. Introduction

- Moderator
- Outline Discussion
 - a) key topics
 - b) participant viewpoint
- Objectives of Discussion

II. Participants Perceptions

- 1. How do you view the Pre-Admission Clinic and Same Day Admission program in relation to your preoperative assessment and care you provide to these patients?
- 2. What are your views on this program?

 Does it enhance or impede your care? Explain.
- 3. What do you feel are the major advantages of this program for patients?
- 4. What do you feel are the major disadvantages of this program for patients?
- 5. What are some of your concerns with the PAC and SDAS program?

- 6. What would you like to see changed or improved?
- 7. Summary of questions
- 8. Have we missed anything?
- 9. Is there anything you would like to add?
- 10. What advise do you have for us?

Interview Topic Guide Healthcare Provider - Physicians

I. Introduction

- Interviewer
- Outline Interview
 - a) introduction to study
 - b) participant viewpoint
- Objectives of interview

II. Participants Perceptions

- 1. How do you view the Pre-Admission Clinic and Same Day Admission program in relation to your preoperative assessment and care you provide to these patients?
- 2. What are your views on this program?
 Does it enhance or impede your care? Explain.
- 3. What do you feel are the major advantages of this program for patients?
- 4. What do you feel are the major disadvantages of this program for patients?
- 5. What are some of your concerns with the PAC and SDAS program?

- 6. What would you like to see changed or improved?
- 7. Summary of questions
- 8. Have we missed anything?
- 9. Is there anything you would like to add?
- 10. What advise do you have for us?

Interview Topic Guide Healthcare Provider - Discharge Planning

I. Introduction

- Interviewer
- Outline Interview
 - a) introduction to study
 - b) participant viewpoints
- Objectives of Interview

II. Participants Perceptions

- 1. How do you view the Pre-Admission Clinic and Same Day Admission Surgery program in relation to care you provide to these patients?
 - A. Patient Preoperative Assessment of Discharge needs?
 - B. Planning care for the patient post discharge?
 - C. Explain how this program has enhanced or impeded your care?
- 2. What do you feel are the major advantages of this program for patients?
- 3. What do you feel are the major disadvantages of this program for patients?
- 4. How do you perceive this type of program in terms of patient education?

- 5. Summary of questions
- 6. Have we missed anything?
- 7. Is there anything you would like to add?
- 8. What advise do you have for us?

APPENDIX D FOCUS GROUP/INTERVIEW REPORTING FORM

Information about the Interview/Focus Group

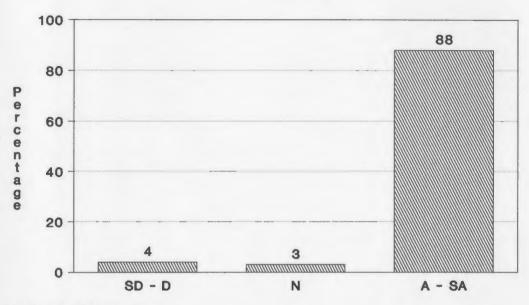
Date Interview	
Location	
Participant(s)	
Classification	
Comments	
Response to Questions	
Question #	

Brief Summary/Key Points	Notable Quotes
	l

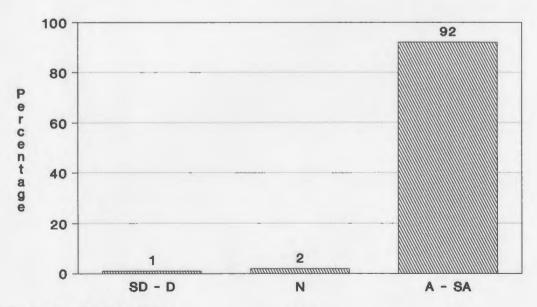
APPENDIX E

BAR CHARTS OF PATIENTS' PERCEPTIONS OF SATISFACTION

Bar Chart E-1
Patients' Responses to Interview
Question 1

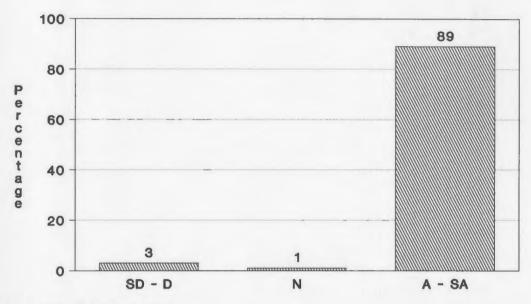


Bar Chart E-2
Patients' Responses to Interview
Question 2

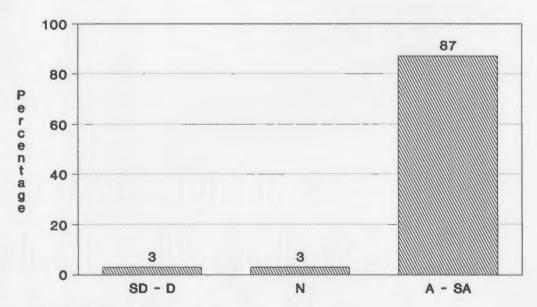


SD-D = Strongly Disagree - Agree N = Neutral A-SA = Agree - Strongly Agree

Bar Chart E-3
Patients' Responses to Interview
Question 3

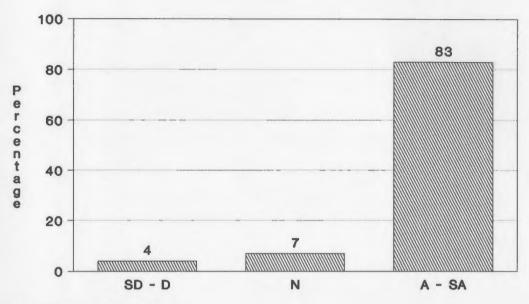


Bar Chart E-4
Patients' Responses to Interview
Question 4

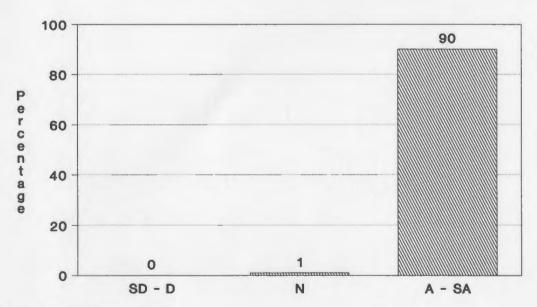


SD-D = Strongly Disagree - Agree N = Neutral A-SA = Agree - Strongly Agree

Bar Chart E-5
Patients' Responses to Interview
Question 5

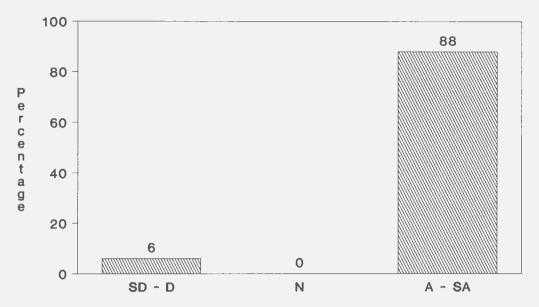


Bar Chart E-6
Patients' Responses to Interview
Question 6

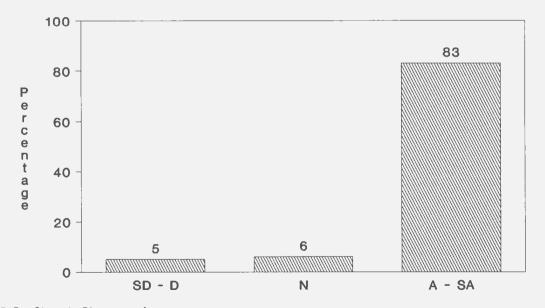


SD-D - Strongly Disagree - Agree N - Neutral A-SA - Agree - Strongly Agree

Bar Chart E-7
Patients' Responses to Interview
Question 7

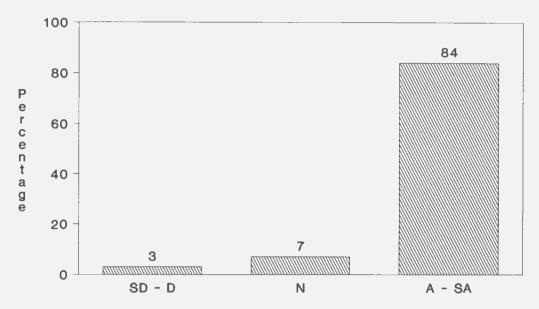


Bar Chart E-8
Patients' Responses to Interview
Question 8

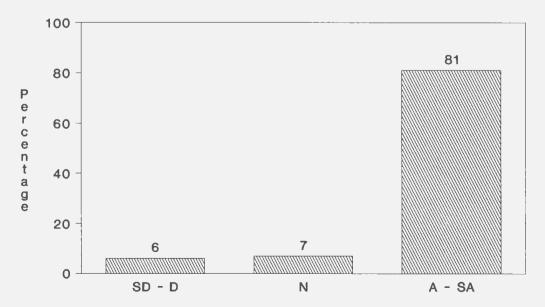


SD-D = Strongly Disagree - Agree N = Neutral A-SA = Agree - Strongly Agree

Bar Chart E-9
Patients' Responses to Interview
Question 9

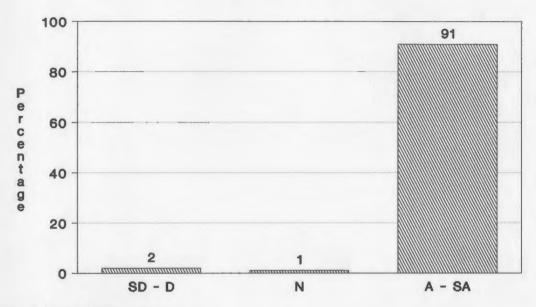


Bar Chart E-10
Patients' Responses to Interview
Question 10

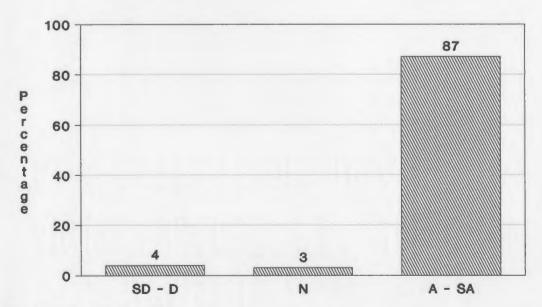


SD-D = Strongly Disagree - Agree N = Neutral A-SA = Agree - Strongly Agree

Bar Chart E-11
Patients' Responses to Interview
Question 11

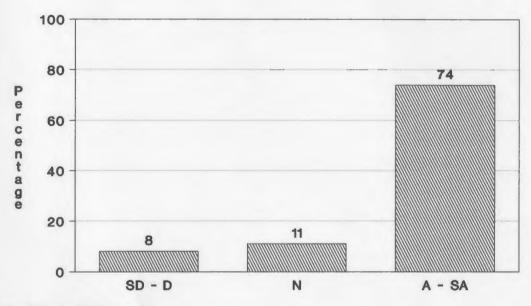


Bar Chart E-12
Patients' Responses to Interview
Question 12

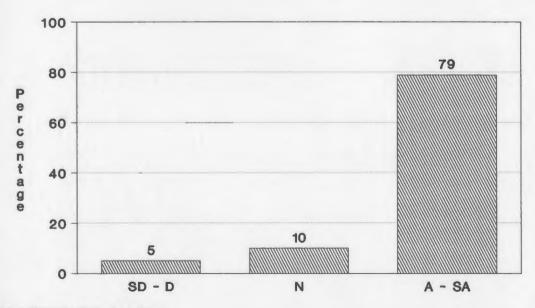


SD-D = Strongly Disagree - Agree N = Neutral A-8A = Agree - Strongly Agree

Bar Chart E-13
Patients' Responses to Interview
Question 13

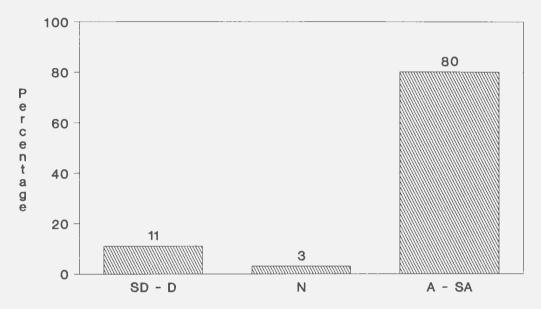


Bar Chart E-14
Patients' Responses to Interview
Question 14

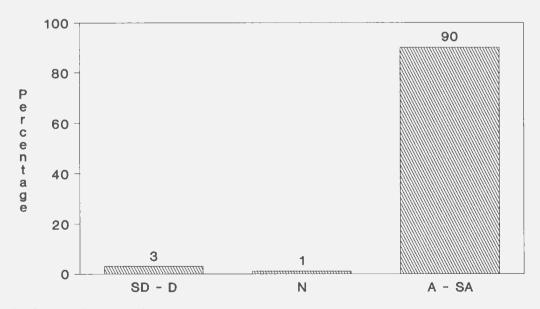


SD-D = Strongly Disagree - Agree N = Neutral A-SA = Agree - Strongly Agree

Bar Chart E-15
Patients' Responses to Interview
Question 15

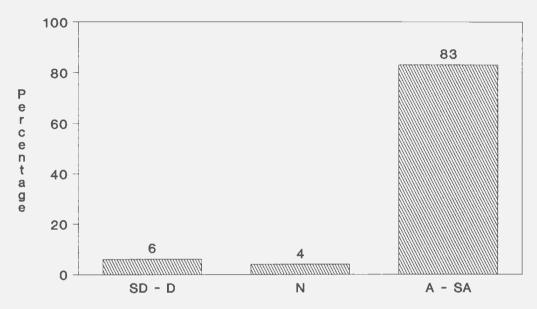


Bar Chart E-16
Patients' Responses to Interview
Question 16

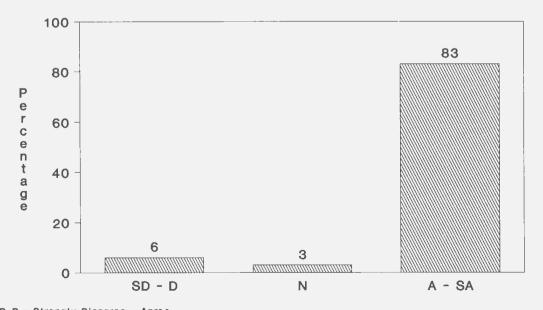


SD-D • Strongly Disagree - Agree N • Neutral A-SA • Agree - Strongly Agree

Bar Chart E-17
Patients' Responses to Interview
Question 17

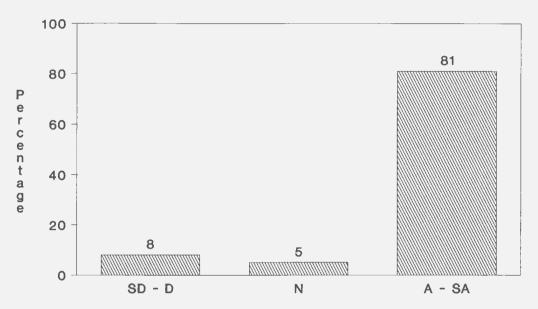


Bar Chart E-18
Patients' Responses to Interview
Question 18

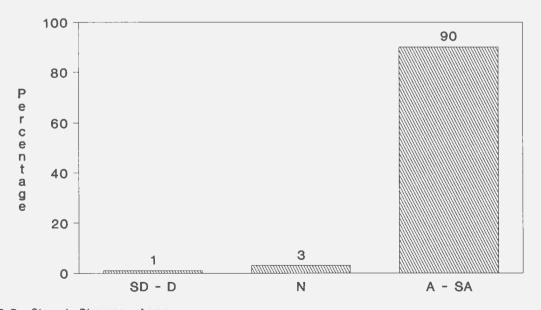


SD-D = Strongly Disagree - Agree N = Neutral A-SA = Agree - Strongly Agree

Bar Chart E-19
Patients' Responses to Interview
Question 19



Bar Chart E-20
Patients' Responses to Interview
Question 20



SD-D = Strongly Disagree - Agree N = Neutral A-SA = Agree - Strongly Agree

APPENDIX F

LENGTH OF HOSPITAL STAY TABLES

Table F-1 Comparison of Median Length of Stay for Years 1990/91, 1991/92 and 1994 Same Day Admission Patients by Primary Procedure.

Table F-2 Median Length of Stay for Years 1990/91, 1991/92 and the Pre-Admission and Same Day Admission Patients by Days Less of Hospitalization.

Table F-1

Comparison of Median Length of Stay for Years 1990/91, 1991/92 and 1994 Same Day Admission Patients by Primary Procedure

rimary Code	Procedures Name	1990/91 Median LOS(# Pts)	1991/92 Median LOS(# Pts)	PAC 1994 Media LOS(# Pts)
6314	Laparoscopic Cholecystectomy	0.0/0	3.0/49	1.5/40
6136	Excision of Hemorrhoids	6.0/17	4.0/15	3.0/5
1683	Contrast Myelogram	7.0 /26	7.0/15	3.5/4
6312	Open Cholecystectomy	6.0 /216	7.0/120	5.5/2
9874	Size Reduction Plastic Operation (Apronectomy)	7.0/3	11.0/4	5.0/1
109	Other Nonoperative Bronchoscopy	7.0/57	7.5/48	12.0/2
4682	Mediastinoscopy	6.0/5	7.5/8	2.0/3
445	Complete Pneumonectomy	13.0/6	17.0/5	10.0/2
6501	Repair Inguinal Hernia, Unqualified	3.5/54	4.0/43	2.0/17
6521	Reapir Bilateral Inguinal, Unqualified	6.0/1	4.0/5	1.0/3
9601	Amputation Fingertip, Revision	6.0/2	0.0/0	12.0/1
9811	Debridement Wound or Infected Tissue	16.0/15	16.0/13	10.0/1
9511	Achillotenotomy	0.0/0	0.0/0	6.0/1
590	Appendectomy	3.0/64	4.0/47	2.0/1
8927	Wedge Osteotomy, Metatarsals	0.0/0	0.0/0	2.0/1
1813	Lumber Sympathectomy	0.0/0	5.0/1	5.0/2
6281	Percutaneous Biopsy of Liver	16.5/6	12.5/6	4.5/2
6551	Repair of Incisional Hernia	7.0/38	4.5/20	5.5/6
5048	Ligation & Stripping of Varicose Vein(s)	5.0/14	6.0/19	1.0/1
9341	Total Knee Replacement	16.0/19	18.5/32	16.0/2
9782	Other Biopsy of Breast	13.0/4	4.5/6	1.0/2
9712	(Unilateral) Complete Mastectomy	6.0/2	5.5/28	5,0/9
9851	Local Incision LSN/TSU Bone, Humerus	0.0/0	0.0/0	2.0/1
9812	Local Excision, Lesion/Tissue Skin	8.0/15	6.0/13	6.5
9326	Metacarpocarpal Fusion	5.0/1	5.0/5	5,5/4
8985	Total Ostectomy, Patella	12.0/1	7.5/2	4,0/1
8980	Total Ostomectomy, Scapula, Clavicle, Thorax	4.0/5	3.5/4	3.0/3
8949	Other Excision of Bunion	4.0/5	5.0/13	5,0/1
5601	Vagotomy, Unqualified	11.0/3	8.0/6	6.0/1
561	Pyloroplasty	13.0/1	8,5/8	8.0/1
9339	Other Arthroplasty Foot & Toe	0.0/0	0.0/0	7.0/1
9000	Bone Graft Scapula, Clavicle, Thorax	0.0/0	6.0/1	4.0/1
5080	Angiography, Contrast	10.5/2	4.0/35	1.0/2
1921	Thyroidectomy, Unqualified	3.0/1	6.0/7	7.0/1
9347	Other Repair of Knee	10,0/3	8.0/5	4.0/1
9396	Other Reapir of Joint	0.0/0	13.0/1	3.0/1
6163	Closure of Anal Fistula	4.0/2	0.0/0	4.5/2
9345	Other Repair Cruciate Ligaments	4.0/5	6.0/11	4.0/1
9359	Total Hip Replacement	15.0/34	15.0/39	13.0/3
9351	Revision of Acetabulum	15.0/6	18.0/11	11.0/1
8936	Other Division of Bone, Tibia	8.0/3	9.0/5	7.5/2
657	Reapir Diaphragmatic Hernia Abdominal Approach	8.0/11	6.0/11	9.5/2
639	Endoscopic Removal of Calculus From Biliary Tract	0.0/0	0.0/0	8.0/1
9383	Other Repair of Shoulder	4.0/2	6.5/8	4.0/1
9308	Refusion of Spine	14.5/10	12.0/1	6.0/1
9307	Lumbosacral Spinal Fusion	11.5/2	11.0/1	8.0/1
9064	Removal Internal Fixation Device (Femur)	10.0/4	46.3/3	2.0/1
9058	Internal Fixation Without Reduction	0.0/0	4.0/1	3.0/1

Table F-2

Median Length of Stay for Years 1990/91, 1991/92 and the Pre-Admission and Same

Day Admission Patients by Days Less of Hospitalization

rimary ode	Procedures Name	1990/91 Median LOS/Saved Days	1991/92 Median LOS/Saved Days	PAC LOS
6314	Laparoscopic Cholecystectomy	0.0/0	3.0/1.5-	1.5
6136	Excision of Hemorrhoids	6.0/3.0-	4.0/1.0-	3
1683	Contrast Myelogram	7.0/3.5-	7.0/3.5-	3.5
6312	Open Cholecystectomy	6.0/0.5-	7.0/1.5-	5.5
9874	Size Reduction Plastic Operation (Apronectomy)	7.0/2.0-	11.0/6.0-	5
109	Other Nonoperative Bronchoscopy	7.0/5.0+	7.5/4.5+	12
4682	Mediastinoscopy	6.0/4.0-	7.5/5.5-	2
445	Complete Pneumonectomy	13.0/3.0-	17.0/7.0-	10
6501	Repair Inguinal Hernia, Unqualified	3.5/1.5-	4.0/2.0-	2
6521	Repair Bilateral Inguinal, Unqualified	6.0/5.0-	4.0/3.0-	1.0
9601	Amputation Fingertip, Revision	6.0/6.0+	0.0/0	12
9811	Debridement Wound or Infected Tissue	16.0/6.0-	16.0/6.0-	10
9511	Achillotenotomy	0.0/0	0.0/0	6
590	Appendectomy	3.0/1.0-	4.0/2.0-	2
8927	Wedge Osteotomy, Metatarsals	0.0/0	0.0/0	2
1813	Lumber Sympathectomy	0.0/0	5.0/0	5
6281	Percutaneous Biopsy of Liver	16.5/12.0-	12.5/8.0-	4.5
6551	Repair of Incisional Hernia	7.0/1.5-	6.0/0.5-	5.5
5048	Ligation & Stripping of Varicose Vein(s)	5.0/4.0-	6.0/5.0-	1
9341	Total Knee Replacement	16.0/0	18.5/2.5-	16
9782	Other Biopsy of Breast	13.0/12-	4.5/3.5-	1
9712	(Unilateral) Complete Mastectomy	6.0/1.0-	7.5/2.5-	5
9851	Local Incision LSN/TSU Bone, Humerus	0.0/0	0.0/0	2
9812	Local Excision, Lesion/Tissue Skin	8.0/1.5-	6.0/0.5+	6.5
9326	Metacarpal Fusion	5.0/0.5+	5.0/0.5+	5.5
8985	Total Ostectomy, Patella	12.0/8.0-	7.5/3.5-	4
8980	Total Ostomectomy, Scapula, Clavicle, Thorax	4.0/1.0-	3.5/0.5-	3
8949	Other Excision of Bunion	4.0/1.0+	5.0/0.0	5
5601	Vagotomy, Unqualified	11.0/5.0-	8.0/2.0-	6
561	Pyloroplasty	13.0/6.0-	8.5/0.5-	8
9339	Other Arthroplasty Foot & Toe	0	0.370.3	7
9000	Bone Graft Scapula, Clavicle, Thorax	0	6.0/2.0-	4
5080	Angiography, Contrast	10.0/9.0-	4.0/3.0-	7
1921	Thyroidectomy, Unqualified	3.0/4.0+	6.0/1.0+	7
9347	Other Repair of Knee	10.0/6.0-	8.0/4.0-	4
9396	Other Repair of Joint	0	13.0/10.0-	3
6163	Closure of Anal Fistula	4.0/0.5+	0	4.5
9345	Other Repair Cruciate Ligaments	4.0/0.0	6.0/2.0-	4
9359	Total Hip Replacement	15.0/2.0-	15.0/2.0-	13
9351	Revision of Acetabulum	15.0/4.0-	18.0/7.0-	11
8936	Other Division of Bone, Tibia	8.0/0.5-	9.0/1.5-	7.5
657	Reapir Diaphragmatic Hernia Abdominal Approach	8.0/1.5+	6.0/3.5+	9.5
639	Endoscopic Removal of Calculus From Biliary Tract	0	0	
9383	Other Repair of Shoulder	4.0/0.0	6.5/2.5-	8
9308		14.5/8.5-		6
9307	Refusion of Spine Lumbosacral Spinal Fusion	11.5/3.5-	12.0/6.0-	
9064	Removal Internal Fixation Device (Femur)	10.0/8.0-		8
7004	Actioval literizar fixation Device (remur)	0.0	46.3/44.3-	3

APPENDIX G PARTICIPANT CORRESPONDENCE

PO Box 5864 St. John's, Newfoundland A1C 5X3

Oct. 23, 1994

Dear Sir/Madame:

Thank you for accepting my invitation to attend the group discussion of our Pre-Admission Surgery Program at St. Clare's Mercy Hospital on Monday, October 31th. The group will meet $\underline{\text{from 7 pm to 8 pm.}}$ Refreshments will be served following the discussion.

Your participation will provide the hospital with valuable information which will be used to improve services to patients. Since we are talking to a limited number of people we need your attendance. If for some reason you are unable to attend please call 778-3460.

Enclosed is a parking permit which will allow you to leave your vehicle in area 8 or 9 of our main parking lot. Please leave the permit inside your vehicle where security can view.

Please enter the hospital through the main entrance, turn left and wait in the large waiting room on your right (Outpatient Registration/Waiting Room). You will be met there by a Candy Striper and escorted to the meeting room.

I sincerely thank you for your participation in this discussion and we look forward to seeing you on October, 31.

Yours sincerely;

Greta Valvasori Moderator

Graduate Student, Memorial University

