A case study of the performance improvement program at an acute care facility

Patricia Cagley Jenkins

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To the Graduate Council:

I am submitting herewith a dissertation written by Patricia Cagley Jenkins entitled "A case study of the performance improvement program at an acute care facility." I have examined the final electronic copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Education, with a major in Educational Administration.

E. Grady Bogue, Major Professor

We have read this dissertation and recommend its acceptance:

Jeff Aper, Norma Mertz, Robert Pursley

Accepted for the Council:

Carolyn R. Hodges

Vice Provost and Dean of the Graduate School

(Original signatures are on file with official student records.)
To the Graduate Council:

I am submitting herewith a dissertation written by Patricia Cagley Jenkins entitled “A Case Study of the Performance Improvement Program at an Acute Care Facility.” I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the Doctor of Education, with a major in Educational Administration and Policy Studies.

E. Grady Bogue, Major Professor

We have read this dissertation and recommend its acceptance:

Jeffrey P. Agar
Norma J. Hardy

Accepted for the Council:

Interim Vice Provost and Dean of The Graduate School
A CASE STUDY OF THE PERFORMANCE IMPROVEMENT PROGRAM AT AN ACUTE CARE FACILITY

A Dissertation
Presented for the
Doctor of Education
Degree
The University of Tennessee, Knoxville

Patricia Cagley Jenkins
May 2001
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I would like to express appreciation to several people who have facilitated my journey of the past six years. They have provided encouragement, intellectual stimulation, and support; thus, enabling this very rewarding educational experience. I have greatly benefited from my program of studies and the interactions with the dedicated faculty and my fellow students. In particular, I would like to express my gratitude to my dissertation committee, E. Grady Bogue, Jeff Aper, Norma Mertz, and Robert Pursley, for their support, encouragement, and guidance.

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Last, an endeavor of this magnitude would not have been feasible without an understanding and supportive family - my husband and best friend, my two children, my mother and my sister. To my family I am especially grateful for their love, understanding, support and encouragement.
ABSTRACT

The purpose of this study was to explore how implementation of the plan for performance improvement, the performance improvement program as required in the performance improvement standards of the Joint Commission on Accreditation of Healthcare Organizations, affected a particular acute care setting as perceived through multiple data sources. The purpose of this study was further explicated through the following four initial research questions: (1) Who are the participants in the performance improvement program? (2) How do members of the health care team at this particular acute care facility perceive the effect of the performance improvement program? (3) How does the performance improvement program affect the operation of this particular acute care facility? and (4) What is the decision utility of the various performance improvement data?

The design for this study was a case study consisting of the review of documents, collection of artifacts, interviews, observations of the environment, field notes, and a reflective/analytic journal. Data collection continued over a period of six months. Observations of the environment were initially recorded via handwritten notes and then transcribed into a typed format. Open ended questions were prepared prior to each interview and each interview then proceeded to explore in more depth the interviewee’s responses to the guiding questions. In addition, several documents and artifacts were reviewed, which included various policies and procedures, written plans, committee minutes and reports.

This study was descriptive in nature beginning with an overview of the performance improvement program and its evolution. The findings included the nine themes emerging from interviews as to the perceived effect of the performance improvement program; the seven ways the performance improvement program affected this particular acute care
facility; and the use of the data collected by this facility as part of the performance improvement program, which included to facilitate decision making, to serve as an incentive, and to provide information.

This study was limited in scope as it explored the effect of the development and implementation of a performance improvement program at one particular acute care setting; however, the findings from this study may provide a foundation for future research.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. OVERVIEW OF STUDY</td>
<td>1</td>
</tr>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Statement of the Problem</td>
<td>8</td>
</tr>
<tr>
<td>Purpose Statement</td>
<td>9</td>
</tr>
<tr>
<td>Research Questions</td>
<td>10</td>
</tr>
<tr>
<td>Need for the Study</td>
<td>10</td>
</tr>
<tr>
<td>Definitions</td>
<td>11</td>
</tr>
<tr>
<td>Delimitations</td>
<td>19</td>
</tr>
<tr>
<td>Limitations</td>
<td>20</td>
</tr>
<tr>
<td>Organization of the Study</td>
<td>20</td>
</tr>
<tr>
<td>II. LITERATURE REVIEW</td>
<td>22</td>
</tr>
<tr>
<td>Introduction</td>
<td>22</td>
</tr>
<tr>
<td>Perspective for Understanding Organizations</td>
<td>23</td>
</tr>
<tr>
<td>Evolution of the Concept of Quality</td>
<td>24</td>
</tr>
<tr>
<td>Evolution of the Concern with Quality in Health Care</td>
<td>26</td>
</tr>
<tr>
<td>Development of the Hospital Inspection or Accreditation System</td>
<td>27</td>
</tr>
<tr>
<td>Investigation of Medical Education</td>
<td>28</td>
</tr>
<tr>
<td>Efforts to Improve Surgical Skills and Outcomes</td>
<td>29</td>
</tr>
<tr>
<td>Development of the Medical Audit Procedure</td>
<td>31</td>
</tr>
<tr>
<td>Development of Donabedian’s Conceptual Framework</td>
<td>32</td>
</tr>
<tr>
<td>Discovery of Geographical Variations</td>
<td>33</td>
</tr>
</tbody>
</table>
Section III: The Evolution and Perceived Effects

Evolution of the Concern with Quality

The Focus of the Quality/Performance Improvement Program

The Integration of the Quality/Performance Improvement Program

The Change in the Role and Character of the Quality Committee

The Participation of Members of the Health Care Team

Multidisciplinary Cooperative Group

Special Multidisciplinary Team(s)

Committees (medical staff and/or hospital)

Corporate Groups/Meetings

Ownership of Performance Improvement Initiatives

The Emphasis on Measurement

Impetus for the Concern with Quality or Performance Improvement

Rationale for Two Separate Committees

Communication between the Physicians’ Quality Committee and the Quality Committee

Functions of the Quality Committee

Hindrances or Constraining Factors to Performance Improvement Activities

Availability of Resources

Impact of Reimbursement on the Plan of Care
Varied Perspectives on Quality in Health Care

- Resource Frame
- Process Frame
- Outcomes Frame
- Combination of Frames

The Impact of the Case Management System

- The Role of Care Paths and the Case Manager
- The Role of the Multidisciplinary Cooperative Group

Designing Care Paths

Involving Physicians in Performance Improvement Activities

Sharing Information

Impact of Customer Satisfaction

The Influence of Corporate Initiatives, Regulatory Requirements, and/or Accreditation Standards

- Proactive Initiatives
- Reactive Actions

Section IV: Impact on Operations

Goals/Ends of the Performance Improvement Program

- Evaluating and Improving Patient Care
- Appropriately Utilizing Resources
- Promoting Improvement Activities
- Complying with Regulatory Requirements and/or Accreditation Standards

Seven Step Process for Performance Improvement Initiatives

Report Format for Performance Improvement Initiatives
Section V: Uses of Data

Introduction

Decision Utility of Data

Improving Patient Care

Preoperative Class for Joint Replacement Patients

Congestive Heart Failure Initiative

Readmission Rate Initiative

Emergency Services Initiatives

Improving Compliance Efforts

Organ/Tissue Donation Initiative

Corporate Initiative to Reduce the Rate of a Particular Surgical Procedure

Back Injury Prevention Program

Credentialing/Recredentialing Process

Improving Customer Satisfaction

Improving Support Services

Incentive Use of Data

Physician Report Card

Behavioral Standards Commitment

Data as Information

Section VI: Brief Summary
CHAPTER 1

OVERVIEW OF THE STUDY

Introduction

The diversity of organizations is evident in various ways - such as their size, ownership, complexity, and purpose. For example, organizations may vary in size from a small family type business to a large corporation or various sizes between these two extremes. Some organizations are private while other organizations are public. Some organizations have a relatively simple structure and others - such as a hospital or university - are more complex. Likewise, some organizations produce goods while others provide services.

Regardless of the specific characteristics of a particular organization, Bolman and Deal (1997) facilitate our understanding of organizations. Using the metaphor of frames, they discuss the impact of framing or viewing a given situation or event from a different perspective and they develop four different ways of framing organizations. These four frames are the structural frame, the human resource frame, the political frame, and the symbolic frame (Bolman & Deal, 1997). Despite the diverse nature of organizations, a common concern of all organizations is the quality of their service or product. This case study will focus on the concern with quality in a service organization - specifically, a health care setting.

Garvin (1988) promotes our understanding of the evolution of the concern with quality in the United States. He organizes the evolution of the concern with quality into four eras beginning with the era of inspection and then progressing to the eras of statistical quality control, quality assurance, and, last, strategic quality management. However, he emphasizes, “Most modern approaches to quality have emerged gradually, arriving through steady evolution rather than dramatic breakthroughs” (p. 3).
A review of the health care literature reveals the steady evolution of the multifaceted concern with quality in health care, especially during the twentieth century, and efforts to address that concern. This evolution included the establishment of a hospital inspection system known as the hospital accreditation system in the early 1900s, which initially consisted of only five standards (Roberts, Coale, & Redman, 1987; Davis, 1960). The literature also describes the concern with the quality of medical education in the early 1900s and Flexner’s (1910) investigation of medical schools in the United States and Canada. The findings of this investigation and the resulting recommendations are in Flexner’s (1910) report, Medical Education in the United States and Canada, Bulletin Number Four.

In addition to the establishment of the health care accreditation system and the changes in medical education following publication of Flexner’s report, the literature chronicles other initiatives that relate to the concern with quality in health care. Some of these initiatives were the development of the End Result System by E. A. Codman, M. D. (1917/1996, 1934) and the development of surgical clinics by Franklin Martin, M. D. (Davis, 1960).

The health care literature, also, portrays the contributions of other members of the medical profession and their efforts relating to quality in health care. These efforts include the development of the medical audit by Lembcke (1956, 1967) and his research on the quality of health care (Lembcke, 1952, Lembcke, 1956, Silver, 1990); Donabedian’s (1980, 1982, 1988, 1991, 1992) conceptual framework for assessing quality in health care; and Brook’s (1985, 1991, 1996, 1996) contributions to the discussion of assessing quality in health care, which promote our understanding of terms such as effectiveness, efficacy, and variations in use. In addition, Wennberg (1984) presents evidence of geographic variations in health care practices, and Iezzoni (1995, 1997, 1997) addresses the issue of risk adjusting data, which is an effort to statistically
manipulate data to account for the differences in patients, thus, facilitating the comparison of data between practitioners and/or health care facilities.

In addition to the contributions of these individuals, the health care literature addresses various issues that arise when attempting to measure quality. One of the issues involves the definition of quality health care (Brook, 1991; Donabedian, 1980; Donabedian, 1982; Donabedian, 1988; Donabedian, 1992; Lembcke, 1952; Palmer, Donabedian, & Povar, 1991; Seplaki, 1997). Another issue is the type of data to collect (Donabedian, 1980; Donabedian, 1982; Donabedian, 1988; Brook, Kamberg, & McGlynn, 1996; Palmer, 1991). Other issues are the method of data collection (Iezzoni, 1997; Jencks, 1990; Brook, McGlynn, & Cleary, 1996; Brook, et al., 1996; Mitchell, 1990), the criteria for evaluating the data (Brook, et al., 1996; Donabedian, 1982; Donabedian, 1988); and the method of risk adjusting the data for comparison (Iezzoni, Ash, Shwartz, Daley, Hughes, & Mackiernan, 1995; Iezzoni, 1997).

In addition, there are studies examining the use of patient reports as an indicator of quality care (Covinsky, Bates, Davis, & Delbanco, 1996; Cleary & Edgman-Levitan, 1997).

Not only does the health care literature chronicle the evolution of the concern with quality in health care and efforts to promote quality care by various health care professionals, but it also chronicles the evolution in the role of hospitals to ensure quality and the changes in the health care accreditation standards. Seplaki (1997) discusses the evolution of the role of the hospital in regards to providing quality health care. He states, in the past, the physician was the patient’s sole agent and rarely anyone scrutinized the doctor’s work. Basically, the hospital was a bystanding though accommodating entity with no control over the treatment, providing little more than physical facilities and environment under the physician’s supervision and undisputed mandate. Today...a hospital is now directly accountable for the quality of care provided within its domain. In fact, responsibility for care quality now needs to be met by both the treating physician and the accommodating hospital, with the latter being accountable for the quality of the care environment it supplies as well as the quality of care provided by the physicians within its domain (p. 179).

Hospitals are now accountable to consumers (patients and third party payers such as Medicare, Medicaid, or private insurance), regulators (state and federal governments), and, possibly, an independent accreditation agency (such as the Joint Commission on Accreditation of Healthcare Organizations) for the quality of the environment of care and the quality of health care they provide (Rubin, 1994; Jencks, 1994; Bogdanich, 1991; Markson & Nash, 1994).

In addition to the evolution of the role of hospitals in ensuring quality, Roberts, Coale, and Redman (1987) chronicle the history of the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) and the adoption of the initial five minimum
standards in 1919. They state, "With the adoption of the Minimum Standard, the accreditation process that continues today was set in motion" (p. 937) [italics in original], and they describe the steps of the accreditation process, which includes:

...the development of reasonable standards that every organization should be expected to meet and that the health professions agree will have a positive effect on improving the quality of patient care; the voluntary request for survey and approval by a health care organization; the survey of the organization by professionals who assess compliance with the standards and provide consultation to support achievement of greater levels of compliance; and the subsequent efforts of organizations to use the standards and survey results to improve patient care. (p. 937)

The history of the Joint Commission reveals several evolutions since the adoption of the five minimum standards in 1919. For example, in 1966 the Joint Commission on Accreditation of Hospitals decided to shift from minimal standards to optimally achievable standards (Roberts, et al., 1987). Another evolution was the change from focusing on quality assurance (during the 1970s and 1980s) to the current emphasis on performance improvement and outcomes (Roberts, et al., 1987; Moore-Greenlaw, Strader, & Decker, 1995; Patterson, 1995), which reflects the philosophical ideas of quality experts such as Deming (1986, 1994), Juran (1992), and Crosby (1980).

Congruent with the current focus on performance improvement and outcomes are the two most recent evolutions in the accreditation process. These include the decision to make the results of accreditation surveys available to the public (American Hospital Association video) and the announcement of the ORYX initiative. "The ORYX initiative requires a hospital to select a performance measurement system approved by JCAHO, which allows the hospital and JCAHO to evaluate the quality of care the hospital provides by measuring hospital patient discharge data against outside benchmarks" (Clinical Dynamics, 1997).
The accreditation standards are easily accessible via a manual, which the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) publishes and updates periodically. Specifically, the standards for an acute care setting are in the Comprehensive Accreditation Manual for Hospitals (1999). “The central portion of the CAMH [Comprehensive Accreditation Manual for Hospitals] is divided into three sections - Patient-focused Functions, Organization Functions, and Structures with Functions” (JCAHO, 1999, p. UM-1) [italics in original]. (Appendix A contains the functions or chapters for each of the three divisions.) Even though the accreditation manual contains a specific chapter on the performance improvement standards, the thread of performance improvement is evident throughout the standards.

The intent of the performance improvement standards is to design processes, measure performance, analyze data, and improve performance for the purpose of improving patient outcomes using a collaborative, interdisciplinary approach (JCAHO, 1999). More specifically, the first standard in the performance improvement section or chapter specifies that the leaders of the organization must establish a plan to measure, analyze, and improve performance (Performance Improvement Standard - PI.1). The standards on performance improvement also specify that analysis of data includes not only the organization’s internal data over time but also data bases external to the organization when this type of analysis is appropriate (Performance Improvement Standard - PI.4.2).

In addition, the performance improvement standards specify certain processes that the health care organization must monitor - such as medication use, blood use, certain invasive procedures, seclusion, restraint use, and sentinel events. Specifically, standard PI.3.1.1 states,

At a minimum, the organization identifies performance measures related to the following processes, as appropriate to the care and services provided: medication use; operative and other procedures that place the patient at risk; use of blood and blood
components; restraint use; seclusion when it is part of the care or services provided; and care or services provided to high-risk populations, (JCAHO, 1999, p. PI-11) and standard PI.4.3 specifies the events that evoke intense investigation (JCAHO, 1999). These include

* ...confirmed transfusion reactions;
* significant adverse drug reactions;...
* significant medication errors;
* ...major discrepancies, or patterns of discrepancies, between preoperative and postoperative (including pathologic) diagnoses, including those identified during the pathologic review of specimens removed during surgical or invasive procedures; and
* significant adverse events associated with anesthesia use.

(JCAHO, 1999, p. PI-17)

Thus, the accrediting agency, the Joint Commission on Accreditation of Healthcare Organizations, mandates that any health care facility they accredit must have a performance improvement plan even though they do not mandate a particular performance improvement model. Therefore, regardless of the specifics of the performance improvement plan, some unifying characteristics of all performance improvement plans are that the plan applies to a health care setting or system (such as a hospital/medical center), which is a complex service organization; the plan addresses collecting data, analyzing data and using the results to promote or sustain improvement; and the plan is interdisciplinary in nature.

The performance-focused accreditation standards emphasize assessment or measurement and performance improvement and were implemented in 1994 (Patterson, 1995). Astin (1993) facilitates our understanding of assessment and the uses of assessment data and Deming (1986, 1994), Juran (1992), and Crosby (1980) discuss the
philosophical ideas of performance improvement including the emphasis on assessment or measurement and use of that data to improve processes. The studies by Berwick, Godfrey, and Roessner (1990) and Watts and Wetta-Hall (1997) demonstrate the applicability of a multidisciplinary approach using performance improvement tools or techniques to facilitate improvement in a health care setting. In addition, McLaughlin and Jordan (1999) provide insight regarding the organizational challenges introduced when deciding to measure outcomes and use that data to improve processes.

Thus, based on the accreditation standards, an acute care setting must have a performance improvement plan, which portrays how that facility addresses the organizational performance improvement standards. These standards reflect the philosophy and methods of quality management (also known as continuous quality improvement, total quality management, or performance improvement). According to Juran (1992) and Crosby (1980), it may require from six to ten years to fully implement a performance improvement program and it has been about six years since the implementation of the performance improvement standards (Patterson, 1995).

Statement of the Problem

The voluntary hospital or health care inspection or accrediting system has evolved from the original five minimum standards to the current emphasis on performance measurement, analysis of data using both internal and external databases, and performance improvement (Roberts, et al., 1987; JCAHO, 1999), which reflect the philosophical ideas of Deming (1986, 1994), Juran (1992), and Crosby (1980). In order to demonstrate compliance with the voluntary accreditation standards, acute care facilities must develop and implement a performance improvement plan, which describes how a
particular facility addresses the performance improvement standards. However, the philosophical ideas of performance improvement go beyond merely demonstrating compliance. The philosophical ideas of performance improvement involve changing the culture and the process of decision making (McLaughlin & Simpson, 1999).

Thus, the problem of this case study was to discover the effect on an acute care facility of implementing the performance improvement standards of the Joint Commission on Accreditation of Healthcare Organizations. The problem of this case study builds on our understanding of the concept of framing and Bolman and Deal’s four organizational frames; the evolution of the concern with quality in the United States; the evolution of the concern with quality in health care including the issues of defining quality and identifying appropriate indicators of quality in health care, the evolution of the accreditation process and the current emphasis of the accreditation standards for acute health care on performance improvement; the philosophy of performance improvement; and the purpose and use of assessment data.

Purpose Statement

The purpose of this case study was to explore how implementation of the plan for performance improvement, the performance improvement program required in the performance improvement standards of the Joint Commission on Accreditation of Healthcare Organizations, affected an acute care setting.
Research Questions

The purpose of this study was further explicated through the following four initial research questions. The initial research questions were:

1. Who are the participants in the performance improvement program at this particular acute care facility?
2. How do members of the health care team at this particular acute care facility perceive the effect of the performance improvement program?
3. How does the performance improvement program affect the operation of this particular acute care facility?
4. What is the decision utility of the various performance improvement data?

Need for the Study

The literature provides insight as to the applicability of performance improvement methods in a health care setting (Berwick, Godfrey, & Roessner, 1990; Watts & Wetta-Hall, 1997), the organizational challenges of measuring outcomes and improving processes (McLaughlin & Jordan, 1999), the varied perceptions of quality by members of the health care team (Sales, Lurie, Moscovice, & Goes, 1995), and the use of statewide indicator data in quality improvement initiatives (Rosen, Schroeder, Hagan, Acord-Szczesny, & Garavaglia, 1996; Romano, Zach, Luft, Rainwater, Remy, and Campa, 1995; Suber, Martin, Jones, Reeves, & Duncan, 1996; Lynch, Mattie, Shevchenko, & Reed-Fourquet, 1993). However, McLaughlin and Simpson (1999) state,
“Because CQI [continuous quality improvement] is new there is little information about how effective such an effort will be after five or ten years” (p. 42).

This study will begin to fill that need since it has been over ten years since the announcement of the change in the focus of the accreditation standards to performance-focused standards (Lehmann, 1987) and about six years since the transition to the standards emphasizing performance improvement (Patterson, 1995). In addition, this case study will contribute to our knowledge of the effect of the organizational performance improvement accreditation standards on an acute care setting as it is important to learn about the impact of policies, practices, or accreditation standards in order to inform those who make decisions that affect these policies, practices, and/or accreditation standards (Worthen & Sanders, 1987).

Definitions

ACCOUNTABILITY: “Accountability entails the procedures and processes by which one party justifies and takes responsibility for its activities” (Emanuel & Emanuel, 1996, p. 229). The procedures include evaluating the compliance with the stated criteria and disseminating the results of that evaluation (Emanuel & Emanuel, 1996).

ACCREDITING AGENCY PERSPECTIVE ON QUALITY OF HEALTH CARE: “Value in health care is the appropriate balance between good outcomes, excellent care and services, and costs” (JCAHO, 1999, p. PI-1).

ADMINISTRATIVE DATA: Data which include all or a portion of the following: routine demographic information, the diagnosis(es) code(s) using the International
Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM); and procedures codes. “The primary producers of administrative data are the federal government, state governments, and private health care insurers” (Lezzone, 1997, p. 666).

**ARTIFACT:** Data from the environment with the exception of documents.

**ASSESSMENT:** This involves the collection of data or information. “The information may or may not in numerical form, but the basic motive for gathering it is to improve the functioning of the institution and its people” (Astin, 1993, p. 2).

**BENCHMARK:** “A benchmark is a measurement that is used to evaluate the performance of a specific health care provider [individual; group practice; or health care facility] relative to other providers” (Fos & Fine, 2000, p. 142).

**BENCHMARKING:** “The concept of setting goals based on knowing what has been achieved by others” (Juran, 1992, p. 503).

**CARE PATH:** A formally approved plan of care for a particular diagnosis, which identifies the process of care (for example - medications, diagnostic tests, activity level, and other actions) each day from admission through the targeted discharge date.

**CASE MIX:** “Case mix can be defined as the measurement of the number of patients, types of patients, illnesses, and treated conditions” (Fos & Fine, 2000, p. 162) and is a component of a hospital’s internal data (Fos & Fine, 2000).

**CASE MANAGEMENT SYSTEM:** A system of managing patient care, which “...addresses coordination of inpatient services, discharge planning, and utilization review” (Scope of Service document).

**CASE MANAGER:** The role of a case manager is multifaceted and includes managing a group of patients from admission through discharge. It includes the following
functions: optimization of DRGs, discharge planning, patient/family education, data collection, and participation as a member of a multidisciplinary cooperative group.

CASE STUDY: "...An intensive, holistic description and analysis of a bounded phenomenon such as a program, an institution, a person, a process, or a social unit" (Merriam, 1998, p. xiii).

CLINICAL DATA: Specific information about a particular patient’s plan of care, the care provided, and the outcome as recorded in the official medical record.

CLINICAL INDICATOR: “A clinical indicator is a measurable element in the process or outcome of care whose value suggests one or more dimensions of quality of care and is theoretically amenable to change by the provider” (Bernstein & Hilborne, 1993, pp. 501-502).

COMMON CAUSE OF VARIATION: Variation that results from a stable process or system (Deming, 1986).

CONSUMER PERSPECTIVE ON QUALITY OF HEALTH CARE: Care that is accessible, provided by a competent practitioner, and is congruent with the consumer’s values (Palmer, 1991).

CONTINUOUS QUALITY IMPROVEMENT: A management philosophy, which provides “...a structured organizational process for involving personnel in planning and executing a continuous flow of improvements to provide quality health care that meets or exceeds expectations” (McLaughlin & Kaluzny, 1999, p. 3).

DATA UTILIZATION: The use of assessment data or information to aid decision making, to serve as an incentive and/or to provide information or feedback (Astin, 1993).
DOCUMENT: This term refers to any official record (such as minutes and reports) and other official communication (such as policies, procedures, plans and budgets) at the site of the study.

EFFECTIVENESS: The effect of health care rendered during ordinary circumstances by the average health care provider for the typical client or patient (Brooks & Lohr, 1985).

EFFICACY: The utilization of a health care service rendered under optimal conditions (Brook, 1991).

EFFICIENCY: Acquiring an outcome of the desired quality at the least possible expense or acquiring the greatest conceivable quality for a given expense (Palmer, 1991).

EXPLICIT CRITERIA: Predetermined, detailed standards/criteria developed and designated in advance, often in great detail, usually by a group of experts (Donabedian, 1988).

FRAMES: "Frames are both windows on the world and lenses that bring the world into focus. Frames filter out some things while allowing other to pass through easily. Frames help us order experience and decide what to do" (Bolman & Deal, 1997, p. 12).

GOVERNMENT PERSPECTIVE ON QUALITY OF HEALTH CARE: Care that is accessible, appropriate, and technically correct (Palmer, 1991, Seplaki, 1997).

HEALTH CARE CONSUMER: An individual or group who receives and/or reimburses a health care provider for services. Examples include individual patients and third-party payers such as state and federal governments (Medicaid and Medicare) or insurance companies.
HEALTH CARE EMPLOYEE: Those individuals who receive economic compensation for their work from the health care organization. This includes both licensed and unlicensed individuals.

HEALTH CARE SYSTEM: A compilation of the people, the equipment, the policies and procedures, the fiscal mechanisms, and the links between these (Moray, 1994).

HEALTH CARE TEAM: A group of individuals from various departments and/or disciplines in a particular health care setting working together to address a specific problem or issue and/or to accomplish a specific goal.

HOSPITAL VOLUME: The number of procedures or diagnosis(es) in a particular hospital during a specified period of time.

HUMAN RESOURCES FRAME: This organizational frame emphasizes that the workforce is an investment and that malfunctions arise from misalignment of people within the organization or from flawed management of the relations between people or groups (Bolman & Deal, 1997).

IMPLICIT CRITERIA: The unspoken criteria an expert practitioner uses when judging the quality of the sequence of activities occurring in the provision of health care or its end result (Donabedian, 1980; 1988).

INDICATOR: “A measurement used to determine, over time, an organization’s performance of functions, processes, and outcomes” (JCAHO, 1999, p. GL-10).

INTERPERSONAL CARE: The interactions occurring between the health care provider and the patient (Donabedian, 1988).

LEGAL PERSPECTIVE ON QUALITY OF HEALTH CARE: Conforming to community standards regarding the provision of health care (Seplaki, 1997).

MEASUREMENT: See definition of assessment.
MEDICAL AUDIT: The retrospective review of medical records for the purpose of evaluating the medical care (Lembcke, 1956).

MULTIDISCIPLINARY COOPERATIVE GROUP: A team of key stakeholders in the process of care, consisting of physicians, the case manager, pharmacy representative(s), staff nurses, health service leadership, and others who have a key role in the process of care under study.

OUTCOME OF CARE: The end result of care on the health condition of an individual person and/or groups of people (Donabedian, 1988; 1992).

PATIENT PERSPECTIVE ON QUALITY OF HEALTH CARE: See definition of consumer perspective of quality health care.

PERFORMANCE IMPROVEMENT: Measuring performance for the purpose of improving that performance both now and in future (Seplaki, 1997).

PERFORMANCE IMPROVEMENT PLAN: The formally approved document which describes the organization's method for designing processes and systematically monitoring, analyzing and improving performance.

PERFORMANCE IMPROVEMENT PROGRAM: The implementation of the organization's performance improvement plan.

PERFORMANCE MEASURE: "A quantitative tool (for example, rate, ratio, index, percentage) that provides an indication of an organization's performance in relation to a specified process or outcome" (JCAHO, 1999, pp. GL - 16-17).

PHYSICIAN VOLUME: The number of procedures performed per physician or the number of patients treated with a particular diagnosis per physician in a designated period of time.

POLITICAL FRAME: This organizational frame "...views organizations as alive and screaming political arenas that host a complex web of individual and group interests" (Bolman & Deal, 1997, p. 163).
PROCESS: "A systematic series of actions directed to the achievement of a goal" (Juran, 1992, p. 508).

PROCESS OF CARE: The group of activities occurring within the patient-practitioner relationship or the sequence of activities occurring in the provision of health care (Donabedian, 1980; 1988).

PHYSICIAN PERSPECTIVE OF QUALITY HEALTH CARE: The management of care (diagnosis and treatment) by the health care practitioner/physician that is expected to obtain the most desirable equilibrium between health benefits and risks (Donabedian, 1980).

PROVIDER PERSPECTIVE ON QUALITY OF HEALTH CARE: See definition of physician perspective on quality of health care.


QUALITY ASSURANCE: Measuring performance for the purpose of ensuring that specific standards are met (Povar, 1991).

QUALITY CONTROL: Involves measuring a process or product, comparing the results to the accepted standard, and distinguishing acceptable variations from unacceptable variations (Garvin, 1988).

QUALITY IMPROVEMENT: See definition for performance improvement.

QUALITY INDICATORS: Quantitative measures of structural elements (example - nurse to patient ratio, percent of board certified physicians); processes of care (example - steps of medication administration); and/or outcomes (examples - morbidity rates, mortality rates, patient satisfaction data, and infection rates) (Bernstein & Hilborne, 1993; Palmer & Reilly, 1979).

RISK ADJUSTMENT: A means of adjusting data to account for patient specific factors that could impact the end result of medical intervention. "Risk adjustment
is intended to account for all factors excluding the process of delivery of health care services that may be helpful in understanding differences in health outcomes in a population” (Fos & Fine, 2000, p. 95).

**RISK ADJUSTED RATES:** “...Clinical outcomes in a population that have been adjusted for demographic and clinical factors” (Fos & Fine, 2000, p. 95).

**SENTINEL EVENT:** “An unexpected occurrence involving death or serious physical or psychological injury or the risk thereof. Serious injury specifically includes loss of limb or function. The phrase ‘or risk thereof’ includes any process variation for which a recurrence would carry a significant chance of a serious adverse outcome” (JCAHO, 1999, p. PI-6).

**SIGNIFICANT ADVERSE DRUG REACTIONS AND SIGNIFICANT MEDICATION ERRORS:** “Unintended, undesirable, and unexpected effects of prescribed medications or medication errors that require discontinuing a medication or modifying the dose, require initial or prolonged hospitalization, result in disability, require treatment with prescription medication, result in cognitive deterioration or impairment, are life threatening, result in death or result in congenital anomalies” (JCAHO, 1999, p. PI-17).

**SPECIAL CAUSE OF VARIATION:** A source of variation caused by someone or associated with a specific event (Deming, 1986).

**STABLE PROCESS:** A process without any evidence of variation caused by someone or associated with a specific event. “It is a random process. Its behavior in the near future is predictable” (Deming, 1986, p. 321). It is in a state of statistical control since all variation caused by someone or associated with a specific event has been eliminated. Any persisting variation is a result of chance or common cause(s) (Deming, 1986).
STRATEGIC QUALITY MANAGEMENT: See definition for continuous quality improvement

STRUCTURAL FRAME: This organizational frame emphasizes organizational structure, goals and policies (Bolman & Deal, 1997).

STRUCTURE OF CARE: “The concept of structure includes the human, physical, and financial resources that are needed to provide medical care” (Donabedian, 1980, p. 81).

SYMBOLIC FRAME: This organizational frame embodies and expresses the culture of the organization. “Meaning, belief, and faith are central to a symbolic perspective” (Bolman & Deal, 1997, p. 216).

SYSTEM: Any compilation of the parts and the links between them, whether the parts are human or not, when the parts have been assembled for a specific objective (Moray, 1994).

TECHNICAL CARE: The two components include determining a suitable plan of care and the skill of executing that plan. The basis for evaluating the quality of technical care is how that care compares to what is believed to be the best method of treatment (Donabedian, 1988).

VARIATIONS IN USE: Various detected levels of per capita use of health care such as medications, special procedures or operations, hospital services and/or physician services (Brook & Lohr, 1985).

Delimitations

This study was delimited to one not-for-profit, acute health care facility in the southeastern part of the United States. This acute care facility was associated with a
well-known religious denomination and was also affiliated with a religiously based organization of health care facilities with a common mission. Other delimitations were that this health care facility was in an urban setting and had been reaccredited by the Joint Commission on Accreditation of Healthcare Organizations within the past year.

Limitations

This study is a case study that was limited to one facility as described in the delimitations. In this case study the researcher was the primary instrument for collecting the data from various sources, which included documents, artifacts, observations, and interviews. The data was limited by the researcher’s access to individuals, places, artifacts, and/or documents and by the researcher’s documentation of observations, recording of information from reviewed documents, and transcription of interviews.

Organization of the Study

This study consists of five chapters. The first chapter introduces the study and the specific sections of this chapter are the introduction, the statement of the problem, the purpose statement, the research questions, the need for the study, definitions, delimitations, limitations, and a description of the contents of this document. Chapter two, Review of the Literature, provides the context for this study. The context includes a perspective for understanding organizations, the evolution of the concept of quality in the United States; the evolution of the concern with quality in health care, which includes the issues of defining quality, measuring quality, and identifying appropriate indicators and
the evolution of the hospital accreditation standards; the philosophical foundation of performance improvement; and the purpose of assessment and the uses of assessment data. Chapter three, Research Design and Methodology, describes the design; the research site selection; the qualitative methods for collecting the data; the approach for analyzing the data of this case study; and the strategies for establishing the trustworthiness of the data and the findings. Chapter four, Findings, reports the findings from this case study regarding how the performance improvement program affected this particular health care organization. The fifth and final chapter summarizes the findings, discusses the findings in relation to specific aspects of performance improvement literature, presents conclusions, and suggests possible opportunities for future research.
CHAPTER 2
REVIEW OF THE LITERATURE

Introduction

The context of this study draws upon the concept of framing and organizational theory, the evolving concern with quality including quality in health care, the foundation of performance improvement philosophy and methods, and the purpose of assessment and the uses of assessment data. Thus, chapter two begins by reviewing the work of Bolman and Deal (1997), which greatly assists both scholars and practitioners in understanding organizations (both simple and complex). The review then proceeds to explore the evolution of a common concern of all organizations, the concern with the quality of their service or product. This discussion provides the foundation for the historical review of the concern with the quality as it relates to health care, especially during the twentieth century. The discussion of quality as it relates to health care involves the various issues of defining and measuring or assessing quality in health care and the efforts to identify indicators of quality. The contextual discussion then progresses to describe the evolution of the accreditation standards including the recent emphasis in the health care accreditation standards on quality or performance improvement and the philosophical foundation of this emphasis, which is the work of quality experts such as Deming (1986, 1994), Juran (1992), and Crosby (1980). The literature review culminates by reviewing Astin's (1993) views on the purpose of assessment and the uses of assessment or measurement data.
Understanding any complex organization is a momentous challenge. However, the recent work of Bolman and Deal greatly facilitates this task. Bolman and Deal (1997) discuss the concept of frames and describe the function of frames as follows: “Frames are both windows on the world and lenses that bring the world into focus. Frames filter out some things while allowing others to pass through easily. Frames help us order experience and decide what to do” (Bolman & Deal, 1997, p. 12). In addition, they emphasize how reframing an experience promotes understanding of a situation or event (Bolman & Deal, 1997).

Bolman and Deal (1997) apply the concept of frames to organizations and discuss four different organizational frames. The four organizational frames they discuss are the structural frame, the human resources frame, the political frame, and the symbolic frame.

The structural frame emphasizes organizational goals and policies. The focus of the second frame, the human resources frame, is that the workforce is an investment and that malfunctions arise from misalignment of people within the organization or from flawed management of the relations between people or groups (Bolman & Deal, 1997). The third frame, “the political frame, views organizations as alive and screaming political arenas that host a complex web of individual and group interests” (Bolman & Deal, 1997, p. 163). The last frame that Bolman and Deal address is the symbolic frame. Bolman and Deal state, “Symbols embody and express an organization’s culture - the interwoven pattern of beliefs, values, practices, and artifacts that define for members who they are and how they are to do things” (p. 217). They further describe the culture of an organization as both a process and a product. “As a product, it embodies accumulated wisdom from those who came before us. As a process, it is continually renewed and
recreated as newcomers learn the old ways and eventually become teachers themselves” (p. 217).

Thus, Bolman and Deal stress the impact of framing; emphasize the positive effect of learning to reframe any event or issue from various perspectives; and contribute to understanding organizations through their discussion of these four frames. This understanding lays a foundation for examining a common concern of all organizations, which is the quality of their service or product.

**Evolution of the Concept of Quality**

Garvin (1988) discusses the history and evolution of the concept of quality and states, “Only recently has it emerged as a formal management function” (p. 3). Garvin describes the evolution of quality as having four different quality periods beginning with the era of inspection and progressing to the eras of statistical quality control, quality assurance, and, most recently, strategic quality management or continuous quality improvement. Even though Garvin describes four different quality eras, he stresses, “Most modern approaches to quality have emerged gradually, arriving through steady evolution rather than dramatic breakthroughs” (p.3).

While discussing the events leading to the era of inspection, Garvin (1988) relates that prior to the rise of mass production the skilled craftsman was responsible for ensuring the quality of the product. However, as a result of the increase in mass production and the need for exchangeable parts, regular inspection became a necessity. Thus, during the early 1900s as the American manufacturing system was changing, inspection assumed greater significance. Despite the increasing importance of inspection, it was not until the
work of Shewhart and the transition to statistical process control that quality control included more than merely counting, sorting and repairing (Garvin, 1988).

In discussing the impact of Shewhart’s work, Garvin (1988) relates, “He was the first to recognize that variability was a fact of industrial life and that it could be understood using the principles of probability and statistics” (p. 6). Thus, the issue of quality began to evolve from meeting the standard to include distinguishing tolerable variation from variations denoting a problem (Garvin, 1988). In other words, as a result of the work of Shewhart, the concern with quality evolved to include distinguishing common causes of variation from special causes. However, following World War II the era of statistical quality control was beginning to end while the era of quality assurance was beginning (Garvin, 1988).

The transition from statistical process control to the period of quality assurance was a transition “...from a narrow, manufacturing based discipline to one with broader implications for management” (Garvin, 1988, p. 12). Garvin (1988) identifies the four elements of quality assurance as determining the costs of quality such as those involving quality control activities (unavoidable costs) and those resulting from defects and failures (avoidable costs); controlling quality from design to finished product (total quality control); using formal procedures to anticipate the performance of equipment over a period of time and incorporating techniques to design products with a lower failure rate; and expecting perfection or a program known as zero defects.

The transition from quality assurance to strategic quality management or continuous quality improvement embodies what Garvin (1988) describes as a striking change in perspective. According to Berwick, Godfrey and Roessner (1990), the perspective of quality management or quality improvement includes measuring customer needs, measuring inputs, measuring processes, and measuring results. In addition, they discuss
that in a performance improvement environment the use of data focuses on gaining knowledge of the process. Specifically, they state,

Unlike other approaches to improvement, however, in which measurement is used to reward and discipline people, measurement in the quality management effort is used to gain knowledge of the processes so that they can be understood, predicted, and improved. Measurement is used so that everyone can control and improve processes, not so that some people can control other people. (Berwick, et al., 1990, p. 41)

Thus, understanding the steady evolution of the concept of quality in the United States, especially during the twentieth century, provides a historical context for the evolution of the concern with quality as it relates to health care in America.

Evolution of the Concern with Quality in Health Care

The literature describes the concurrent, steady evolution of the concern with quality in health care during the late 1800s until the present. This concern evolved from an initial emphasis on inspection and quality control to the current emphasis on performance improvement. More specifically, the evolving concern with quality in health care included the following: the development of the hospital inspection system; the investigation of medical education; the development of the End Result System by Codman and the implementation of surgical clinics by Martin in the early 1900s; the development of the medical audit by Lembcke; the development of a conceptual framework for assessing quality in health care; the discovery of geographic variations in health care; the discussion of issues of defining, assessing and measuring quality in health care; research to identify indicators of quality in health care; and the evolution of the hospital accreditation system.
Starr (1982) describes the hospital during the late 1800s and early 1900s as being primarily for the homeless poor and mentally ill. Furthermore, he states that until after 1900 physicians were cautious about sending their patients to the hospital since infections periodically spread through the hospital wards. Despite the less than ideal conditions in hospitals during this time, Davis (1960) and Neuhauser (1990, 1996) discuss the scientific advances occurring in some areas of health care such as the use of aseptic surgical technique, anesthesia, and new diagnostic tools.

Hornsby (1917) also discusses the conditions in hospitals during the early 1900s and describes the lack of standardization and the wide variation in services. More specifically, regarding the lack of standardization Hornsby states,

In perhaps 75 percent of the hospitals in this country, large and small, general and special, the [medical] record as it is kept today is practically valueless. ...In 75 percent of the hospitals there is no examination whatever on the admission of a patient, and his assignment to a location in the institution is based upon his own statement as to what he is suffering from. No admitting diagnosis is recorded, and in the vast majority of the cases no history of the patient’s disease is written. This haphazard method of admitting patients is responsible for very many hospital epidemics of communicable diseases. (p. 7)

In light of the concern regarding the lack of hospital standardization, the first committee on hospital standardization was formed in 1912 during the third annual meeting of the Clinical Congress of Surgeons. The purpose of this committee was to study the feasibility of developing a system for standardizing hospitals, which would also provide the public with information about the safety in specific hospitals. The chairman
of this committee was Ernest Amory Codman, M. D. (Codman, 1934; Davis, 1960; Roberts, et al., 1987).

Six years after forming the hospital standardization committee, the committee conducted its first initial survey in 1918. The results of this initial survey of 671 hospitals were announced in October 1919, during a conference on hospital accreditation. However, the results were disappointing since in the first year of the hospital inspection program, only 89 hospitals had met the five minimum standards (Stephenson, 1981) - including some of the most prominent hospitals (Roberts, et al., 1987). In light of the disappointing results of this initial survey, Stephenson (1981) reveals that “...at midnight before the conference [on hospital accreditation], the list prepared by ‘stupendous’ staff effort had been cremated in the furnaces of the Waldorf Astoria Hotel to insure it would not get into the hands of the press” (p. 21). Later in the same year, the five minimum standards for the hospital accreditation program were officially adopted. Roberts, Coale, and Redman (1987) describe these standards as defining those components then deemed crucial to the appropriate care and treatment of all hospitalized patients. These minimum standards addressed the organization of the medical staff, criteria for medical staff membership, governance of the medical staff and hospital, contents of the medical record, and criteria regarding diagnostic and therapeutic facilities (The Minimum Standard, 1924).

Investigation of Medical Education

Also occurring around the same time there was concern about the quality of medical education, which led to the subsequent investigation of medical education in the United States and Canada conducted by Abraham Flexner. The findings and recommendations from this study are contained in Medical Education in the United States and Canada.
In general, this report describes the lack of standardization among the various medical schools during the early 1900s and even provides detailed descriptions of the conditions existing at some of the schools. For example, Flexner describes the conditions of the laboratory facilities at a medical school in Georgia as follows:

The school occupies a building which in respect to filthy conditions, has few equals, but no superiors, among medical schools. Its anatomy room containing a single cadaver, is indescribably foul: its chemical “laboratory” is composed of old tables and a few bottles, with water, drain, lockers, or reagents; the pathological and histological “laboratory” contains a few dirty slides and three ordinary microscopes. Nothing more disgraceful calling itself a medical school can be found anywhere. (Flexner, 1910, p. 205).

Opinions differ as to the direct impact of Flexner’s report (Kaufman, 1976; Bevan, 1928). However, there is agreement that the report marks a pivotal point in the history of American medical education and the concern with both the quality and standardization of that education and its ultimate impact on health care (Bevan, 1928; Chapman, 1974; Kaufman, 1976; King, 1984).

Thus, prior to World War II there were several efforts to inspect, standardize, and improve the quality of health care in the United States. In fact, Califano (1986) concludes, “By the late 1920s the hard core of today’s health industry - physicians, hospitals, medical education, state licensing, and some early medical research successes - was pretty much in place” (p. 40).

**Efforts to Improve Surgical Skills and Outcomes**

In addition to the development of a hospital inspection/accreditation system and the investigation of medical education and the resulting recommendations for
standardization, there were two additional initiatives to improve the quality of health care. One was the first meeting of the Clinical Congress of Surgeons of North America organized by Franklin Martin, M. D. The purpose of this meeting was to enhance the quality of current surgical practice by providing the opportunity for the young surgeons to observe surgical procedures being performed (Davis, 1960).

The other effort to improve the outcome or product of health care was Codman’s work on the End Result System, which was a method he developed to inspect the outcomes of his surgical procedures (1917/1996; 1934). Codman (1917/1996) describes the End Result System as follows: “It demands an analysis of the final result of each case treated and the fixation for responsibility of failure or success on the individual who undertakes the treatment” (p. 112). Furthermore, Codman states, “The End Result System demands an analysis of the reasons why the case has been successful or unsuccessful, and the utilization of the knowledge thus obtained for avoiding future errors and for securing future successes” (p. 112). Codman (1917/1996) coded his results using the following categories:

Errors due to lack of technical knowledge or skill;
Errors due to lack of surgical judgment;
Errors due to lack of care or equipment;
Errors due to lack of diagnostic skill. These are partially controllable by organization;
The patient’s unconquerable disease;
The patient’s refusal of treatment. These are partially controllable by public education; [and]
The calamities of surgery or those accidents and complications over which we have no known control. These should be acknowledged to ourselves and to the public, and study directed to their prevention. (p. 59)
According to Codman (1917/1996), “The really difficult thing about the End Result System is to induce the staff in any hospital to be willing to make a truthful acknowledgment of the personal part which contributes to the success or failure of the cases” (p. 113). Furthermore, Codman (1934) acknowledges,

Of course, these ideas of mine are unpopular with the majority of our profession who have spent their lives in the practice of the art of medicine rather than in that of the science, and, being financially successful, are able to influence the trustees of hospitals against an analysis of results. (p. xxxv)

Even though Codman’s ideas were not widely accepted during his life, the influence of his ideas on measuring the result of treatment, improving the quality of care, and professional accountability are evident in the evolving concern with quality in health care (O’Leary, 1996; Donabedian, 1998).

**Development of the Medical Audit Procedure**

The concern with quality in health care continued to evolve, and following World War II in the Era of Expansion in health care (Relman, 1988), the need to audit medical records using scientific methods was addressed by Lembcke (1956, 1967). The medical audit involved retrospectively reviewing medical records for the purpose of evaluating the medical care. The purpose of the medical audit was to assure that all the benefits of knowledge relating to medicine were being adequately utilized to care for sick people and the desired end of the medical audit was that revealing the deficiencies would stress the necessity to manage the quality of care as it was being rendered (Lembcke, 1956). Therefore, it was important to develop criteria that were as specific as possible so that different people using them independently got identical results - such as determining whether a particular surgery was justified or indicated (Lembcke, 1956).
Development of Donabedian’s Conceptual Framework

Also during the mid-portion of the 20th century (1940s-1960s), a time Relman (1988) refers to as the Era of Expansion, health care experienced an expansion in hospital facilities and the quantity of physicians (Relman, 1988). Access to health care was also increased through the passage of the Medicaid and Medicare legislation in 1965. Passage of this legislation heralded the drastic change in the role of governments (state and federal) in their relationship to health care since governments (state and federal) began providing reimbursement to health care providers for their service and establishing conditions hospitals must meet in order to participate in the Medicare program (Califano, 1986; Jencks, 1994; Starr, 1982; Relman, 1988; Roberts, et al., 1987).

During this time the literature reveals various researchers expressing concern about the hazards associated with hospitalization. For example, in the study, “The Hazards of Hospitalization,” Schimmel (1964) identifies the following six categories of potential hazards of hospitalization: “Reactions to diagnostic procedures; reactions to therapeutic drugs; reactions to transfusions; reactions to other therapeutic procedures; acquired infections; [and] miscellaneous hospital hazards” (p. 101). In another study, the National Halothane Study, the authors note the existence of large variations in postoperative deaths among the institutions in their study (Moses & Mosteller, 1968).

With the expansion in medical specialists, technology, hospital beds and health care insurance, health care costs escalated quickly. This increase in health care costs, thus, became the catalyst for the onset of the second era, the Era of Cost Containment (1970s through the mid-1980s) (Relman, 1988). During this period when concern was growing about the cost and quality of health care, Donabedian (1980, 1982, 1988, 1992) provides his conceptual framework for assessing quality in health care.
Donabedian's conceptual framework has three different components. The three components of his conceptual framework are the structure of care, the process of care, and the outcome of care. Donabedian (1988) states,

Structure denotes the attributes of the settings in which care occurs. This includes the attributes of material resources (such as facilities, equipment, and money), of human resources (such as the number and qualifications of personnel), and of organizational structure (such as medical staff organization, methods of peer review, and methods of reimbursement). (p. 1745)

The process of care consists of those activities occurring within the patient-practitioner relationship (Donabedian, 1980; 1988), and the outcome of care is the end result of care on the health condition of an individual person and/or groups of people (Donabedian, 1988; 1992). Donabedian (1988) emphasizes, “This three-part approach to quality assessment is possible only because good structure increases the likelihood of good process, and good process increases the likelihood of a good outcome” (p. 1745).

**Discovery of Geographical Variations**

Along with the rising cost of health care, another event fueling the concern with the quality of health care was the discovery of sizable variations in the rate of certain treatments in different parts of the United States without an observable difference in the end result or outcome (Relman, 1988). More specifically, Wennburg (1984) identifies, “In Vermont the probability that resident children will undergo a tonsillectomy has ranged from a low of eight percent in one hospital market to a high of nearly 70 percent in another” (p. 9).
Issues of Defining and Measuring Quality in Health Care

In light of the increasing concern with quality in health care, the literature provides insight into the complex issues of defining and measuring or assessing quality in health care. One of the issues is how one defines quality health care (professional perspective, government perspective, consumer perspective, accreditation agency perspective, legal perspective or some combination of these). Another issue is the data one chooses to assess (structural, process, outcome, or some combination). A third issue is the source of that data (administrative data base or clinical record). A fourth issue is the means of evaluating that data (explicit criteria, implicit criteria or some combination). The fifth issue is the means of risk adjusting data.

Understanding the various definitions of quality health care is imperative since the definitions vary in their perspective or frame of quality. The health care professional defines quality from the provider's perspective (Donabedian, 1980; Donabedian, 1988; Palmer, 1991); the government defines quality from the perspective of access and justification of total expenses (Lohr, 1991); the patient defines quality from the consumer's perspective (Palmer, 1991); the accrediting agency defines quality as a balance between outcomes, resources, and costs (JCAHO, 1999); and the legal system defines quality in regards to conformance to standards (Seplaki, 1997).

Palmer (1991) and Brook, McGlynn, and Cleary (1996) state that physicians prefer to define quality in terms of individual patients and physician interventions. In other words, the quality of care a physician provides a patient is that care which is expected to obtain the most desirable equilibrium between the benefits and the risks of that care (Donabedian, 1980).

Both Seplaki and Palmer discuss the federal government's definition of quality health care. Both agree on three elements of this definition, appropriateness, technical
excellence and access. Seplaki defines these three elements in the following manner. He states, “Appropriateness entails the right care at the right time. Technical excellence is present when care is delivered properly. Access indicates the ease with which needed care can be procured by the patient...” (p. 174). In addition to these three elements, Seplaki includes another element, acceptability, and states that acceptability prevails when rendered care is adequate from the patient’s perspective.

However, Palmer (1991) discusses the idea of acceptability when discussing the definition of quality health care from the patient’s perspective. She identifies that consumers not only express an interest in provider competence and access but they also affix a new aspect of quality, which is that their health care is congruent with their own values. In addition to these definitions of quality care, the accrediting agency defines quality or value as follows: “Value in health care is the appropriate balance between good outcomes, excellent care and services, and costs” (JCAHO, 1999, p. PI-1) and the legal definition of quality care involves conforming to community standards regarding the provision of health care (Seplaki, 1997). Thus, depending on the perspective of the definition of quality health care, the characteristics one measures may vary as well as the results of that assessment activity.

Not only is understanding the perspective of the various definitions of quality health care imperative to the issue of quality, but it is also necessary to understand the type of information a particular component of Donabedian’s conceptual framework for assessing quality in health care will provide along with the advantages and disadvantages or limitations of each component. For example, one advantage of using structural data to assess quality health care is that this type of data is fairly inexpensive to gather and analyze (Palmer, 1991). However, a limitation of structural data is that compliance with structural standards does not guarantee that patients will obtain proper care (Palmer, 1991).
Donabedian’s second component of quality assessment is the process of care. This consists of two parts, the technical skills and the interpersonal interaction between the health care provider and the consumer. Specifically, he states, “Technical performance depends on the knowledge and judgment used in arriving at the appropriate strategies of care and on skill in implementing those strategies” (Donabedian, 1988, p. 1743).

Evaluating the technical care involves comparing that care to the best current practice (Donabedian, 1988), which Berwick, Godfrey, and Roessner (1990) describe as frequently being a matter of opinion. Donabedian (1988) also discusses the difficulty of assessing the interpersonal process. One means of assessing the interpersonal process is to conduct a patient survey; however, a recent study of academic physicians regarding the use of patient reports about their care reveals that while physicians are willing to obtain feedback from their clients or patients, the remarks emphasized the physicians’ reluctance to see patient perspectives disclosed or utilized to establish compensation (Covinsky, et al., 1996).

In addition, assessing the process of care involves deciding on the type of criteria to use - either explicit criteria and/or implicit criteria. Donabedian (1988) describes these two types of criteria as follows:

Implicit, unspoken criteria are used when an expert practitioner is given information about a case and asked to use personal knowledge and experience to judge the goodness of the process of care or of its outcome. By contrast, explicit criteria and standards for each category of cases are developed and specified in advance, often in considerable detail, usually by a panel of experts, before the assessment of individual cases begin. (p. 1747)

Each type of criteria for assessing the quality of the process of care has advantages and disadvantages. Implicit criteria allow the “...assessment of representative samples of cases and are adaptable to the precise characteristics of each case...” (Donabedian, 1988,
However, that process is expensive and imprecise (Donabedian, 1988). In contrast to implicit criteria, explicit criteria are expensive to develop, but after development they can be utilized to produce accurate assessments inexpensively. On the other hand, explicit criteria can be utilized only if the criteria have been developed for that particular case(s) (Donabedian, 1988).

On the other hand, Palmer (1991) describes a method for evaluating health care which combines both explicit criteria and implicit criteria. This method employs explicit criteria to judge the process or end result of care for particular categories of health care consumers or patients. In the event a case (or cases) does not meet the explicit criteria, that case (or cases) then undergoes peer review using implicit criteria.

Regardless of the type of criteria, implicit or explicit, the assessment of the process of care has some limitations. For example, the usual primary source of information for assessing the process of care is the medical record (Palmer, 1991). Unfortunately, the medical record contains information about only the hospital level of care and may have incomplete documentation, inaccurate documentation, and/or no documentation regarding the interpersonal process (Donabedian, 1988; Lloyd & Rissing, 1985). In addition, abstracting information from the medical record is a time consuming process (Jencks, Williams, & Kay, 1988; Iezzoni, 1997). Another, at least potential, limitation when assessing the process of care is that the relationship between the medical care process itself and health status is not always direct. In many cases, it may be so confounded by intervening variables such as patient compliance that adequate process may not result in good outcomes. On the other hand, apparently poor process may result in good outcomes if the process criteria selected are invalid or are incorrectly measured. (National Center for Health Service Research, 1977, p. 2)
The third component of health care assessment is the outcome of care. The recent emphasis on outcome assessment stems from

...the recognition that use of structural and/or process variables alone may be invalid because improvements in such measures may not improve health, and the belief that outcome measures have more face validity in that they measure health status directly, thereby allowing changes in health to be documented directly. (National Center for Health Services Research, 1977, p. iv)

Despite the current emphasis on outcome data, there are limitations to the information provided by this type of data. Some of the limitations include the variation among patients regarding the severity of the disease, the existence of other illnesses, the age of patients, and patient’s compliance with the treatment plan. Specifically, Palmer (1991) states,

The more serious disadvantage of measuring quality of care based on patient outcomes is that patients’ health status after receiving care is mostly determined by factors not under the control of the provider, such as the severity of disease, the presence of complications, patient age and resilience, patient willingness to comply with recommended therapy, and the effectiveness of the therapies available. (p. 38)

Another limitation is our knowledge of the effectiveness of care or the impact of health care rendered during ordinary circumstances by the average health care provider for the typical patient or client (Brook & Lohr, 1985). In addition, Brook (1991) states, “Furthermore, much of our scientific information about diagnosis and treatment does not concern effectiveness at all but rather relates to efficacy or the use of a service when provided under ideal circumstances...” (p. 487) such as during clinical trial studies.

As with assessing the process of care, one source of data for assessing health care outcomes is the medical record. Again, the advantage of the medical record is that it
contains clinical information; however, research reveals that the medical record may also contain incomplete and/or inaccurate information (Lloyd & Risling, 1985).

However, another source of outcome data is an administrative data base. An administrative data base is computer accessible and contains demographic information and codes for both diagnoses and procedures (Iezzoni, 1997). Iezzoni (1997) describes the limitations of administrative data. She states, “Administrative data cannot elucidate the interpersonal quality of care, evaluate the technical quality of processes of care, determine most errors of omission or commission, or assess the appropriateness of care” (p. 668). On the other hand the advantages of administrative data are that the data are easily accessible, are not expensive to obtain, are computer readable, and usually include a sizable population. In addition, administrative data may provide a means of screening data to identify quality of care issues that require a more comprehensive investigation (Iezzoni, 1997).

Not only is the issue the type of data to use (the medical record or administrative data) but there is also the issue of how to compare the results or outcomes among various health care facilities. In order to compare data across facilities, there is general agreement on the need to adjust the data to compensate for the fact that some hospitals and some health care providers care for higher risk patients. Thus, the purpose of risk adjusting the data is that the resulting difference then reflects the quality of care and not the severity of the patient’s illness (Epstein, 1995; Iezzoni, 1997). Even though there is general agreement about the need to risk adjust data, Iezzoni (1997) states that at the present time there is not agreement regarding the most appropriate method for accomplishing this task. Specifically, Iezzoni (1997) states, “Determining which risk factors to include and how to measure them generally generates controversy” (p. 1600) especially since “different severity measures frequently produce different impressions about relative hospital performance” (Iezzoni, 1997, p. 1600).
Studies in the health care literature demonstrate the impact of definition and/or methods. For example, the study by Lembcke (1952) illustrates the effect of definition of quality health care. In his study of appendectomy rates he states, "The best measure of quality is not how well or how frequently a medical service is given, but how closely the result approaches the fundamental objectives of prolonging life, relieving distress, restoring function, and preventing disability" (p. 276). Thus, Lembcke’s (1952) definition of quality does not rely on how well the surgeon performed the appendectomy or whether there were or were not complications. This definition of quality is more in terms of the outcomes from a provider’s perspective.

The study by DuBois, Rogers, Moxley, Draper, and Brook (1987) illustrates the effect of the choice of the method to review the process of care. Specifically, this study examined the process of care between high outliers and low outliers on mortality rates. The authors of this study conclude,

Reviews of process of care using 125 criteria [explicit criteria] revealed no differences between the high and low outliers. However, detailed reviews by physicians [implicit review] of the records of patients who died during hospitalization revealed a higher rate of preventable deaths in the high outliers than in the low outliers. (DuBois, et al., 1987, p. 1674)

In addition to the previous limitations to assessing the process of care and the outcome of care, Reason (1990) discusses another limitation. He discusses how hindsight bias influences the interpretation of past events. Reason cautions those examining a situation involving human error, such as an adverse outcome of patient care or failure to meet the standard of care, to make a clear differentiation between the way the preceding events appear having knowledge of the less than desirable end result or outcome and the way they appeared at the time. Likewise, Cook and Woods (1994) state, "Indeed, it is clear from the studies of large system failures that hindsight bias is the greatest obstacle to
evaluating the performance of humans in complex systems after bad outcomes” (pp. 294-295) [italics in original]. Thus, it is clear that measuring or assessing quality in health care is a complex process, which hints at the difficulty in identifying specific indicators of quality.

**Indicators of Quality**

The literature reveals that the concern with quality in health care has been prevalent throughout the twentieth century and continues to the present time, which Relman (1988) labels as the Era of Assessment and Accountability. The literature contains various voices speaking to the concern with quality. On the one hand, the literature reflects numerous studies examining indicators of quality in health care. However, on the other hand, there are those who express concern about the ability of the current systems to ensure quality health care.

The literature contains numerous studies examining various indicators of quality in health care; however, the results of these studies vary at times. For example, one of the most notable public releases of hospital specific data occurred in the mid-1980s. This was the Health Care Financing Administration’s (HCFA) release of hospital-specific data on the mortality rates of Medicare patients (Berwick & Wald, 1990). Following the public release of the hospital specific mortality rates by the Health Care Financing Administration, one can find numerous studies examining the issue of mortality rates and whether hospital mortality rates are an indicator of the quality of care. Unfortunately, these studies provide less than conclusive findings (Fink, Yano, & Brook, 1989). For example, in one study examining the mortality rates of medical patients with congestive heart failure and myocardial infarctions in targeted hospitals, the authors state,

...We determined that hospitals targeted with unexpectedly high
age-sex-race-disease-specific death rates do not provide lower quality of care than do untargeted hospitals, and that any difference in quality of care that lie within estimated confidence bounds have minimal effects on death rate. (Park, et al., 1990, p. 488)

However, another study reviewing the process of care between high outliers and low outliers on mortality presents a somewhat different finding. The authors of this study conclude,

Reviews of process of care using 125 criteria [explicit criteria] revealed no differences between the high and low outliers. However, detailed reviews by physicians [implicit review] of the records of patients who died during hospitalization revealed a higher rate of preventable deaths in the high outliers than in the low outliers. (DuBois, et al., 1987, p. 1674).

The authors of another study examined the importance of the severity of illness in relation to hospital mortality and conclude that the methodology for the Health Care Financing Administration’s mortality data “...is not sensitive enough to wide variations in the condition of patients to be considered a good reflection of quality of care among U.S. hospitals” (Green, et al., 1990, p. 246). In fact, Iezzoni (1997) relates that due to concerns about the trustworthiness and accurateness of the data, the Health Care Financing Administration (HCFA) discontinued the publication of these reports in 1993.

A fourth study examined hospital characteristics (structural characteristics) and mortality rates. These authors conclude, “Both a higher percentage of physicians who were board certified specialists and a higher percentage of nurses who were R.N.s were associated with a significantly lower mortality rate” (Hartz, et al., 1989, pp. 1723-1724). Another study by Keeler, Rubenstein, Kahn, Draper, Harrison, McGinty, Rogers, & Brook (1992) examined the relationship between hospital characteristics (structural data) and the quality of care using both explicit and implicit criteria when examining the issue of patient deaths within 30 days of entering the hospital adjusted for severity of illness at
the time of admission. These authors conclude, “Quality varies from state to state, but
teaching, larger, and more urban hospitals have better quality in general than nonteaching,
small, and rural hospitals” (p. 1709).

Other studies examine indicators of quality such as the relationship between hospital
volume or physician volume of a particular diagnosis or surgery (structural data) and
outcomes. The studies regarding hospital volume and outcomes reveal (in general) a
positive relationship between volume and outcome. Specifically, these studies reveal a
positive relationship between high volume (especially with high risk surgeries or
procedures such as coronary artery bypass, vascular surgery, and coronary arteriograms)
and better outcomes (Flood, et al., 1984; Luft, et al., 1979/1990; Luft & Hunt,
1986/1990; Farber, et al., 1981/1990; Kelly & Hellinger, 1987/1990). In addition, the
studies examining the relationship of physician volume and patient outcome also reveal a
generally positive relationship between physician volume per diagnosis or procedure and
positive outcomes, especially for high risk procedures or diagnoses such as coronary
artery bypass (Hannan, et al., 1990; Kelly & Hellinger, 1987/1990; Roos, et al.,

However, there are studies that cite exceptions to these generalizations. For example,
Riley and Lubitz (1985/1990) identify the existence of the physician volume and outcome
relationship for high risk procedures such as coronary bypass but not for procedures such
as cholecystectomy and inguinal hernia repair. Kelly and Hellinger, also, (1987/1990)
cite mixed findings. They state,

This study showed that patients undergoing cardiac catherizations or CABG were
more likely to survive when their procedures were performed in hospitals with higher
procedural volumes, but that higher physician volumes had no significant effect. For
AMI patients, higher physician volume, but not hospital volume, correlated with
increased survival. (p. 45)
Other voices speaking to the issue of quality in health care express concern regarding cultural barriers to methodically measuring and improving the quality of health care in the current information age and/or question the current methods of attempting to ensure quality health care such as licensure, accreditation, regulatory requirements, and peer review (Bogdanich, 1991; Gross, 1998; Millenson, 1997; Stewart, 1999). One particular example is the book by Bogdanich (1991), *The Great White Lie - How America's Hospitals Betray Our Trust and Endanger Our Lives*. Bogdanich describes the contents of his book as follows:

The stories I have chosen to tell are true stories. I have not used pseudonyms, a staple of many books that report critically on the practice of medicine in this country. These are actual hospitals, doctors, and nurses whose identities are no more hidden than the names of their accusers. (p. 10)

Bogdanich expresses concern about the inadequacies of current means of ensuring quality health care - such as professional peer review, licensing boards, regulatory agencies, and accrediting agencies. Thus, the concern with quality in health care continues to evolve - some speaking words of warning and others striving to improve how we measure or assess quality in health care. In short, the words of Dennis O'Leary (1996), President of the Joint Commission on Accreditation of Healthcare Organizations, reflects the current situation. He states, “In the quality oversight world, the forces which had earlier in the decade driven performance measurement, quality improvement, and public accountability up onto the marquee are still there...” (p. 2).

*The Evolution of the Hospital Accreditation System*

As Dennis O'Leary (1996) acknowledges, there is now an emphasis on measuring performance, improving performance and quality, and being publicly accountable. The
current emphasis on improving performance and accountability mirrors the fourth stage of Garvin's (1988) evolution of the concept of quality, which he labels as "...strategic quality management" (p. 3). This is the current emphasis of the health care accreditation system. However, just as the concept of quality has evolved, so the health care accreditation system has, also, evolved.

The hospital accreditation system began with five minimum standards (Roberts, et al., 1987; The Minimum Standard, 1924). As the hospital accreditation system grew, it became evident that the accreditation program required the involvement of the whole medical and hospital arena and not just the American College of Surgeons. Thus, the Joint Commission on Accreditation of Hospitals was formed and in 1953 it started offering accreditation to hospitals (Roberts, et al., 1987).

Another significant evolution in the hospital accreditation system occurring in 1966, was the decision to change the focus from minimal standards to optimal achievable standards as the federal government was also regulating hospitals by defining minimal standards via their conditions of participation for Medicare (Roberts, et al, 1987).

Roberts, Coale and Redman (1987) state, "The publication of these [optimal achievable] standards was a clear indication of the tremendous progress hospitals had made since the beginning of this century and of the impact of voluntary accreditation on the quality of hospital care" (p. 938). In addition during the early 1970s, the accreditation system began incorporating a medical audit to retrospectively measure the quality of health care being rendered as a component of quality assurance throughout the United States (Roberts, et al., 1987).

The next evolution in the accreditation standards was the shift from a focus on quality assurance to a focus on performance improvement effective in 1994 (Patterson, 1995).

Povar (1991) states that this shift reflects a significant philosophical change since quality assurance focuses on measuring performance to ensure that specific quality standards are
met while performance improvement, which reflects the philosophical ideas of Deming (1986, 1994), Juran (1992), and Crosby (1980), strives to enhance both the current and future performance of health care providers (Seplaki, 1997).

Not only has there been a shift from quality assurance to quality or performance improvement, but the results of hospital surveys by the Joint Commission on Accreditation of Healthcare Organizations are now available to the public (American Hospital Association video). The most recent initiative of the Joint Commission on Accreditation of Healthcare Organizations, the ORYX initiative, focuses on outcomes. Specifically, communication from the Joint Commission on Accreditation of Healthcare Organizations states that ORYX

...will integrate outcomes and other performance measurement data into the accreditation process. For the first time, accredited organizations will be required to collect performance data related to outcomes of patient care and submit that data to the Joint Commission on a continuing basis. The long-range goal of the ORYX initiative is to establish a data-driven, continuous survey and accreditation process to complement the standards-based assessment. (Joint Commission on Accreditation of Healthcare Organizations, 1997)

In addition to the changes by the accrediting agency, the Institute of Medicine (2000) recently published a report addressing the issue of medical errors and quality health care. This report states, “The focus must shift from blaming individuals for past errors to a focus on preventing errors by designing safety into the system” (p. 5).
Philosophical Foundation of Performance Improvement

The evolution of the concept of quality and the current focus of the acute care (hospital) accreditation standards which emphasizes performance assessment, performance improvement, and accountability are clearly evident in the 1999 standards of the Joint Commission on Accreditation of Healthcare Organizations, especially in the chapter on improving organizational performance. These standards reflect the philosophical ideas of Deming (1986, 1994), Juran (1992), and Crosby (1980).

Deming (1986, 1994) is a proponent of the philosophy of performance improvement. His philosophy of management revolves around the need for an organization, which is a system, to have constancy of purpose. Deming advocates building quality and performance or process improvement into the system instead of inspecting for defects. Deming believes that building quality into the system requires understanding the concept of variance, which includes knowledge of both special cause and common cause types of variance and using statistical methods to analyze data. Specifically, Deming (1986) states,

A stable process, one with no indication of a special cause of variation, is said to be... in statistical control, or stable. It is a random process. Its behavior in the near future is predictable. In the state of statistical control, all special causes so far detected have been removed. (p. 321) [italics in original]

In other words, any persisting variation results from chance or common cause(s) (Deming, 1986).

In addition, Deming (1986) identifies the fourteen points of his philosophy of management as follows:

1. Create constancy of purpose toward improvement of product and service, with the aim to become competitive and to stay in business, and to provide jobs.
2. Adopt the new philosophy.
3. Cease dependence on inspection to achieve quality. Eliminate the need for inspection on a mass basis by building quality into the product in the first place.
4. End the practice of awarding business on the basis of price tag. Instead, minimize total cost.
5. Improve constantly and forever the system of production and service, to improve quality and productivity, and thus constantly decrease costs.
6. Institute training on the job.
7. Institute leadership.... The aim of supervision should be to help people and machines and gadgets to do a better job.
8. Drive out fear, so that everyone may work effectively for the company....
10. Eliminate slogans, exhortations, and targets for the work force asking for zero defects and new levels of productivity.
11a. Eliminate work standards (quotas) on the factory floor. Substitute leadership.
12a. Remove barriers that rob the hourly worker of his right to pride of workmanship. The responsibility of supervisors must be changed from sheer numbers to quality.
12b. Remove barriers that rob people in management and in engineering of their right to pride of workmanship.
13. Institute a vigorous program of education and self-improvement.
14. Put everybody in the company to work to accomplish the transformation. The transformation is everybody's job. (pp. 23-24)

Not only does Deming (1986) provide his fourteen points of management but he also provides an example of how to apply his fourteen points of management to a health care
setting. Deming's (1986, 1994) philosophy of management relies on the identification of special or common cause variation using various tools such as control charts and a methodical problem solving approach, known as the Shewart cycle (PDSA) - plan, do study, act - to improve the system.

Juran (1992) has three processes for managing quality. These three processes are quality planning, quality control, and quality improvement. Juran identifies that each of these processes has a general series of procedures or steps (Juran, 1992).

The universal steps for quality planning are "establish quality goals, identify the customers..., determine the customers' needs, develop product features that respond to customers' needs, develop processes that are able to produce those product features, establish process controls, and transfer the resulting plans to the operating forces" (Juran, 1992, p. 15). The serial processes for quality control are: "Evaluate actual quality performance, compare actual performance to quality goals, [and] act on the difference" (Juran, 1992, p. 15). Lastly, the serial processes for quality improvement are as follows:

Establish the infrastructure needed to secure annual quality improvement; identify the specific needs for improvement - the improvement projects; for each project establish a project team with clear responsibility for bringing the project to a successful conclusion; provide the resources, motivation, and training needed by the teams to diagnose the causes, stimulate establishment of remedies, [and] establish controls to hold the gains. (Juran, 1992, p. 15) [italics in original]

Juran also advocates using various tools, such as the flow diagram, spreadsheets, histograms, storyboards, responsibility matrix, control chart, scatter diagram, and graphs, to facilitate managing for quality.

Crosby (1980) emphasizes the relationship of people and quality. He states, "In discussing quality, we are dealing with a people situation" (p. 14) since it is people who transact the business of a service organization or a manufacturing organization. He
defines quality as compliance to specifications or standards. Defining quality as complying to a standard conveys that the standard or requirement must be clearly defined and be measurable. More specifically, Crosby states, “Requirements must be clearly stated so that they cannot be misunderstood. Measurements are then taken continually to determine conformance to those requirements. The nonconformance detected is the absence of quality” (p. 15).

Despite the differing philosophies underlying performance improvement and the variety of names (strategic quality management, total quality management, continuous quality management, continuous quality improvement, or performance improvement), each contains a common thread. That thread is assessing or measuring performance and using the data to either improve or maintain past improvement.

The Purpose and Uses of Assessment

Astin (1993) facilitates our understanding of the purpose of assessment and the uses of assessment data. He states, “As commonly used today, the term assessment can refer to two very different activities: (a) the mere gathering of information (measurement) and (b) the utilization of that information for institutional and individual improvement... (Astin, 1993, p. 2) [italics in original]. Even though individuals may use the term, assessment, to describe two different activities, Astin defines assessment as collecting data for the purpose of improving the operation of the organization and its people. This definition of assessment is consistent with the intent of measurement using the philosophy of performance improvement.

Furthermore, Astin (1993) defines utilization of assessment data as how or the way that the findings of data analysis are actually put to use and he identifies three possible
uses. The possible uses of assessment data that Astin identifies are to aid decision making, to serve as an incentive, and to provide information or feedback. For example, since decision making involves choosing between two or more options, courses of action or paths, assessment data can provide valuable information as to the likely impact of the various options, courses of action or paths (Astin, 1993). In other words, assessment data facilitate decision making by supplying information to the decision maker (Astin, 1993).

A second use of assessment data that Astin (1993) identifies is to serve as an external incentive. The incentive use of data relies on the principles or theories of reward and punishment, and the incentive may function as a reward, punishment, or both (Astin, 1993). The third use of assessment data Astin discusses is the use of data to provide information or feedback. Astin discusses that the feedback theory of data use assumes a desire to learn and to improve and that good information is necessary to inform the learner (individual or organization) about their current performance, strengths and weaknesses, and opportunities for growth and development or improvement.

Even though there are three distinct uses of assessment data, assessment data may serve more than one purpose (Astin, 1993). In other words, assessment data may aid decision making and serve as an incentive; serve as an incentive and provide feedback; or some other combination of the three possible uses. However, Astin cautions that, if the intended use of assessment data is to serve as an incentive and to provide feedback, there may be a tendency to manipulate the data rather than learn from them. Regardless of the intended use of the data, the purpose of assessment according to Astin (1993) is to facilitate improvement.
Summary of Literature Review

In summary, the foundation for this study consists of the concept of framing and organizational theory; the evolution of the concept of quality; the evolution of the concern with quality in health care including issues of defining quality in health care, methods of measuring or assessing quality, the search for indicators of quality, and the evolution of the hospital or acute care accreditation standards; the philosophical foundation of performance improvement; and the purpose of assessment and the three possible uses of assessment data. As the literature review reveals, the evolution of the concern with quality in health care occurs in context with the evolution of the concept of quality in the United States and progresses from emphasizing the concern with structure and inspection to the current emphasis on quality or performance improvement (Bolman & Deal, 1997; Garvin, 1988; McLaughlin & Kaluzny, 1999; Neuhauser, 1990; Patterson, 1995; Roberts, et al., 1987).

Even though health care accreditation has only recently entered the phase of performance improvement, Berwick, Godfrey and Roessner (1990) provide evidence that the tools of performance improvement are applicable to a health care setting. However, McLaughlin and Simpson (1999) remind those in health care that “because CQI [continuous quality improvement] is new; there is little information about how effective such an effort will be after five or ten years” (p. 42). 
The purpose of this study was to explore how implementation of the plan for performance improvement, the performance improvement program required in the performance improvement standards of the Joint Commission on Accreditation of Healthcare Organizations, affected an acute care setting.

Design and Methodology

The design for this study was a case study since this design enabled the researcher to investigate this phenomenon in its natural setting to develop an in-depth understanding of how this current phenomenon, the performance improvement program, affected this acute care setting (Yin, 1994). Qualitative research methods were appropriate for this study because they provided the means to conduct an inquiry in the naturalistic setting utilizing a variety of strategies to gather data (Glesne & Peshkin, 1992; Lincoln & Guba, 1985; Merriam, 1998; Yin, 1994).

Research Site and Participants

The criteria for the selection of the research site and participants were purposeful in nature, which is characteristic of qualitative research (Erlandson, Harris, Skipper, & Allen, 1993; Merriam, 1998). The criteria for selecting the research site included that the
health care organization was an acute care facility in an urban setting and was accredited by the Joint Commission on Accreditation of Healthcare Organizations. The criteria also included that the next accreditation survey was not scheduled during the upcoming year to 18 months. Thus, the facility would have recently undergone their accreditation survey.

The criteria for selecting individuals to interview at this facility included one or more of the following criteria: (1) individuals designated as my liaisons; (2) individuals affiliated with this facility either as an employee or a credentialed health care practitioner; (3) members of the committee responsible for performance improvement activities; (4) individuals referred by a prior interviewee; (5) individuals knowledgeable about one or more performance improvement activities; (6) and individuals willing to talk with me about how the concern with quality affected this acute care setting. Names of individuals who were involved in performance improvement activities and/or who might provide insight as to how the performance improvement program affected this facility were obtained during document review and new employee orientation. In addition, I utilized network sampling, which involved asking an interviewee to refer me to other individuals (Merriam, 1998). Initial contact was made either in person, via phone or in writing. Written, informed consent was obtained from all interviewees prior to the interview (Appendix B).

**Data Collection Procedures**

A case study involves investigating present day occurrences or events when it is not feasible to control the relevant behaviors (Yin, 1994). Yin (1994) discusses that a case study uses many of the same methods as a historical study, which includes review of
documents and collection of artifacts. However, he discusses that the unique strength of a case study is its capacity to deal with diverse sources of data including documents, artifacts, interviews, and observations (Yin, 1994), and these were the methods of data collection used in this study. Thus, the qualitative methods (observing the environment, interviewing participants, collecting artifacts, and reviewing documents) provided the opportunity to conduct a naturalistic inquiry of the performance improvement program in a complex organization from the perspective of the participants (Erlandson, Harris, Skipper, & Allen, 1993; Glesne & Peshkin, 1992; Merriman, 1998). The data collection did not commence until receipt of approval by the institutional review board at the university. Data collection began in August, 1999 and ended the first week of February, 2000. Appendices C and D summarize the monthly data collection activities at the research site.

**Observation**

Observation was a component of this study since observation provided information about the environment in which the phenomenon of my research, the performance improvement program, functioned. As observer-participant my objective was to clearly describe what I observed through my senses (Erlandson, et al., 1993; Glesne & Peshkin, 1992) - such as the environment, the participants, actions and interactions, and my behavior (Merriam, 1998).

Observations of the physical environment included sketching a diagram, which described the allocation of space and any objects and/or resources available, and describing in writing other aspects of the physical setting such as color scheme, lighting, and noise. Observations of the participants included describing who is present and/or how many are present, their location in the environment, and the physical appearance of
individuals presiding or presenting information. Observations of the interactions and activities included such items as what was said and by whom, what activities and/or interactions occurred, when did they occur and how long did they last (Merriam, 1998).

I began data collection in August 1999 by observing the two day new employee orientation, which provided a formal introduction to this facility. In addition, this observation enabled me to begin learning about various aspects of this facility such as the organizational structure, policies and procedures, and the culture. Other specific observations of the environment during my research included a self-guided tour of the medical center; four meetings of the Quality Committee; the preoperative class for patients undergoing joint surgery; a morning with the cardiac case manager; and general observations of the environment. A field notebook was used for initially recording the extensive, detailed notes about the observations as, previously, described. I then transcribed into a typed format my handwritten notes regarding that particular observation and added in handwriting any analytic and reflective comments in the large left hand margin of the page created for that purpose (Glesne & Peshkin, 1992).

**Interviews**

Prior to beginning my research I was not familiar with this facility or its organizational structure even though I was familiar with the diverse functions/activities of an acute care facility and had met briefly with the two individuals at this facility, who were to be my liaisons. (The purpose of this introductory meeting was two-fold. One purpose was to introduce myself and the second purpose was to share with my liaisons about the purpose of my study and the research methods to be used.) Thus, as I began my research I was cognizant of both the purpose of my research and the need to learn more about the environment or context and the organizational structure of this facility to facilitate the
The process of identifying those individuals who might be knowledgeable about the performance improvement program and how it affected this facility.

The first two individuals I contacted to interview were my liaisons as I hoped to learn more about the organizational structure and to begin identifying those individuals I might need to contact. I was able to schedule an interview with one of these individuals the next week (the second week of on-site data collection). This interview provided insight regarding the organizational structure and the names of persons I might contact regarding my research. The other interview was initially scheduled for the third week of data collection. Unfortunately, this second interview was rescheduled more than once; thus, the interview with this individual did not occur until the latter part of the third month of data collection.

In addition to contacting my liaisons, I utilized additional criteria, as previously stated, when selecting individuals to contact for the purpose of scheduling an interview. These criteria included one or more of the following: (1) individuals affiliated with this facility either as employees or as a credentialed health care practitioner; (2) members of the committee responsible for performance improvement activities; (3) individuals referred by a prior interviewee; (4) individuals knowledgeable about one or more performance improvement activities; (5) and individuals willing to talk with me about how the concern with quality affected this acute care setting. Thus, using this criteria, I identified another potential interviewee while observing new employee orientation. This person had been affiliated with this facility for about 20 years in various capacities (staff nurse, nursing supervisor, infection control nurse, employee health nurse, and educator). I subsequently contacted this person and scheduled an interview for the following week (the second week of data collection).

I began interviews by formally introducing myself; sharing the purpose of my research; identifying the need to obtain written, informed consent; providing the
interviewee the opportunity to voice any questions/concerns about my research topic or methods; answering any voiced questions or concerns posed by the interviewee; and asking permission to audiotape the interview for those interviews that were conducted in person. After obtaining written, informed consent and permission to audiotape the interview, the actual interview began using open-ended questions (Merriam, 1998). Interviews continued until I was unable to schedule interviews with additional members of the health care team that had been suggested and the information became redundant (Glesne & Peshkin, 1992; Erlandson, et al., 1993; Lincoln and Guba, 1985; Merriam, 1998).

As I began my research of trying to understand how the performance improvement program affected this acute care facility, I was keenly aware of the purpose of my study, the guiding research questions, and the emergent nature of qualitative research. In other words, I was cognizant that I did not know, in advance, every individual I would interview nor all the questions I would eventually ask (Merriam, 1998). However, the focus of every interview (with the exception of the one interview focused on learning about the organizational structure) was to learn more about the performance improvement program and how it affected this acute care setting. This is reflected in the evolution of the interview questions (Appendix E).

Interviews occurred concurrently with other data collection methods (document review and observations) as reflected in Appendices C and D. As previously stated, in addition to learning about the performance improvement program and the effect of this program on this facility, I needed to learn more about this facility (the environment). This was reflected in the focus of the interview questions in the early phase of my research (Appendix E). Over the course of the first month of data collection, preliminary data analysis indicated the need to refine the initial open-ended interview questions to strive to clarify the interviewee’s perspective of two issues. One issue was the perceived driving
force with the concern with quality at this facility since data indicated several potential
drivers of this concern such as mission, money, and/or the right thing to do. The second
issue necessitating clarification was the interviewee’s definition of the term quality health
care as I wanted to understand the interviewee’s point of view or how they framed that
concept as “...people’s perspectives determine what they see” (Bolman & Deal, 1997, p.
29). Thus, questions focused on clarifying these two issues began to be incorporated into
interviews during the next five weeks of data collection (Appendix E). As data collection
continued (Appendices C and D), the focus of the open-ended interview questions
emerged to the following six questions: (1) Would you share with me about what you
do? (2) How would you define the phrase quality health care? (3) How do you perceive
the concern with quality affects this facility? (4) What do you perceive to be the driving
force behind the concern with quality at this facility? (5) Are there other individuals you
suggest I contact? (6) May I contact you again, if it would facilitate my research?
Appendix E depicts the evolution of the interview questions.

During the first nine weeks of research, I conducted a total of 14 interviews. Even
though I had not asked each of these 14 interviewees the same questions, thirteen of these
interviews had provided insight regarding one or more of my guiding research questions
and one interviewee had provided insight regarding the organizational structure of this
facility. Therefore, I did not schedule a follow-up interview with individuals I had
previously interviewed in order to ensure that I had asked each interviewee the same
questions with the exception of the one interviewee where the focus of the interview had
been on learning about the organizational structure.

I contacted a total of 47 different members of the health care team for the purpose of
scheduling an interview to learn how each of these individuals perceived that the concern
with quality of health care including measuring performance, analyzing the performance
data, and improving performance affected this particular acute care setting. The
individuals I contacted in addition to the 22 members of the Quality Committee (Appendix F) included two senior administrators, three case managers, five support staff, three clinical leaders, the business leader of acute care services, a staff nurse, and ten physicians. Appendix G identifies the titles of those I contacted in an effort to schedule an interview and also identifies whether the individual was a member of the 1999 Quality Committee.

I conducted a total of 40 formal interviews with 36 different members of the health care team using primarily open-ended questions since it was important to learn about this phenomenon from the interviewee's perspective (Merriam, 1998). I conducted a second formal interview with four of those individuals. Three of the second interviews were to continue items not covered during the first interview and the fourth repeat interview was to obtain this interviewee’s input regarding the interview questions since the initial interview focused on the organizational structure of this facility. Appendix H lists the titles of the individuals I interviewed; the date(s) of the interview; and identifies those interviewees who were members of the Quality Committee and/or the Physicians' Quality Committee. I interviewed all members of the Quality Committee or a designated representative with the exception of the chief operating officer since I was unsuccessful in my attempts to schedule an interview with this person.

I took handwritten notes during all interviews to record the content of the interview and all interviews except one were audiotaped after obtaining the interviewee's verbal permission to do so (Erlandson, et al., 1993; Merriam, 1998). The one interview not audiotaped was conducted via phone. Only one interview was conducted as a joint interview and this was done at the request of the interviewees. All others were conducted as an individual interview. In addition to the formal interviews that were audiotaped, there were five occasions I initiated either a phone conversation or personally talked with an individual that I had previously interviewed to gain their input regarding a specific
issue. These issues involved the following: input on obtaining physicians' perspective, the process for approving the proposed revisions to the Performance Improvement Plan, and the existence of Performance Improvement Plans prior to 1998.

Following each interview that was audiotaped, I transcribed the audiotape and then relistened to the audiotape while reading the transcript and made corrections as needed. For the one interview that was not audiotaped, I utilized a similar process. First, I reviewed and expanded my initial handwritten notes and then transcribed the expanded handwritten notes into a typed format. Next, I compared the typed copy to the expanded handwritten notes and the initial handwritten notes and made any needed corrections. These corrections were incorporated on the final typed transcript of the interview prior to sharing a copy of the transcript with the interviewee.

**Documents and Artifacts**

Documents and artifacts were another vital portion of this study. Erlandson, Harris, Skipper, and Allen (1993) state, “The term *document* refers to the broad range of written and symbolic records as well as any available materials and data” (p. 99) [italics in original] and encompasses almost anything in writing that existed before and throughout the investigation. However, for the purpose of clarification, the term document in this study refers to any official record (such as minutes and reports) and other official communication (such as policies, procedures, plans, and budgets). The term, artifact, refers to all other types of data from the environment such as printed e-mail, memos, letters, brochures, newspaper articles, handouts and pictures.

Appendices C and D display the monthly concurrent data collection activities and Appendices I and J list those documents and artifacts, respectively, provided by the facility to review. The document review process began by reviewing the information
received during new employee orientation; the organizational patient care policy and procedure manual; and policy and procedure manuals regarding safety and risk management, nursing, and human resources. I then proceeded to reviewing documents related more specifically to the performance improvement program, which included the current Performance Improvement Plan; the accreditation visit presentation manuals on improving organizational performance and infection control; and the agenda, minutes, and reports of the Quality Committee; and other documents listed in Appendix I. Document review was ongoing during my research at this facility as reflected in Appendix D.

**Journal**

In addition to collecting data via observation, document review and interviews, I maintained a journal throughout the research project (from the time of the prospectus meeting through completion of the final draft). The purpose of this journal was three-fold. First, it provided a record or log of my research activities (Lincoln & Guba, 1985). Second, I utilized the journal to chronicle my reflective and introspective notes, which facilitated recognizing and understanding my biases and my influence on the data collection and data analysis (Glesne & Peshkin, 1992; Lincoln & Guba, 1985; Maxwell, 1996). Last, the journal contained a record of decisions made in regards to the research method (Lincoln & Guba, 1985) and was an invaluable resource in writing chapter three.
Methods of Analysis

Analysis of data was inductive in nature, which involves formulating meaning from a variety of pertinent data (Erlandson, et al., 1993). Data analysis relied on recording the data accurately, filing the data in an easily retrievable manner, and categorizing the data. The constant comparative method, which involves an ongoing comparison of data from an observation, interview, and/or document with other data, was the primary method for data analysis (Merriam, 1998).

To ensure the accuracy of the data, I initially recorded both my observations and the notes from the document review on handwritten notes. I then transcribed my handwritten notes into typed format to facilitate completeness, clarity and readability (Glesne & Peshkin, 1992). Next I compared the content of the typed notes to the original handwritten notes and made any corrections needed. I also maintained a journal to record my thoughts and activities during the study. As with observations and document review, the journal was initially handwritten and then transcribed to a typed format. Third, I took handwritten notes during each interview. In addition, I audiotaped each scheduled interview except one, which was conducted via phone. I then transcribed the interview into a typed format and compared the typed interview to either the handwritten notes or the audiotape making any needed corrections. I also included my reflective and analytic notes in regards to that interview (Glesne & Peshkin, 1992) in the margin of my typed copy. (These comments were not included on the typed copy that I shared with the interviewee.)

In order to facilitate easy retrieval of the data, I filed the data in regards to the source of that data in a chronological fashion. For example, copies of documents and artifacts were filed in chronological order in one notebook; transcripts of all interviews were filed in chronological order according to the interviewee in another set of notebooks;
observations regarding the environment were filed in a fourth notebook. The last chronological file was my personal journal, which recorded my reflections, thoughts, and activities (Erlandson, et al., 1993).

Data collection was ongoing and all data were collected and transcribed by the researcher. Since data collection was ongoing as reflected in Appendices C and D, I examined the data periodically to ensure that the data were meaningful and themes were beginning to emerge (Erlandson, et al., 1993; Glesne & Peshkin, 1992; Merriam, 1998). After completing the collection of data and the transcription of the data into a typed format, I began reviewing the data and categorizing the data using colored markers and pencils to shade data in each category with the designated colored pencil or marker. Initially, I identified four categories but as data analysis continued these initial four categories emerged to a total of nine categories (Appendix K), which were also shaded according to the category using the colored markers and pencils. After categorizing the data using the previously described color shading method, I developed a grid for each research question designating the rows as the category and the columns as the source of the data and completed the grid for each research question designating the location of the data. Next, I reviewed each interview for themes, listed the themes per interview, reviewed the themes across interviewees and used colored pencils to note recurring themes across the different interviews. I followed this same procedure for reviewing the documents for recurring themes. In addition, I reviewed each interview noting the data addressing the final interview questions.

After reviewing and analyzing the data as described, I carefully considered Wolcott's (1990) advice to begin writing since “writing is a great way to discover what we are thinking, as well as to discover gaps in our thinking” (p. 21). Thus, I decided to follow this advice and began the task of writing my findings in relation to my guiding research questions. As I began to write I recognized the need to revise the original categories as I
was unable to organize the originally identified categories to answer the guiding research questions. Thus, the revised categories contained in chapter four reflect the guiding research questions and the themes or categories originally identified became subcategories or threads weaving throughout the findings.

Establishing Trustworthiness

Validity of the data from both interviews and the observations was an important concern. Therefore, I was cognizant of the importance of developing rapport as rapport promotes trust, calms anxiety, promotes acceptance and facilitates (Glesne & Peshkin, 1992) and acquiring "...continual access to information" (Glesne & Peshkin, 1992, p. 94). Establishing rapport included such strategies as dressing in appropriate business attire, being prompt for appointments, being flexible in my schedule to accommodate the needs of the participants, and verbally acknowledging to the participants my appreciation of their contributions to my research. I, also, attempted to maintain a constant vigil on my verbal and nonverbal responses, their impact, and my subjectivity and recorded my thoughts in my journal (Glesne & Peshkin, 1992). Not only did I strive to develop rapport to facilitate my access to additional data, but I utilized the following specific strategies to establish trustworthiness of the data.

Trustworthiness of Interview Data

One strategy I used to ensure the trustworthiness of the interview data was to record analytic and reflective notes parallel to the transcribed content on my copy of the transcript and to maintain a journal of my thoughts, actions, and activities. A second
strategy I used was member checking, which included providing a copy of the transcript (minus the reflective/analytic notes) to the interviewee (Erlandson, et al., 1998; Glesne & Peshkin, 1992; Lincoln & Guba, 1985; Merriam, 1998) along with a request for candid feedback from the interviewee in regards to the accuracy of the transcript. (On one occasion I did not provide the interviewee with a copy of the transcript at this person’s request; however, I did provide this person with a copy of the transcript from our second interview.) I received feedback on seventeen of the transcripts. Two of the individuals providing feedback extensively edited the verbatim transcript while the majority of respondents provided only minor corrections. All feedback was reviewed and utilized in the data analysis including the edited transcripts since the editing did not alter the intent of the original response.

Trustworthiness of Observational Data

In addition to strategies to promote rapport, self-awareness, and trustworthiness of the interview data, there were specific strategies to address the issue of trustworthiness of the observational data. Observations were ongoing throughout the study and I recorded observations in a chronological fashion and included detailed descriptions of what I saw and heard (Glesne & Peshkin, 1992; Maxwell, 1996). I included analytic and reflective notes parallel to the observations, as needed. To ensure completeness of the observation field notes, I expanded my handwritten notes, if needed, as soon after the observation as feasible and, also, transcribed my notes into a typed format (Glesne & Peshkin, 1992).

A second strategy utilized was prolonged engagement as data collection occurred during a six month period of time (August 9, 1999 - February 2, 2000). Prolonged engagement allowed for repeated observations, specifically, of the Quality Committee meetings (total of four observations).
In addition, I utilized formal member checks by sharing copies of transcribed observations (minus the reflective/analytic notes) with participants along with a request for feedback regarding the accuracy of my observations (Lincoln & Guba, 1985). I received written feedback regarding one observation, new employee orientation, and oral feedback regarding another, the first observed meeting of the Quality Committee. After carefully reviewing the written feedback on employee orientation and weighing its meaningfulness (Lincoln & Guba, 1985), I incorporated the feedback in my recorded observation of new employee orientation. However, it was not necessary to incorporate the verbal feedback regarding my observation of the Quality Committee meeting since the comment was regarding the detail of the recorded observations (what I saw and heard) and not the content of the observation.

**Trustworthiness of Interpretations**

An issue regarding the trustworthiness of the data and my interpretations was the issue of bias and reactivity on the part of the researcher while recording observations and interpreting the data. One strategy to address this issue was the use of member checks as described for the interviews and observations (Lincoln & Guba, 1985). Also the use of reflective memos and reflective/analytic notes on the observations and interviews served as a means to facilitate recognizing and understanding both my biases and my influence on the collection and analysis of the data (Glesne & Peshkin, 1992; Lincoln & Guba, 1985; Maxwell, 1996).

Another concern was the issue of the validity of my interpretations. The strategy for addressing this concern was to collect data from a variety of sources, a strategy known as triangulation (Glesne & Peshkin, 1992; Maxwell, 1996; Lincoln & Guba, 1985). Data for this study included collecting information from interviews, documents, artifacts, and field
observations and triangulation involved validating the data “...against at least one other source (for example, a second interview) and/or a second method (for example, an observation in addition to an interview)” (Lincoln & Guba, 1985, p. 283). A grid was developed to ensure triangulation of data either from another interviewee, observation, and/or document. In addition to triangulation, another strategy was the use of formal member checks throughout the study, as previously described (Lincoln & Guba, 1985). The last strategy to address the trustworthiness of the data has been to acknowledge and document the limitations of the study by specifying the individuals contacted for interviews, the individuals interviewed, the documents reviewed, and the observations made during the study as reflected in Appendices C - J (Glesne & Peshkin, 1992).
CHAPTER 4
FINDINGS

Introduction

The purpose of this case study was to explore how implementation of the plan for performance improvement, the performance improvement program, affected a particular acute care facility as perceived through multiple data sources. The findings from this case study will be presented in the following six sections. Section I will describe the setting of this study. Section II will provide a description of the performance improvement program and the participants. Section III will address the evolution of the performance improvement program and how various members of the health care team perceived the effect of the performance improvement program. Section IV will describe how the performance improvement program affected the operation of this acute care facility. Section V will discuss the uses of the various performance improvement data collected by this facility utilizing the three categories of uses identified by Astin (1993). Last, Section VI will briefly summarize my findings.

Section I: The Setting

In order to understand how the concern with quality and the need to provide evidence of quality affected this acute care setting, it was necessary to learn about this particular acute care facility as well as learn about the purpose and goals of this facility’s Performance Improvement Plan. This facility, which provided a variety of inpatient and
outpatient services, was located in a metropolitan area in the southeastern United States. There were three additional acute care facilities in this city within about a fifteen minute commute, which also provided similar services as this particular facility. This facility was accredited by the Joint Commission on Accreditation of Healthcare Organizations (as were the three other facilities in this city). More specifically, this facility’s Plan for Provision of Care described this facility as being an acute care facility with more than 470 beds providing diverse services to the citizens in a 12 county area.

This facility employed various licensed and non-licensed personnel and also had “...a voluntary medical staff...” In other words, members of the medical staff had requested and been granted privileges to practice at this facility. The medical staff elected a chief of staff, who then served for one year and was responsible for the different committees and departments of the medical staff. More specifically, the medical staff coordinator reported that there were over 700 health care practitioners credentialed through the medical staff office at this facility. Of those 700, approximately one third held active medical staff privileges while the remaining two-thirds had privileges in other categories. According to the medical staff coordinator, there were two major divisions of practitioners credentialed through the medical staff office. One division was physicians and the other division was non-physicians. The specific categories of physicians were active, courtesy, provisional, honorary, affiliate and temporary. The second major division of health care practitioners credentialed through the medical staff office were non-physicians, which included allied health practitioners (podiatrists and psychologists) and physician’s assistant. The subcategory of physician’s assistant was described as a broad spectrum of practitioners that assist a physician, which included trained physician’s assistants, certified nurse anesthetists, nurse midwives and surgical assistants. Thus, the categories of practitioners credentialed through the medical staff office were diverse and
included active staff, courtesy staff, provisional staff, honorary staff, affiliate staff, allied health, and physician assistant.

This particular acute care facility was part of a regional health care system, which included this facility; another smaller facility; various inpatient services; various outpatient services (including home health, hospice, and durable medical equipment); physician practices and an ambulatory surgery center. The health services this particular acute care facility provided were organized according to the various health services - for example, women's services, surgical services and ambulatory services.

The senior leader was the president and chief executive officer. In addition to the chief executive officer, the administrative structure included the chief operating officer of this particular acute care facility and several senior vice-presidents and vice-presidents, who were responsible for the varied activities of the health system - such as new business development and the physician practices; mission services; network development including government relations; financial operations; resource development; and information systems. It was reported that members of the leadership team of the health system participated in one or more of the following administrative councils or groups. These were the administrative council, which met monthly and addressed various operational issues; the strategic planning group, which also met monthly; and the senior management council, which met weekly "...to coordinate our strategy and operational issues...." More specifically, senior management was described as the group which focused on the "...key strategies and how we are implementing them."

Not only was this particular acute care facility part of a regional health system but it was also affiliated with a large non-profit organization. In fact, a publication by this large, non-profit organization contained a message from the chief executive officer and president of this large corporation in which he described this large, non-profit organization as "...a dynamic, growing organization of dedicated people working to
achieve our mission....” The mission of this organization was to improve the general condition and well-being or health of their communities with an emphasis on those human beings in need as an extension of the healing ministry of Jesus Christ. In addition, the chief executive officer and president of this particular acute care facility and this regional health care system stated: “One of the nice things is that our mission is to continue the healing ministry of Jesus. It’s pretty obvious that you take care of people.” Documents reflected that this organization was affiliated with and guided by the doctrine of a well-known Christian denomination and that those affiliated with this organization must comprehend and be committed to helping the organization adhere to the moral and social doctrines of that religious denomination.

The religious affiliation of this acute care facility was evident throughout the study. Some of the evidence was in the religious decor of the facility. Other evidence included specific aspects of the new employee orientation program, information in documents identifying the religious affiliation and interviews with various members of the health care team who shared their views as to the impact of the mission and core values on this facility and its operations.

Section II: The Performance Improvement Program and the Participants

The purpose of the performance improvement program as identified in this facility’s 1999 Performance Improvement Plan was “...to utilize an interdisciplinary approach to continuously improve the quality of patient care/services in a manner that is efficient, effective, and consistent with the philosophies and goals of the institution and...” the corporation with whom this local institution was affiliated.
The goals of this program as stated in the 1999 Performance Improvement Plan were to:

1. Evaluate and improve the quality of patient care and to assure appropriate utilization of hospital resources through an effective mechanism for monitoring, evaluating and improving patient care and support services.
2. Promote improvement activities which positively impact the organization’s measures of success.
3. Meet requirements of laws, regulatory agencies and hospital accreditation organizations.
4. Develop a mechanism to identify and manage sentinel events.

My first introduction to the performance improvement program occurred during day one of new employee orientation when the facilitator addressed the goals, service statement, mission and core values of the corporate entity and this facility. The first goal of this organization reflects the religious orientation of this facility. The second and third goals address the relationship of this facility with their patients/customers and associates. The fourth goal stresses improving “the quality of our service,” which the facilitator stated was “continuous and ongoing.” The focus of these goals was also evident in the service statement and the values of this organization. The six values were listed and defined for participants. These values included “excellence, human dignity, justice, compassion, sacredness of life [and] service.” In addition, during an orientation activity, participants were informed that their feedback from that activity would be shared with the areas involved as part of continuous quality improvement.

Following orientation, I gleaned additional insight about the performance improvement program and its participants by reviewing documents (Appendix I), interviewing members of the health care team (Appendix H), and observing Quality Committee meetings. The 1999 Performance Improvement Plan identified that the
ultimately responsibility for all hospital activities including performance improvement” belonged to the Board of Directors. The plan also identified the two committees through which the performance improvement activities were to be accomplished as well as the mission and goal of those committees. More specifically, performance improvement activities were to be accomplished through two separate committees, the Quality Committee and the Physicians’ Quality Committee.

The mission of the Quality Committee and the Physicians’ Quality Committee as stated in the Performance Improvement Plan (1999) was to support and coordinate the performance improvement activities within this particular acute care facility. The stated goal of the Quality Committee and the Physicians’ Quality Committee was “...to promote customer satisfaction and quality outcomes through the provision of efficient, effective health management services....” These health management services were to be congruent with both the strategic plan and the mission, vision and values of the corporate organization.

The 1999 Performance Improvement Plan included a general description of the composition of both the Quality Committee and the Physicians’ Quality Committee. Members of the Quality Committee were representatives from support services; the medical director; the vice-chief elect or his/her liaison; the chief executive officer or his/her designee; the chief operating officer or his/her designee; representative(s) from home health, hospice and durable medical equipment; a representative from the physician practice division; representative(s) from the leadership of the various health service areas or a designee(s); and the compliance officer for the corporate-wide program on ethical/legal responsibilities.

The Physicians’ Quality Committee consisted of two categories of members. One was voting members and the other was non-voting support staff. The voting members of the Physicians’ Quality Committee were listed as follows:
1. Chief-Elect of the Medical Staff;
2. Vice Chief-Elect of the Medical Staff;
3. Vice-Chairman of each medical staff department [anesthesia, emergency medicine, family practice, medicine, obstetrics/gynecology, pathology, radiology and surgery];
4. Medical Director;
5. COO [chief operative officer] or designee; and
6. Health Service Line representative.

(In the 2000 Performance Improvement Plan, the chief operating officer and health service representative were listed as non-voting support staff.) Non-voting support staff for this committee included the physician quality analysts; the chair of the Quality Committee; the Clinical Outcomes Leader; a representative from Medical Records/Business Leader or designee; a representative from Risk Management/Safety; the Regulatory Compliance Consultant, and others as indicated. All of the non-physician members of this committee were also members of the Quality Committee except one.

According to the 1999 Performance Improvement Plan, the scope of the performance improvement program applied “...to all service areas and associates whose activities within the institution have either a direct or indirect influence on the quality of patient care.” The plan, also, specified that the responsibility of the Quality Committee and the Physicians’ Quality Committee included prioritizing and coordinating performance improvement activities in light of the stated mission, vision, values and strategic plan. The “scope of the program” included a variety of activities such as the work of various teams (key process or interdisciplinary), activities of the medical staff, initiatives of the organization, investigation of sentinel events, and results of the corporate indicator project.
The measurement activities specified in the 1999 Performance Improvement Plan included the following:

1. Data collection from processes and outcomes;
2. High risk; high volume; high cost and problem-prone processes;
3. Patients' needs, expectations, and satisfaction;
4. Results from infection control activities;
5. Safety of the care environment;
6. Risk management findings;
7. Utilization management data;
8. The...[corporate] report card;...

and other corporate reporting monitoring/activities.

The chair of the Quality Committee described the Quality Committee and its function in the following manner: "Think of the Quality Committee as being representatives of the hospital, which they are. They come from various areas of the hospital." This committee was further described by the chair of the Quality Committee as being more like a working group - serving as both a resource and a sounding board - and having "...a more global sense of many things that are happening." In differentiating these two committees, the chair of the Quality Committee described the Physicians' Quality Committee as more of an informational group because by the time the information was presented to that group it had been reviewed and refined so that the information being presented to that group was very meaningful.

As previously noted, the Physicians' Quality Committee was primarily a physician committee; however, there were non-physicians who attended the Physicians' Quality Committee and all but one of the nonphysician members of the Physicians' Quality Committee were members of the Quality Committee. The purpose of having overlapping members as described by the chair of the Quality Committee was to facilitate
communication between the committees. Those individuals designated as being on both committees as identified in the 1999 Performance Improvement Plan and the attached list of members were the chief operating officer, the medical director, health service leadership representative(s), medical staff quality analyst (medical staff liaison to the Quality Committee), chair of Quality Committee, the business leader, the clinical outcomes leader, and the consultant for regulatory compliance. In addition to these two formal committees, interviews, review of documents and observations revealed participation in the performance improvement program by a variety of members of the health care team. Participants included not only committee members but also other employees and/or physicians affiliated with this facility.

The chair of the Quality Committee summarized the description of the performance improvement program at this facility as an "...improvement process that works for our organization, our culture, and where we are. We've been on our own journey and one that makes sense for us. And we know it's not a done deal. We're looking at it constantly." In addition to the chair of the Quality Committee, who portrayed the current performance improvement program as being facility specific and continuing to evolve, others at this facility also provided insight regarding this facility's performance improvement journey.

Section III: The Evolution and Perceived Effects

Interviews with various members of the health care team provided insight as to this facility's performance improvement journey and the perceived effect of this facility's performance improvement program. The stated goals of this performance improvement program focused on the following four areas: 1) evaluating and improving patient care;
2) appropriately utilizing resources; 3) promoting improvement activities; and 4) complying with regulatory and accreditation standards. After careful analysis of the data from the interviews for themes, nine categories emerged describing the journey and the perceived effect of the performance improvement program at this facility. The nine categories are the evolution of the concern with quality; the impetus for the concern with performance improvement or quality; the rationale for the two separate committees (Quality Committee and the Physicians’ Quality Committee); communication between the Quality Committee and the Physicians’ Quality Committee; the functions of the Quality Committee; hindrances to performance improvement activities; the impact of the case management system on patient care; the impact of consumers; and the influence of corporate initiatives, regulatory requirements, and/or accreditation standards.

**Evolution of the Concern with Quality**

Several members of the health care team shared their perceptions of the evolution of the concern with quality at this particular facility and the internal changes that had occurred, which reflect Bolman and Deal’s (1997) symbolic frame. These changes involved the focus of the quality/performance improvement program; the integration of the quality/performance improvement program; the change in the role and character of the Quality Committee; the participation of members of the health care team; the ownership of performance improvement initiatives; and the emphasis on measurement.

**The Focus of the Quality/Performance Improvement Program**

One individual described the change in the focus of the quality program from being where “...you had one or two people who did quality in a hospital” to having teams where
“everyone is involved from the housekeeper to the CEO.” Another individual described the change as transitioning from quality control and quality assurance to quality or performance improvement. This individual elaborated further by stating: “We still have quality control. We still have some quality assurance. But more and more what you find the departments and the units working on is quality improvement.”

A third individual described the change regarding the usefulness of the performance improvement activities. This evolution was described as follows:

When I started we had this structure. I don’t know that we ever used that to impact change. It’s just like an exercise that we did in getting some reports filed. ...I think the information has become more useful in that we are working on things that are important.

**The Integration of the Quality/Performance Improvement Program**

Various members of the health care team provided insight regarding the integration of the performance improvement program during the past several years in terms of becoming part of the culture. The chair of the Quality Committee used the analogy of a journey that this organization had been taking during the past seven or eight years in an effort to show the accreditation agency the way this facility worked cooperatively as a system as opposed to the function of individual departments.

Another individual related that about seven years ago this organization “...started making some organizational changes for performance improvement and widening that out from the medical staff.” This individual also characterized this organization as having progressed from generating lots of reports for the accreditation survey to tying the Performance Improvement Plan to the strategic plan. This change was characterized as it
"used to be something you literally pulled out for your surveys. Now, it’s how you do business. It’s not that quality is in addition to your business. It is your business."

A third individual commented: "Quality is not a program here so much as it permeates. Everything we do is performance improvement related." On the other hand, a physician stated:

When I’m taking care of Ms. Jones over in the CCU [cardiac care unit] with an acute MI, do I know that there’s any quality initiative going on about that? No. There may very well be. But am I aware of that? To be honest, not really. I know there are some things they are looking at.

This physician then proceeded to discuss his awareness of the recent initiative regarding the use of a particular category of medications recommended in the treatment of patients diagnosed with congestive heart failure.

Furthermore, this physician stated that physicians have a tendency to think their problems or issues are the most important and the two quality issues of physicians regarding health care at this facility involved the following: “Is the care of my patient being delivered?” and are my orders being implemented in a timely manner?

The Change in the Role and Character of the Quality Committee

One member of the Quality Committee described the change in the role of the Quality Committee as the committee had “...grown and begun to take on more responsibilities and see themselves as more responsible for the big picture within the hospital.” Another member of the Quality Committee described the change in the role of the Quality Committee as “they’re looking at it more in terms of how does this tie in with the strategic plan, which is so far from where we were in terms of lay low, people have real work to do.”
A second change reported by a third member of the Quality Committee was in the character of the Quality Committee meetings. This individual indicated that the Quality Committee used to consist of vice-presidents and other leaders and that the meeting was very formal and rigid. This individual then described that the character of the Quality Committee meeting had "...changed dramatically as we’ve grown and implemented CQI [continuous quality improvement] teams and revamped our whole Quality Committee. Now we have representation from all levels on the committee" and the meetings were described as being less formal and rigid. However, there were other members of the Quality Committee who commented on the size of the current Quality Committee (over 20 members) and that it was continuing to grow and/or voiced the opinion that the Quality Council still consisted primarily of those in leadership or administrative positions.

*The Participation of Members of the Health Care Team*

Interviewees provided insight into various ways members of the health care team participated in the performance improvement program. Some of the ways revealed in the interviews were via a multidisciplinary cooperative group, a special multidisciplinary team, committees (medical staff and/or hospital), and corporate groups/meetings.

*Multidisciplinary Cooperative Group*

One way of participation was via a multidisciplinary cooperative group which was defined as a group of key people involved in the process of care. Each of the 16 multidisciplinary cooperative groups consisted of "anybody who has a key role in the process of care we’re investigating" such as physicians, pharmacy, the case manager, staff
nurses, nursing leadership, and others as indicated. The chair of the Quality Committee described that the multidisciplinary cooperative groups had facilitated the involvement of physicians in performance improvement activities during last seven to eight years.

*Special Multidisciplinary Team(s)*

Another means was participating as a member of a special team that had been formed to address a particular problem or issue. There were various comments about the experience of serving on a team. One individual stated: “Now, you have teams. Everyone is involved from the housekeeper to the CEO [chief executive officer]. In addition, this individual expressed that employees were excited about participating on a performance improvement team because they desired to affect change and they understood there was a process. Another individual related how easy it was to get a multidisciplinary team together to address a specific issue. This person stated that at times “we just call a group together” to address an issue. However, this person also stated: “Some issues are so large, like improving access to the organization, that you have to have a formal team and facilitator.”

A staff nurse described both a positive and a negative experience of participating on a project team. This staff nurse described the worst team as consisting primarily of nurses as this group was short-sighted in examining the issue. On the other hand this nurse described the best team as one that had all disciplines involved. Specifically, this nurse stated: “So, even though each one of us had different areas we wanted to concentrate on, we had somebody there who could let us know what the limitations were of what we could and could not do.” In addition, this nurse stated that on this particular unit the nurses rotated so that various nurses were involved on different teams.
In contrast to this experience, however, another individual also shared an experience of being a member of a team, which had been formed to address a specific concern. This individual reported that the team made some recommendations, and those recommendations were presented to the Quality Committee "...to decide what we’re going to do about it." However, this individual was not aware of the outcome of that report.

* Committees (medical staff and/or hospital)

A third means of participating was via committees which might be either a medical staff committee (such as the Pharmacy and Therapeutics Committee or the Infection Control Committee) or a committee of the medical center/hospital (for example, the Safety Committee). One example of participating in the activities of a medical staff committee was shared by the Infection Control Nurse. The Infection Control Nurse described that role as a dual role. One role was serving as the infection control coordinator which encompassed the three duties of surveillance, prevention and control of infection for both patients and employees and sharing the findings from the review and analysis of data on the various infections with the hospital epidemiologist.

The second role involved supporting the work of the medical staff’s Infection Control Committee. The Infection Control Nurse stated that this aspect involved working closely with the physician chair of the Infection Control Committee, who was the hospital epidemiologist, to develop the agenda for the committee’s quarterly meeting and recording the minutes of those meetings.

An example of participating in the activities of a medical center committee was the Safety Committee. The Safety Coordinator related that there were seven important functions of the Safety Committee. The seven functions identified were safety
management, hazardous materials and waste, security, emergency preparedness, medical equipment management, utility management, and life safety. The Safety Coordinator stated: "We decided to divide the work of the Safety Committee based on those important functions and we divvied up the behind the scenes work into those teams so that we had a method for a lot more people to be involved...." The Safety Coordinator also related that members of the Safety Committee served as the chairs of the teams or subcommittees that addressed those seven functions.

The Safety Coordinator related that the Safety Committee utilized a standard agenda, which included reporting on specific quality indicators or key processes. The Safety Coordinator discussed that key processes were reported to the Safety Committee and then to the Quality Committee. In addition, the Safety Committee also submitted a quarterly report to the Board.

* Corporate Groups/Meetings

The fourth method of participation involved corporate level activities. Some examples of corporate type meetings/committees/groups described by interviewees involved such areas as quality, strategic planning, compliance officers, materials resource managers, operations, finances, information systems, and human resources.

Ownership of Performance Improvement Initiatives

There was consensus among the various interviewees that the Quality Committee did not approve performance improvement initiatives. One Quality Committee member stated that it was the responsibility of the department to decide on quality outcomes and initiatives and described the role of the Quality Committee as follows: "The role of the
[Quality] committee is not to say whether that’s right or wrong. The role of the committee is to say, ‘You’ve decided you want to do this. Now, how may we help you achieve it?’ ”

Even though the Quality Committee did not formally approve performance improvement initiatives, the committee had devised a tool to facilitate deciding which projects to undertake. More specifically, this tool was described as a set of questions to facilitate identifying the impact of this project and deciding if it was feasible to devote the time, energy, and financial resources to that project (Appendix L).

In addition, the chair of the Quality Committee described their method for tracking the various initiatives. The tracking method was called the quality matrix. The chair of the Quality Committee stated: “Every report that’s turned in is tracked through the matrix. It just shows you flagrantly where there’s not enough activity and where we’ve got activity.”

Not only was a particular area responsible for making decisions about the particular performance improvement process that they wanted to address but they also had the option to present an oral report (along with submitting a written report) or to file the report. A filed report was described as a written report submitted to the Quality Committee to be filed in the notebook, which contained all the written reports, and the contents of written reports submitted to be filed were not formally shared with the committee. Even though the contents of written reports were not formally shared with the committee, it was stated that the filed reports in the Quality Committee notebook were available for anyone who would like to review them. On the other hand, another member of the Quality Committee expressed the opinion that “we need to really be paying attention to all the things that are turned in to the Quality Committee. ...There is no oversight of the filed reports and that’s a big loss to the organization and to the groups that are doing those studies.”
The Emphasis on Measurement

Several interviewees commented on the concern with measurement. One individual related: “Quality has to be measured now. You have to have documentation. You have to have some measurement tool. That’s the state of the art way of doing business.” Another individual stated: “Everyone knows the importance of being able to measure what you do here. We have to be able to quantify all of our indicators.”

The medical director also discussed the importance of measuring indicators of quality as reflected by the following statement.

I think until you begin to aggregate and look for outcome data and use both internal and external benchmarking, you don’t have any idea whether you have quality or not. Anecdotally, we all remember our good cases. We all remember occasional disasters, but we really have no idea about how we do overall.

Although there was acknowledgment of the importance of quantitative measures, one member of the Quality Committee described the difficulty of quantifying all measures. Specifically, this individual shared the dilemma of identifying appropriate quantitative measures for some initiatives such as patient spirituality.

Impetus for the Concern with Quality or Performance Improvement

The members of the health care team perceived the impetus or the driving force of the medical center’s concern with quality in four different ways. Some perceived the impetus as the need to demonstrate compliance with various regulatory or accrediting agency requirements (for example, the federal government, corporate and/or Joint Commission). In fact, the medical director when talking about how the concern with quality affected this
facility responded by stating that "...were there not external pressures, I don’t know how a health system would react." This individual also stated:

If there’s any value to the Joint Commission, if there’s any value to purchasing groups, the value that they bring on the positive side is that they are forcing us to look at quality information, respond to their benchmarks, and to act on information that says there’s an opportunity to improve, to move to and past the median.

Others perceived the impetus as the mission and core values of the organization as reflected in the following statements:

Everyone is concerned about the bottom line and you have to or we won’t be here. But I think we’re so blessed with our mission and our core values of doing all these right things and...our concern is first and foremost and always will be that patient, that customer, the care that we’re doing.

A third perceived impetus was the issue of being economically viable or being able to remain in business in a competitive health care environment. Although there was the expressed need to control cost to stay in business, one individual dealing with the financial aspect of providing health care expressed the belief that "...sometimes money takes a back seat." Another individual commented: "...Our primary focus is patients and the quality of their care. We’re all committed to being lean and mean in the overhead areas and trying our best to still give the patient what they need."

Possibly a fourth driving force might be customer satisfaction. However, customer satisfaction might also be related to remaining in business in this competitive health care environment. For example, one interviewee emphasized the importance of customer satisfaction as it related to meeting the requirements of the payer. This individual stated: "Like it or not, it’s a payer’s market and if you don’t meet the requirements of the payers, you’re no longer going to be able to provide the service no matter how good your
intentions.” Another individual stressed the issue of customer satisfaction as it related to meeting the expectations of your patient customers as follows:

...I think most people know how to judge what they believe is quality and exercise their right to choose a different physician, if they are unsatisfied. And that’s really the ultimate test of quality, in my opinion, is if you see customers, patients, clients moving away from you, it’s probably an indicator that something is wrong and you’re not meeting their expectations.

**Rationale for Two Separate Committees**

Interviews with members of the health care team addressed the rationale for the two different committees - the Quality Committee and the Physicians’ Quality Committee. One individual who attended both committee meetings described the issues addressed at the Physicians’ Quality Committee meetings as, “generally, it’s almost the same as what you’re going to find in Quality Committee.” However, the time of the meeting was more convenient for the physicians and there were not as many people who attended that meeting. Another individual, who also attended both committee meetings, stated: “We have conceptually thought about making it one group,” but went on to state that the need for the two committees related to issues of privacy and confidentiality.

Relating to the issue of confidentiality, one physician expressed the dilemma of addressing quality issues in health care given the reality of malpractice suits. More specifically, this physician stated that quality should be “...an issue to be dealt with rather than a malpractice suit to be dealt with. You can’t have it both ways.”
Communication between the Physicians’ Quality Committee and the Quality Committee

Interviews provided evidence of efforts to facilitate communication between these two committees. For example, the chair of the Quality Committee commented that some of the members on these two committees were the same. In other words, some individuals attended both the Quality Committee and the Physicians’ Quality Committee. Another individual described the communication as a two-way process. A third individual discussed that the medical director, a physician, provided a means of physician input to the Quality Committee. A fourth comment by a member of the Quality Committee was that “...I think that they’ve probably learned and appreciated what’s needed by the Quality Committee from Physicians’ Quality Committee. I think we have a pretty good handle on when it’s appropriate for it to come to Quality Committee and when it’s not.”

In contrast to these comments, an individual who attended both meetings expressed concern about the perceived lack of communication between these two committees regarding the respective committee’s activities. For example, it was stated that the Quality Committee had not been receiving a summary report of activities of the Physicians’ Quality Committee. However, this individual also commented that this was beginning to be addressed and stated that certain individuals were now discussing the issue of improving the paper flow between the two committees.

Other examples of communication between the two committees were that some reports were presented to both committees. These included reports like the Infection Control Committee, the multidisciplinary cooperative groups, and results from the corporate indicator project.
Functions of the Quality Committee

Interviews with various members of the health care team revealed their perceptions of the function of the Quality Committee. One individual described the Quality Committee as follows: "There is a group within the hospital called the Quality Committee that works in terms of improving the departmental operations..." as well as facilitating compliance with various accreditation and regulatory standards. A member of the Quality Committee described the function of the Quality Committee as being a resource, a sounding board, and reporting outlet and providing the means for both clinical and non-clinical areas to assemble, discuss and present actions that have been taken to improve or to demonstrate outcomes that have been achieved. However, approving requests for various performance improvement initiatives was clearly not a function of the Quality Committee. Two additional functions of the Quality Committee were to serve as a storehouse of information and to coordinate the reporting about various performance improvement initiatives.

Another function of the Quality Committee revealed during interviews was to conduct an annual retreat. The purpose of this retreat, which had been held annually since 1997, was to review the Performance Improvement Plan and draft proposed revisions to the current plan. The proposed revisions would then be presented to the Physicians’ Quality Committee for their review and approval. Ultimately, the plan would be submitted to the Medical Executive Committee and, finally, to the board for their review and approval.
Hindrances or Constraining Factors to Performance Improvement Activities

Several interviewees addressed hindrances or constraining forces on performance improvement initiatives. Three categories of hindrances emerged from the interviews. These three categories involved availability of resource, the impact of finances or reimbursement on the plan of care, and the varied perspectives on quality health care.

Availability of Resources

One hindrance or constraining factor involved the availability of the following interacting resources - personnel, time, equipment, and money - and several interviewees spoke to this issue. For example, the chair of the Quality Committee when discussing the "Project Summary Form" (Appendix M) stated that the "Project Summary Form is a methodology that was created to help people ask questions, critical questions about our organization and what we’re working on..." and to facilitate making decisions about what initiative would most likely provide the greatest return on our investment.

A second individual spoke to the issue of doing more with less when talking about the various demands on one’s time. For example, it was discussed that the report submitted to the Quality Committee was to be in a particular format (the Project Summary Form - Appendix M). However, this individual related that with the various demands on one’s time that writing the report in the format required by the Quality Committee was, possibly, the last thing to occur. Another individual also related the concern of having to do more with less when discussing the need to address specific Joint Commission recommendations and the stated intention not to provide additional man hours or full time equivalents (FTEs) to accomplish this. Other individuals discussed the need to address specific recommendations from the recent accreditation survey and that physicians were
"...torn between how much time they spend with patients and how much time they have to spend on these committees to do these kinds of things" or time involved with completing various types of paper work.

In addition, there was the expressed need for information systems capable of providing "...accurate, pretty contemporaneous data" and that the available systems were not easy to use. However, the person discussing this also described the dilemma of deciding whether to purchase equipment or hire personnel in a time of limited resources and stated: "If you're going to make a decision about six care givers at the bedside versus an information system and a system analysis person, we're down so low in our care giver situations that we have to choose the care givers and not the other equipment."

Another concern expressed was in regards to the resources available for assessing the quality of health care. For example, regarding the tools currently available to assess the quality of health care, one physician opined: "We just have some tools that can look at a piece of it." In other words, there were not tools available to examine the whole picture. Furthermore, this physician expressed the following concern:

You can make a big deal out of a small piece of it [data] or not depending on what the situation is. I'd say it depends on the interests and motive behind whoever is trying to collect material. You can use statistics to show lots of different things depending on what you want to show, depending on what you want to hide.

**Impact of Reimbursement on the Plan of Care**

A second category of hindrances or constraining factors was described as the hesitancy of health care providers to consider the impact of financial resources on the plan of care. One individual described this as follows: "It's a huge leap to get clinical people to think in terms of everything that impacts the patient and money impacts the patient."
A third category of hindrances or constraining factors was the various perspectives or frames of quality in health care. Bolman and Deal (1997) state, "The ideas, or theories, we carry with us determine whether a given situation is confusing or clear, meaningful or cryptic, a paralyzing disaster or a learning experience" (p. 30). Thus, an individual's ideas or theories impact their perception and interpretation of a given situation since there is clearly too much occurring in any situation for that person to pay attention to every detail (Bolman & Deal, 1997). Bolman and Deal discuss the two functions of our theories, which are to "...tell us what is important and what can be safely ignored; and they group many different bits of information into patterns or concepts" (p. 30). Thus, the existence of various frames or perspectives on quality in health care affect performance improvement initiatives since various interviewees frame the term quality health care differently. Bolman and Deal describe the impact of various frames in the following manner: "Each of the frames offers distinctive advantages, but each also has blind spots and shortcomings" (Bolman and Deal, 1997, p. 280). Thus, perspectives or frames on quality health care influence, either directly or indirectly, the discussion and subsequent decisions that impact the quality of care.

*Resource Frame*

The first frame was the resource frame. This frame dealt with both equipment and personnel associated with this facility. For example, one individual described quality health care as meaning that you would have physicians, nurses and employees that were qualified and you would have the finest technology available.
**Process Frame**

The second frame was the process frame. One physician defined quality from a process perspective. This physician identified that for health care providers and health care facilities quality involved the disease process being treated “according to the standard of care and as long as those standards were met then we feel that we have provided appropriate care.”

**Outcomes Frame**

The third frame was the outcomes frame. The outcome or end result might be one of two types - either a clinical type outcome or a customer service/satisfaction type outcome - and the end result of these may be very divergent. One individual clearly spoke to the difference in the definition of quality health care by a health care professional and the definition by a customer/patient. This individual stated that health care professionals thought of quality health care as “...clinical type outcomes.” On the other hand, this was not the way patients or your customers perceived quality. Patients/customers assumed “...that you have clinical expertise; you’re going to do the right thing at the right time and the right way and get the right outcome.” Specifically, it was expressed that the consumers’ definition of health care was believed to be more consistent with the concept of customer relations.

Another individual spoke to the challenge that health care providers and organizations had in trying to meet everyone’s quality expectations. This individual provided examples of the different customers a health care organization encountered. There were external customers such as the patients and there were internal customers like the laboratory, the nursing staff, the physicians, and housekeeping personnel. This individual related that
patients expected clinical quality; however, customers/patients also expected services such as receiving information, having parking available, and for the people to be friendly. This individual voiced the outcome perspective that: "...If you don’t do the clinical quality, you’re not in business to do any of the other.”

*Combination of Frames*

Other interviewees combined the various frames - resources, processes, and outcomes. One combination was the combined frame of resources and outcomes. This was evidenced by the following statement: "...the public, the payers, and the providers want positive outcomes and I think they want reasonable cost related to positive outcomes.” Another combined frame was the resources and processes. For example, a case manager defined quality health care as "...cost effective, timely, following the standard of care for that particular disease.”

The medical director framed quality health care from the perspective of outcomes and processes. The medical director defined quality health care as doing

...the right things for the right people, at the right time and the right set of circumstances on a regular basis. And if you’re meeting the four rights regularly, you should have outcomes by any parameter that you measure that are as good as the mean or better. And, I think, those desired outcomes should be regularly achieved so when you look at a rolling average over time you continually maintain the level of desired outcome.

A fourth combination involved resources, processes and outcomes as evidenced by another physician’s definition of quality health care. This physician discussed that quality entailed looking at the end result or the outcome, looking at the processes used to achieve
the end result or outcome, and also looking at the cost. Specifically, this physician posed the following question:

If we can get from A to C with less cost, the same result and the same risk, is that good quality, too? It’s the issue of is more care better? That’s what we used to think. We know that’s not true. We’re just trying to find out how much care is that. Yet, another physician defined quality health care in terms of resources, processes, and outcomes but in somewhat different terms. This physician defined quality health care as being “...when the desired health outcome results with the least amount of expense or intervention and the system through which it is delivered is replicatable for other people.” In addition, the clinical outcomes leader discussed the case management system as it related to the combined frames of resources, processes, and outcomes.

**The Impact of the Case Management System**

The case management system at this facility was initiated in 1994. The overall perceived impact of the case management system was described as positive. It was credited with promoting more consistency and standardization of physicians’ practice and decreasing the length of stay. One component of the case management system was the multidisciplinary cooperative groups. Two other components were the various care paths (82 total as of the time of my research) developed by the different multidisciplinary cooperative groups and the role of the case manager.

**The Role of Care Paths and the Case Manager**

It was reported that all patients were case managed, but not all patients were on a care path since there was not a care path to address every individual patient need. Each care
path had "...key indicators of success," which were to be "...measured from the day we implement the care path" by the case manager. Not only were care paths developed for the health care providers but care paths were also developed for patients so that patients were given the plan for their care in terms they could understand.

In addition, a case manager talked about a new piece of software "...that’s actually going to put a dollar figure on all our care paths." The case manager stated that by using that software it would be possible to provide a physician with information regarding the cost of treating the patient based on the physician’s preference or without using the care path as compared to the cost of treating the patient utilizing the care path.

Implementing the care path was described as a nursing function. In fact, a staff nurse related that the care paths contained the target goals for the nurses and a nurse could implement the care path whether or not the physician was writing orders that corresponded exactly to the care path. The clinical outcomes leader stated:

We still have physicians who still want to practice the way they want to practice, and we’re able to call that out in the physician profiling system that goes along with the case management program. We can look at severity adjusted information by DRG or care process that clearly calls out who the physicians [are] that are over utilizing and still continue.

In addition, the clinical outcomes leader emphasized: "We never look at cost of care without looking at quality indicators" - such as, readmission rate, complication rate, and/or mortality.

The Role of the Multidisciplinary Cooperative Group

Interviewees identified several functions of the multidisciplinary cooperative groups. One was to design care paths. Another was to facilitate physician involvement in the
performance improvement activities. A third function was to serve as a forum for sharing information.

* Designing Care Paths

The function of the multidisciplinary cooperative groups in regards to designing care paths was described by the clinical outcomes leader as having

...all the key stakeholders bringing cost or quality types of concerns. From that data and information, we design what we call best practice. If we had everybody taking care of the patients the same way in the group we’re studying, what would that plan of care look like including actions, meds, physical therapy, occupational therapy, whatever the action items are plus nursing process issues. We plot that out into our practice care path. Each one has key indicators of success.

*Involving Physicians in Performance Improvement Activities

The chair of the Quality Committee described the multidisciplinary cooperative groups as a means of promoting physician involvement in performance improvement activities. The chair stated that the multidisciplinary cooperative teams had facilitated physician involvement in performance improvement activities during the past seven to eight years. Another individual shared their observation regarding the work of a particular multidisciplinary cooperative group that was investigating the rate of a specific surgery. This individual commented: “We’ve made them do it before. Now they’re doing a lot of it because they’re interested.”
**Sharing Information**

The cardiac case manager related an example of collecting and sharing data with physicians and other members of the cardiac multidisciplinary cooperative group. This project was part of a larger study by an outside agency. This project involved two aspects: (1) the initial assessment of the percent of patients diagnosed with congestive heart failure at this facility who were treated with a particular classification of medications and (2) the follow-up study on the use of this particular classification of medications after having "...educated our physicians."

Another individual involved with data analysis reported that the multidisciplinary cooperative groups had been a very useful means of sharing information. A third person stated that the multidisciplinary cooperative group was used at times as a vehicle for providing physician education regarding implications of documentation on coding and reimbursement issues.

**Impact of Customer Satisfaction**

Interviews with several members of the health care team addressed their awareness of the role consumers were playing in managing their health and how the increasing concern with satisfying the needs of customers impacted this facility. One individual stated that consumers were getting more involved in their health care and the things that health care providers perceived as improving quality were things that the consumer expected. Another individual expanded on that theme. This individual stated:

...As health care professionals quality to us has been clinical type outcomes. But when you really talk to your customers and look at what they perceive as quality, they aren't those things. They take it for granted or they make the assumption that you
have clinical expertise; you’re going to do the right thing at the right time and the right way and get the right outcome. What they look for in quality is really more what we call customer relations.

In addition, this individual related that “...we really have made a 360 on customer relations. In fact, we have gone through a great deal of education and training with our staff” regarding customer/guest relations.

This individual also commented on how the current health care environment of benchmarking, managed care and consumerism was impacting this facility. Specifically, this individual stated that in the current environment with benchmarking, managed care, and consumers making decisions about their health care based on report cards that everyone was extremely interested and committed to being in the topmost level.

Furthermore, this individual discussed that it was necessary to demonstrate your current initiatives, areas of improvement, clinical outcomes, and expertise in the clinical services you provided. Another individual expanded this focus from merely demonstrating these four aspects to comparing the internal data of this facility to external data - both local and national. This individual commented that there was not only an increased interest in benchmarking against the local market but also nationally and striving to become the preferred provider, to exceed the benchmarks, and to exceed the customer’s expectations.

**The Influence of Corporate Initiatives, Regulatory Requirements, and/or Accreditation Standards**

Interviews with various members of the health care team provided insight as to the influence of accreditation standards, regulatory requirements, and/or corporate initiatives. Requirements (both corporate and regulatory) and accreditation standards by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO or Joint
Commission) affected this organization in one of two ways. One way was via proactive actions or actions designed to meet requirements and/or accreditation standards. The second way was reactive actions or actions in response to recommendations or feedback from specific entities such as the accreditation agency, a regulatory agency and/or a corporate office.

_Proactive Initiatives_

There were several examples of proactive initiatives to address requirements (corporate or regulatory) and/or the accreditation standards. An example of a proactive initiative to address a requirement was this facility’s participation in a corporate program which emphasized legal and ethical behavior. The local coordinator of this program stated that it was not possible to work in health care and not be cognizant of some of the probes or investigations that major health care providers had encountered and the amount of money involved. The local coordinator stated that this was an initiative to ensure...

...that the member organizations...[of this corporation] were constantly aware of the need to be in compliance with Medicare regulations and they really wanted to go beyond that and not focus solely on compliance itself. They felt like this was a good opportunity to develop a program which would reinforce our core values as an organization and emphasize the need for us as a corporate member of the community to always strive to do the right thing.

The coordinator also described this program as basically a group of policies and procedures to assure that we make exemplary decisions.

In addition, the local coordinator discussed the relationship or the connection “...between clinical quality and quality from the compliance, audit perspective.”

Specifically, the coordinator stated: “...We may be very good in patient care, but if we
don’t bill accurately, then we have a problem. Billing, coding - it can really get an organization into trouble fast.”

Interviews also provided several examples of proactive actions to address accreditation standards. One example was shared by the safety coordinator, who identified that “Joint Commission provides a model that we adapted to set up our important functions...” regarding the environment of care. The seven plans addressing the environment of care were the Safety Management Plan, the Hazardous Materials and Waste Plan, the Security Plan, the Emergency Preparedness Plan, the Medical Equipment Management Plan, the Utility Management Plan, and the Life Safety Plan.

Another example was development of the method for tracking the various performance improvement initiatives. The chair of the Quality Committee stated that all written reports were traced through the matrix.

We created the matrix in order to show Joint Commission where our activities were as it relates to the chapters and the measures of success that we’ve created throughout our organization. We wanted to show that we were working on things that we said were important to us.

Another individual discussed the effect of the accreditation standards on the continuum of care and how the accreditation organization wanted to see how care was “...delivered across the organization from outside the walls to inside the walls to back outside the walls.” As a result this individual related: “We began moving to that organizational focus in early 1995 - probably before that.”

A fourth example was provided by the clinical leader of the emergency services. These activities included development of the Performance Improvement/Risk Management Plan for emergency services and three recent performance improvement initiatives. The Performance Improvement/Risk Management Plan addressed the following five functions identified in the accreditation manual: care of the patient, patient
rights and organizational ethics; environment of care, assessment of the patient, and continuum of care (JCAHO, 1999). It also included multidisciplinary monitoring of high risk, high volume, and/or problem prone areas (JCAHO, 1999) such as "...patient deaths; patients who leave AMA [against medical advice], elope, or leave without being seen; abuse; all transfers; all patients who receive restraints for the purpose of restraints - not medical immobilization - and conscious sedation." The three performance improvement initiatives included the lab process team, the admissions team, and the radiology team. The major goal of each of these three teams was to reduce throughput time.

The director of pharmacy shared a fifth example. The director of pharmacy identified that the goal of the pharmacy was "...to get the right medication to the right patient in a timely manner." The director also discussed various processes that were monitored to fulfill specific accreditation standards such as adverse drug reactions, medication errors, medication use studies (JCAHO, 1999) as well as to identify opportunities for improvement. The director of pharmacy stated that without report cards, you were not able to discern the areas requiring more assistance or attention.

A sixth example was this organization's method of collecting information about the needs, expectations, and satisfaction of the individuals they served as required by the accreditation standards (JCAHO, 1999). Specifically, the facility had developed a personalized system for obtaining feedback regarding customer satisfaction as well as identifying areas for improvement. This personalized call system involved leaders making a specified number of calls each quarter to obtain customer feedback on the service they experienced while being a patient at this facility. It was also reported that this information was then shared with the employees of the medical center.

Another example was the recent formation of a blood and tissue review committee. The chair of this recently developed committee identified that the impetus for forming such a committee was that "...the hospital didn't have one and the Joint Commission
requires such a committee in all hospitals.” Furthermore, this individual described the function of this committee as, “...basically, peer review” since the committee examined the usage of blood in the hospital and correlated the “... preoperative and postoperative diagnosis with our tissue or histologic diagnosis, the final diagnosis.”

An eighth example was provided by a physician quality analyst in regards to a physician’s profile. This process involved reviewing medical records using specific screening criteria and arranging peer review sessions, if indicated. The quality analyst stated:

Results of those reviews end up on a physician’s profile, and that is their record of quality that we keep here at the hospital that is used in the credentialing and recredentialing process. It is also required by the accreditation bodies that we use.

In addition, the medical staff coordinator provided examples of proactive actions in regards to the medical staff. The medical staff coordinator stated that they were “...regulated by Joint Commission and a lot of the things we do are to be applicable to their standards.” The medical staff coordinator also discussed the structure and organization of the medical staff as well as the credentialing/recredentialing process noting specific Joint Commission requirements such as having a Medical Executive Committee, reviewing the medical staff bylaws annually, and recredentialing the medical staff every two years.

The medical director stated:

If there’s any value to the Joint Commission, if there’s any value to purchasing groups, the value that they bring on the positive side is that they are forcing us to look at quality information; respond to their benchmarks and to act on information that says there’s an opportunity to improve, to move to and past the median.

Furthermore, an individual involved with data analysis discussed this organization’s involvement in data collection and analysis. This individual stated: “We’re constantly
measuring quality across the continuum and that’s defined in many ways. We measure financial performance, clinical performance, quality indicators, satisfaction indicators, and a number of various aspects of performance.” This individual also discussed that this organization not only collected and analyzed its internal data but it also compared their data to the data from other hospitals. Specifically, this person stated: “We take our complication rate and compare it to other hospitals’ complication rate for a certain procedure or we’ll look at infection rates or mortality rates or financial performance, profitability, cost per case - that kind of thing.”

Thus, there were several examples of proactive type initiatives. Not only were there proactive initiatives but there were also examples of reactive type actions.

Reactive Actions

Examples of actions that might best be characterized as reactive in nature were actions/activities initiated in response to feedback from an agency - either corporate, regulatory and/or accreditating. One example of a reactive type response was the formation of several teams to address specific recommendations from the recent accreditation survey. Not only were the teams formed but the teams reported their progress at a Quality Committee meeting and were required to submit their written action plan. Another initiative that might be labeled as reactive was this facility’s participation in a corporate initiative to decrease the rate of a particular type of surgical procedure at this facility since the rate this procedure was performed at this facility was about three percent above corporate’s targeted rate.
Section IV: Impact on Operations

In addition to providing insight as to the perceptions of various members of the health care team; interviews along with review of documents provided by the organization, and observations of the Quality Committee meetings, the two-day hospital orientation, the preoperative class for patients who would be undergoing joint replacement surgery, and time spent with a case manager provided insight as to how the performance improvement program affected the operation of this particular acute care facility. Analysis of the data revealed that the performance improvement program not only impacted the culture of this facility but it also affected the operation of this particular acute care facility in seven ways, which reflect Bolman and Deal's (1997) structural frame. First, the Performance Improvement Plan identified the goals or ends of the performance improvement program at this facility. Second, the performance improvement program utilized a formal seven step process to facilitate the efforts of various performance improvement teams. Third, the program formalized the format for presenting and/or writing reports on performance improvement initiatives. Fourth, the program established a reporting schedule for the Quality Committee. Fifth, the program provided a record of the various performance improvement initiatives. Sixth, the monthly committee meetings provided a forum for sharing about performance improvement initiatives. Last, the monthly committee meetings provided a forum for disseminating information regarding corporate initiatives and accreditation issues.

Goals/Ends of the Performance Improvement Program

Review of the 1998-2000 Performance Improvement Plans for this organization revealed a consistency in the general sections contained in each of these plans. I obtained
copies of the three most recent years (1998-2000). I was unable to obtain a copy of the written Performance Improvement Plans for 1996 or 1997. (The 1996 accreditation survey of this facility would have been the first survey following the change in the focus by the accreditation agency to improving organizational performance in 1994.)

Analysis of the Performance Improvement Plans for 1998-2000 revealed that the plans consisted of similar content as listed in Appendix N. Some of the differences in the plans reflected either changes in corporate strategic direction, committee membership, organizational structure, regulatory requirements, accreditation standards, and/or verbiage.

The 1999 Performance Improvement Plan identified that the purpose of this organization's performance improvement program was “...to utilize an interdisciplinary approach to continuously improve the quality of patient care/services in a manner that is efficient, effective, and consistent with the philosophies and goals of the institution...” and the corporate organization. The goals of the 1999 Performance Improvement Plan focused on four areas. These four areas were a.) evaluating and improving patient care; b.) appropriately utilizing resources; c.) promoting improvement activities; and d.) complying with regulatory requirements and accreditation standards.

Evaluating and Improving Patient Care

One mechanism this facility utilized for evaluating and improving patient care was the case management program. The case management program included the role of the case manager, multidisciplinary cooperative groups, and care paths. The clinical outcomes leader stated that the case management system was initiated in 1994 and “...we have been able to demonstrate that as you improve the processes of care, you're able to decrease the cost of that care, which then leads to having value.” The clinical outcomes leader
stressed the interrelatedness of the various quality indicators and stated: “We never look at cost of care without looking at quality indicators. By that I mean, if we decrease our length of stay, are we increasing our readmissions, are we increasing our complication rate or our mortality?”

The role of the case manager as revealed through oral reports to the Quality Committee, interviews, and review of documents had various dimensions. One dimension involved measuring quality indicators based on care paths. For example, the care path for atrial fibrillation identified the expected length of stay and some of the indicators were “day of discharge; if on Coumadin, day started; [and] INR day of discharge.” Other dimensions of the case manager’s role included providing/ensuring patient education, planning and facilitating the patient’s discharge, and facilitating the work of the multidisciplinary cooperative team.

One mechanism by which the case manager facilitated the work of a multidisciplinary cooperative team was identified in the policy on care path development and implementation. This was to perform “...a retrospective chart audit consisting of five percent or a minimum of 30 charts to identify present practice patterns, resources utilized and when utilized, actual length of stay, and charges versus costs for those patients.” In addition, the case manager was to “...conduct a literature review including benchmark data and practice guidelines....” This information was to be shared with the multidisciplinary cooperative group, which consisted of physicians and representatives from the various disciplines that were involved in providing care to the patient affected by the particular care path under development.

One of the case managers interviewed related that there were currently 82 care paths written for various DRGs [diagnostic related groups] and that the physician’s orders were “...kind of separate from the care path.” In fact, it was stated that since the care path
contained nursing functions a nurse did not need a physician’s order to initiate the care path.

The policy on implementing a care path stated that using the multidisciplinary care paths (MCPs) was “...an approach to the assessment and improvement of the quality of patient care and the utilization of resources within...[the] health system.” The policy also stated that the care paths were used “...as tools for documentation, quality improvement, resource allocation, utilization, and clinical risk management.” Another function stated in the policy was that the care path would serve as a means to reduce the variation among the various health care providers.

It was reported that not all the physicians affiliated with this facility utilized the care paths. However, the clinical outcomes leader stated that the physician profiling system which accompanied the case management program clearly identified those physicians who over utilized resources and continued to do so. In addition, the clinical outcomes leader stated that you could identify the physicians who utilized the care paths regularly. The general consensus of various members of the health care team was that the impact of the case management program was positive even though it was acknowledged that care paths were not always utilized by members of the health care team as they were intended. For example, a leader of one of the health services commented that the multidisciplinary cooperative groups had resulted in a “...decrease length of stay, decrease cost, decrease utilization, [and] quality outcomes. It’s been positive in all respects.” Another individual, who was intimately involved with data analysis, commented that there was less variation in the practice patterns of different physicians related to the use of care paths. In addition, written reports in the Quality Committee notebook revealed the impact of using care paths in the emergency department. Specifically, these reports identified: “Overall documentation improved due to emgeri-path prompters” and cost and length of stay had also decreased.
The policy on care path implementation specified that multidisciplinary care path “...guidelines will be used as tools to monitor quality assurance improvement.” In addition, results would be communicated to the Physicians’ Quality Committee. Reporting schedules for both the Quality Committee and the Physicians’ Quality Committee identified the reporting schedule for each multidisciplinary cooperative group. Interviews with case managers, review of the minutes and written reports of the Quality Committee, and observation of Quality Committee meetings included various reports from the case managers addressing such issues as readmission rates of a particular group of patients, implementation and initial follow-up report of the preoperative class for elective joint replacement patients, and targeted goals and plans regarding reducing a particular surgical procedure.

In addition, one of the case managers talked about a new piece of software that would assist in providing feedback to physicians and other members of the health care team since the software would place “...a dollar figure on all our care paths.” Thus, the case manager would be able to provide a physician feedback on the cost of treating the patient without using the care path or according to the physician’s preference versus treating the patient utilizing the care path.

*Appropriately Utilizing Resources*

Another component of the case management program as observed during an oral presentation to the Quality Committee and document review was “the utilization management component of the care management program....” During an oral presentation to the Quality Committee, the clinical outcomes leader “...discussed meeting our length of stay targets, and how we manage our avoidable denied days.” Information regarding specific “...DRGs [diagnostic related groups], the geometric mean, current LOS
[length of stay], and the variance” for this facility was also presented. In addition, during the oral presentation, the clinical outcomes leader reported that physicians were contacted regarding avoidable days and this could be trended by reason for denial as well as by physician.

In addition to the case management system, evidence of the emphasis on appropriately utilizing hospital resources (Performance Improvement Plan, 1999) was reflected on both the “Project Evaluation Tool” (Appendix L) and the “Project Summary Form” (Appendix M). The Project Evaluation Tool was described as a tool to help the team to identify the value of a potential performance improvement initiative. The “Project Summary Form,” which was the format for the written report to be submitted to the Quality Committee, inquired about the financial impact of the project by inquiring about “how will this project impact your department or the health system financially?” In addition, during oral reports to the Quality Committee, I observed this information being addressed. More specifically, on two separate occasions the feasibility of charging for a specific service being provided was addressed by members of the Quality Committee during the question and answer period that followed the formal presentation.

**Promoting Improvement Activities**

The 1999 Performance Improvement Plan promoted improvement activities by specifying measurement activities, identifying various uses of measurement data, ensuring assistance for teams, and providing a schedule for reporting. The measurement activities as previously stated included the following:

1. Data collection from processes and outcomes;
2. High risk, high volume, high cost and problem prone processes;
3. Patients’ needs, expectations and satisfaction;
4. Results from infection control activities;
5. Safety of the care environment;
6. Risk management findings;
7. Utilization management data; [and]
8. the [Corporate]...report card.

The plan also identified the various ways systematic data collection assisted this health care facility. These were listed as follows:

1. Establish baseline data when processes are implemented or redesigned;
2. Describe process performance or stability;
3. Describe the dimensions of performance relating to functions, processes, and outcomes;
4. Identify opportunities for improvement, and
5. [Determine]...whether actions/changes in process improvement have met the prescribed objectives.

According to the Scope of Service document, each department was to identify a performance improvement project or “...a key process for improvement.” The department then reported on the key process twice a year to the Quality Committee. In addition, the Scope of Service document stated: “Customer standards of excellence and indicators have been identified and put in place by each department to measure improvement.”

Third, the 1999 Performance Improvement Plan identified the functions of the Physicians’ Quality Committee and the roles of the Quality Committee members. According to the 1999 Performance Improvement Plan, the Physicians’ Quality Committee was “...responsible for the oversight of the performance improvement activities of the medical staff” and the scope of the Physicians’ Quality Committee included the medical staff departments, “...functions, and committee reports....” The medical staff departments at this facility were identified as “Anesthesiology, Emergency
Medicine, Family Practice, Medicine, Obstetrics and Gynecology, Pathology, Radiology and Surgery.” The Performance Improvement Plan also specified:

Medical staff/multidisciplinary review and reporting functions include[d] blood usage review, drug usage evaluation, medical record review, pharmacy and therapeutics, surgical case review/tissue, autopsy review, hospital safety, infection control, risk management, utilization review,...[the corporate report card]; monthly Quality Committee minutes and other team reports as identified.”

Furthermore, the Performance Improvement Plan identified the distinctive activities of the Physicians’ Quality Committee, which included:

1. Reviewing reports from all departments/services with designated performance improvement activities quarterly/semi-annually.
2. Make[ing] recommendations regarding problem assessment, outcome data, corrective action(s) and follow-up.
3. Recommend[ing] process improvement opportunities for consideration by the Quality Committee.
4. Coordinate[ing] ongoing review activities in order to provide an objective, comprehensive review of the quality of patient care while reducing duplication of efforts.
5. Assure[ing] documentation and appropriate, timely reporting of all ongoing improvement activities.
6. Evaluate[ing] the effectiveness of all components of the medical staff’s performance improvement activities at least annually.
7. Review[ing] and/or revise[ing] and approve[ing] the...Performance Improvement Plan each fall.

In addition to these seven functions, four other activities were identified. One was that the quality analyst would “...submit a written summary report of Physicians’ Quality
Committee activities, excluding peer review activities, to the Quality Committee for their review and recommendations, as appropriate.” Second, pertinent information from committees with performance improvement accountabilities, such as P&T [Pharmacy and Therapeutics], and other information relating to the medical staff functions and Quality Committee activities will be included in the report to the Medical Staff Department’s Performance Improvement Executive Sessions, which may be called as needed.

Third, medical staff activities were to “...be consistent with the current Medical Staff Bylaws and Rules and Regulations.” Last, both the Physicians’ Quality Committee and the Medical Executive Committee were to “…review the minutes from the Quality Committee monthly and make recommendations to the Quality Committee, as necessary.”

As previously stated in Section III, however, concern had been expressed regarding communication between the two committees. Review of the January 1999 minutes of the Quality Committee identified: “This is the first time that the Physicians’ Quality Committee has reported to the Quality Committee. [The] Quality Committee made recommendation to Physicians’ Quality Committee that this formal reporting around physician quality activities continue in the future.”

The Performance Improvement Plan specified the functions of the Physicians’ Quality Committee and delineated the roles of the members of the Quality Committee. The members of the Quality Committee served as a liaison to various teams “…assisting in the identification of key processes, completion of the Project Summary Form, reviewing and making recommendations for completeness of the written report; and coaching team members for oral presentation.”

More specifically, the roles of Quality Committee members as listed in the Performance Improvement Plan (1999) included

1. Reviewing team reports and action plans;
2. Assessing organizational progress;
3. Facilitating and advising teams;
4. Recommending follow up action, as appropriate;
5. Removing barriers to improvement activities;
6. Assisting in identification of key indicators and outcome measures;
7. Recognizing and communicating improvement results;
8. Reviewing and/or revising and approving the Performance Improvement Plan annually in the Fall;
9. Actively seeking improvement activities;
10. Identifying opportunities to create an “integrated” approach to performance improvement;
11. Educating associates about the “7 Step Method” and how to integrate performance improvement into daily activities;
12. Acting as liaison to designated departments and functions. This will involve assisting in the identification of key processes, completion of the Project Summary Form, reviewing and making recommendations for completeness of the written report, and coaching team members for oral presentations;
13. Providing their designated areas with education regarding the Performance Improvement Program;
14. Notifying leaders in their designated areas of the need to document and discuss performance improvement activities during staff meetings;
15. Following the group norms;
16. Providing a substitute to attend any Quality Committee meetings the designated liaison is unable to attend;
17. Maintaining confidentiality of information; and
18. Signing the QC [Quality Committee] Liaison contract annually.
Last, by providing a reporting schedule, the performance improvement program facilitated improvement activities by ensuring that departments, committees, and/or teams were aware when a report was due to the Quality Committee. In addition, the Quality Committee’s reporting schedule identified the specific liaison for a department.

**Complying with Regulatory Requirements and/or Accreditation Standards**

There were several examples of compliance efforts addressing regulatory requirements (local, state, federal or corporate), and/or accreditation standards. One example of compliance with regulatory requirements was the recently developed corporate program which emphasized the core values of this particular health care facility and the corporate organization with whom this facility is associated along with their commitment to "...fulfill all ethical, professional and legal obligations...." New employees were introduced to this program during orientation and were provided with a booklet, which contained written information about the program. The booklet described the program, the steps for reporting concerns, and six principles of responsible conduct, which addressed such items as honesty, integrity, legal obligations, confidentiality, conflict of interest, dignity and respect.

The individual with oversight of this program at this facility described the program as basically a group of policies and procedures to assure that we make exemplary decisions. In addition, this person identified the purpose of this program as encouraging associates to inform us if there were issues that needed to be addressed. This individual emphasized that "...quality cuts across a lot of lines" and that quality issues involving the administrative type functions of billing and coding were as important as the clinical quality issues. Furthermore, this person stated: "Billing [and] coding - it can really get an organization into trouble fast."
In addition to the impact of regulatory requirements, there was also evidence of the impact of the accreditation standards. One manifestation of this was the Safety Program at this facility. This facility had a large notebook containing policies and procedures relating to safety. This notebook contained a memo from the chief executive officer that delegated to the safety coordinator and the Safety Committee the responsibility for the “...design, implementation, and ongoing process of safety management and information collection in order to manage continuous improvement of the Safety Program.” In fact, the chief executive officer stated: “The biggest focus in terms of patient service/customer service is safety.”

The safety coordinator also related that this facility adapted the model provided by the Joint Commission to establish the seven important functions of the Safety Committee, which were identified as: safety management; hazardous materials and waste; security; emergency preparedness; medical equipment management; utility management and life safety. The safety coordinator stated: “We decided to divide the work of the Safety Committee based on those important functions;” thus, providing a means for involving more people. The work of those teams were then reported to the Safety Committee as reflected in the Safety Committee’s reporting calendar in the facility’s safety manual.

In the safety manual there was an outline of the content regarding the safety program which was to be covered during the orientation of new employees. This content included the following four major components: 1) the Safety Program; 2) a video on hospital safety; 3) the Fire Emergency Plan; and 4) back safety. These items were addressed during the second day of new employee orientation. In fact, the back safety program included not only verbal instruction but also a return demonstration on proper lifting technique by participants. In addition, for those who would be involved in patient care, there was additional instruction with a return demonstration on transfer techniques (bed to chair, chair to bed, bed to stretcher, stretcher to bed, and the use of the Hoyer lift).
Another example of the influence of accreditation standards on the operation of this facility was the establishment of the blood and tissue review committee. The accreditation standards specified that the organization monitored the utilization of both blood and blood components (JCAHO, 1999) and "...major discrepancies or patterns of discrepancies between preoperative and postoperative (including pathologic) diagnoses..." (JCAHO, 1999, p. PI-17). The chairperson of this recently formed committee stated that the impetus for forming this committee was: "...The hospital didn’t have one and the Joint Commission requires such a committee in all hospitals." Furthermore, the chairperson described the function of this committee as "...basically peer review" as this committee was responsible for examining the usage of blood in this facility as well as examining the correlation of "...the preoperative and postoperative diagnosis with our tissue or histologic diagnosis, the final diagnosis."

More specifically, the 1999 Quality Committee notebook of minutes and reports contained a report filed by the Blood and Tissue Review Committee. This report identified that the committee was to meet "...quarterly to discuss confirmed transfusion reactions, appropriateness of transfusions, adequate transfusion services, and correlation of preoperative and postoperative surgical and tissue diagnosis." In addition, this report stated that the committee was formed as a result of accreditation standards and inspections and that it had formally met on two separate occasions.

**Seven Step Process for Performance Improvement Initiatives**

The chairperson of the Quality Committee stated: "It’s important that we use a process. We use a seven step process." The detailed seven step process used by this acute care facility (Appendix O) was recorded in a notebook prepared for the
accreditation survey, which addressed the standards of improving organizational performance.

However, a schematic drawing observed on a bulletin board in the facility described the seven step process in a simpler manner. The schematic listed the seven steps as

Step 1: Define areas of opportunity for improvement
Step 2: Understand current process and localize breakdown
Step 3: Identify and verify the root cause
Step 4: Determine proposed solution
Plan - Do - Check - Act
Step 5: Confirm improvements are made
Step 6: Standardize the process
Step 7: Future steps/next steps

Report Format for Performance Improvement Initiatives

The content of the Project Summary Form (Appendix M) consisted of six different sections. The first section addressed identifying information regarding the project and members of the team. The second, third, and fourth sections were to be completed by circling the “dimensions of performance,” the “JCAHO chapters”, and the various “measures of success” that applied to the project. The fifth section was to be completed in narrative form and contained questions and/or statements addressing such items as the outcome indicators for this project, the impact of this project, and how this project related to other initiatives of the facility. The final section was to be completed following completion of the project to evaluate the effectiveness of the project.
The written reports in the 1998-2000 Quality Committee notebooks provided evidence that a number of reports were submitted in the format of the Project Summary Form, especially, as compared to the written reports for 1995-1997. However, there was also evidence of other types of reports. Some reports consisted of only data such as information from the Safety Committee and the corporate quality report card. Other reports provided information about programs/initiatives. Two examples of sharing of this type of information were the following reports: 1) the program emphasizing both the core values of this organization and their obligation to conduct the activities of this organization in an ethical, professional and legal manner and 2) the presentation on the characteristics of the top 100 hospitals.

Reporting Schedule for Quality Committee Reports

The reporting schedule for the Quality Committee identified the topic or department/area and the month a report was due. The reporting schedule included a variety of reports such as reports from utilization management; the multidisciplinary cooperative groups; the various departments/services of this facility including home health, hospice and durable medical equipment; infection control; special performance improvement teams; various corporate projects/initiatives; and accreditation/regulatory issues and follow-up.

The reporting schedule for 1999 was very detailed and included between eight to 15 different reporting areas per month (most usually eleven or twelve). In addition, the 1999 reporting schedule listed the various departments in a given area - for example, the reporting schedule listed the seven different reporting components in Women’s Services. However, the 2000 reporting schedule for the Quality Committee listed from two to seven reporting areas per month (most usually five to seven) and the list was not as detailed in
that it did not list the components of the different reporting areas. In addition, some areas that had been reporting bi-annually - such as the cardiac health service, senior services, and patient/family education - were scheduled to report only annually.

Even though there was a designated reporting schedule, interviews, review of minutes, and observations of the Quality Committee meetings revealed that not all reports were submitted and/or presented as per the schedule for various reasons. One reason given was that the report was deferred because the information or feedback was not available. Another reason for deferring a report was the individual presenting the report had a scheduling conflict. A third reason given was the difficulty in making the time to write the report in the appropriate format.

The Performance Improvement Team Report Format document stated oral reports should take about 15 minutes and should reflect the seven step process. The Quality Committee was scheduled to meet two hours each month. During each of the four Quality Committee meetings I observed there were from three to five oral presentations per meeting. As previously stated in Section III, there was the option of presenting orally the report or filing the report. However, the chair of the Quality Committee stated that all activities were tracked via the quality matrix and the 1998/1999 quality matrix listed over 60 different teams, which is a stark contrast to the five to twelve teams that McLaughlin and Simpson (1999) suggest an organization could maintain at any one time.

**Record of Performance Improvement Initiatives**

Review of the 1998 and 1999 Quality Committee notebook containing the minutes and the written reports revealed both reports that had been filed or submitted in written form only and those reports that had been reported orally (as well as submitted in written form). As I reviewed the various reports, it seemed that the reports which had been
presented orally were the most informative, especially, regarding the specific planned change as that information was not requested on the "Project Summary Form" (see Appendix M).

There were examples of performance improvement activities where the primary impact was one department or one population of patients. One example of an intradepartmental performance improvement initiative was the development of a written shift report format for a particular patient care area, which was later extended to another patient care area in the same health service division. Two examples of a performance improvement initiative impacting a particular population of patients was the preoperative class for patients undergoing elective joint replacement surgery and the clinic for selected patients with congestive heart failure.

In addition to departmental or other types of focused initiatives, there were examples of performance improvement initiatives that had a more organizational impact. Examples of this category of performance improvement initiatives were the recently implemented customer/guest relations program, the back injury prevention program, and the information systems project.

The size of the teams varied from many members representing different areas within the facility to a few members from a department or health service. Some of the larger teams worked on initiatives impacting the health system such as the team that developed the new customer/guest relations program and the team working on systematizing physician preference cards.

**Forum for Sharing about Performance Improvement Initiatives**

Not only did the performance improvement program establish a formal record of performance improvement initiatives, but it also provided a forum for sharing about
performance improvement initiatives. Those verbally reporting on performance
improvement initiatives were, at times, members of the Quality Committee. At other
times, the individual presenting the report was a member of the performance
improvement team but was not a member of the Quality Committee. In fact, during my
first observation of the Quality Committee meeting, the individual presenting the report
on the recently developed "Time Management Program" for information services stated
that her first exposure to the Quality Committee was two or three weeks ago when she
was contacted via e-mail by the chairperson of the Quality Committee.

Forum for Sharing Information

In addition to providing a forum for reporting performance improvement initiatives
and providing a written record of various initiatives, the Quality Committee served as a
forum for communicating information. One example was the written report found in the
1999 Quality Committee notebook explaining the recently developed corporate program
designed to reaffirm the corporate commitment to "...meet all ethical, professional and
legal duties." Another example was the report providing information on the recently
approved corporate strategic plan. A third example was the information shared about
characteristics of the top 100 hospitals.
Section V: Uses of Data

Introduction

A fourth aspect of my research was to learn about the decision utility of the various performance improvement data. In addition to using data to aid decision making, Astin (1993) identifies two other possible uses for assessment data, which are to serve as an incentive and to provide information or feedback. Thus, these three possible uses of assessment data - to aid decision making, to serve as an incentive, and to provide information - will provide the organizing structure for presenting my findings in this section.

Based on knowledge of the accreditation standards, an assumption underlying my study (since this organization was an accredited acute care facility) was that it collected various types of data about its performance. Review of documents, interviews with various members of the health care team, and observations of the Quality Committee meetings validated the assumption that, indeed, this organization gathered information or measured diverse aspects of their performance. An individual involved with data analysis reported that some of the measures of performance included “...financial performance, clinical performance, quality indicators, satisfaction indicators and a number of various aspects of performance.”

More specifically, some of the inpatient outcome indicators identified were length of stay, mortality rate, infection rate, complication rate, percent receiving blood, percent case managed by case manager, percent on a defined care path, and readmission rates. Some of the financial indicators were average cost per case and average expected payment per case. The satisfaction indicators included both employee/associate satisfaction and patient satisfaction.
Interviews, review of documents and observations of the Quality Committee meetings, revealed that not only was this facility involved in comparing their internal data to their own past performance but they were comparing their results to state and national data and standards as well as to the performance of other local and/or sister corporate facilities. For example, a report card was being prepared for members of the medical staff that would enable them to compare their data to local, state, and national data. In fact, during a meeting of the Quality Committee that I observed, the medical director presented the type of data physicians would see in the newly developed physician’s report card and discussed both some advantages and limitations of the data. Another example was the use of comparative data when writing care paths. The cardiac case manager stated: “What we do when we’re writing a care path is we pull our own practice pattern and then we benchmark it to what the AHA [American Heart Association] says or what other hospitals say and that kind of thing.” In addition to these data, there were other data such as the results of regulatory and/or accreditation surveys and the measurements obtained by a specific team formed to address a particular issue or concern.

The Scope of Service document for this acute care facility addressed performance improvement activities and identified that these were “...part of an ongoing organizational effort to maintain and improve services within the organization.” In addition, this document listed three department level improvement activities, which were quality control activities, key process(es) for improvement, and customer standards of excellence.

The Scope of Service document stated that quality control activities were established by both external regulations and the organization. These monitors were to be collected monthly and reported every three months to the leadership of that department. A departmental key process was the performance improvement activity for the department and reports regarding these activities were submitted to the Quality Committee biannually.
The Scope of Service document also stated: "Customer standards of excellence and indicators have been identified and put in place by each department to measure improvement." The call feedback system was one method used by this facility to measure patient satisfaction. The results of this call feedback system were shared with the involved department and were also reported to the Quality Committee.

Thus, review of the minutes and reports filed in the Quality Committee notebook revealed evidence of data collection on various indicators or key processes. There were examples of reports on various financial, clinical, and satisfaction (patient and associate) indicators as well as data regarding other identified projects. There were also reports assessing how this facility was fulfilling the mission of the corporate organization.

Review of documents, observations of the Quality Committee meetings and interviews with various members of the health care team provided examples of the use of data. Analysis of the uses of data revealed that not only were data utilized to aid decision making but data were also utilized to serve as an incentive and/or to provide information. Therefore, I will address each of Astin’s identified uses instead of only the decision utility of the data as specified in my initial guiding research question.

**Decision Utility of Data**

During an interview, one member of the Quality Committee addressed the decision utility of data by stating: "Now we make decisions about what we’re going to do, and what new services we’re going to add based on studies we’ve done so far as quality improvement. So, it’s pretty significant.”

Analysis of data obtained through document review, observations and interviews revealed examples of data being used to aid decision making to improve performance and/or processes in patient care; compliance (corporate initiatives, regulatory
requirements and/or accreditation standards); customer satisfaction; and support services. The following examples demonstrated the use of data to either identify the baseline status of a process, identify opportunities for improvement, and/or monitor the effect of actions to improve a particular process.

**Improving Patient Care**

Examples of the use of data to improve patient care included the preoperative class for patients scheduled to undergo joint replacement surgery, the use of a particular medication to treat patients with congestive heart failure, the initiative to reduce readmission rates of patients with the same or related problem, and the development and use of care paths in the emergency services department.

*Preoperative Class for Joint Replacement Patients*

The orthopedic case manager related that this preoperative class was developed because patients who were to have a total joint replacement were obtaining information from various sources. Thus, the problem was the lack of control of the information these patients were receiving. Therefore, the orthopedic case manager identified an opportunity for improvement. The case manager reported working with multiple disciplines (orthopedic surgeon, staff nurse, someone from surgery, and a physical therapist) to develop the course outline.

The case manager stated: “It took me about a year to develop it...and I’ve been doing it for four or five months.” At the time of my research, the case manager reported that this initiative had not been formally evaluated, but feedback received from the nursing staff had been positive - such as, “They all use their breathing toy [incentive spirometer]
now.” However, the case manager acknowledged that it was necessary to validate that the course was beneficial.

*Congestive Heart Failure Initiative*

Another example was the initiative regarding the use of a particular classification of medications to treat patients diagnosed with congestive heart failure. This was identified as part of a larger project involving the Health Care Financing Administration. The cardiac case manager reported that the result from a retrospective review of medical records was used as a baseline assessment on the use of this particular classification of medications for patients with the diagnosis of congestive heart failure and this retrospective review revealed that less than 50 percent of the patients with a diagnosis of congestive heart failure were treated with that particular classification of medications. In addition, the cardiac case manager reported that the data were shared with the cardiac multidisciplinary cooperative group and other physician groups. (The cardiac case manager also shared that a retrospective analysis of the sample originally studied revealed that the initial data included some patients with congestive heart failure in whom the use of this particular classification of medication was contraindicated).

As a result of the baseline assessment and sharing the data with the cardiac multidisciplinary cooperative group, the cardiac case manager reported the identification and implementation of several opportunities for improvement. One opportunity for improvement was to improve the use of this particular classification of medications for those patients with congestive heart failure in whom the use was not contraindicated. The cardiac case manager reported that the most recent monitoring of this data revealed an increased usage of this classification of medications (52 percent improvement from the
initial baseline assessment). The case manager emphasized: "Our numbers now definitely reflect where we are and that's where we want to be."

A second opportunity for improvement identified was to expand the membership of the cardiac multidisciplinary cooperative group. Initially, this group included cardio-thoracic surgeons and cardiologists but did not include physician representatives from Family Practice or Internal Medicine. Therefore, members from these groups of physicians were subsequently added to this multidisciplinary cooperative group since patients diagnosed with congestive heart failure (as well as other cardiac patients) were not always treated by a cardiologist.

A third opportunity for improvement identified was the data collection tool for this study. The case manager reported that suggestions for improving the tool were shared in writing with the external director of the study. Another opportunity for improvement both identified and implemented was the revision of the congestive heart failure care path.

In addition, the cardiac case manager discussed another opportunity to improve the management of the care of patients with congestive heart failure. The cardiac case manager shared about the development and implementation of a formal program to manage the care of selected patients with the diagnosis of congestive heart failure after discharge. The cardiac case manager identified that the expected outcomes were to decrease readmission rates and decrease the cost of care for those that were readmitted. In addition, the cardiac case manager stated: "...If we're managing them outside the walls better, they shouldn't have to come back as frequently, and if they do, it should be easier to tune them up."
*Readmission Rate Initiative*

Another example of the use of assessment data to positively impact patient care outcomes was regarding patient readmission rates. An individual involved with this project related that this was a corporate benchmark initiative and the data clearly identified that readmission rates at this facility were higher than other corporate hospitals and national standards. Furthermore, this individual described that the issue of readmission had great importance since it impacted not only reimbursement but also clinical outcomes and client satisfaction since readmissions were generally a result of a complication. It was reported that based on the data: "We knew we needed to improve." This prompted additional analysis of the data and identification of several diverse actions to address this problem, which were reported to have been implemented. As a result it was shared that data revealed a steady decline in the rate of readmission over three years and that now the readmission rate was comparable to other hospitals. In fact, this individual shared that as a result of this facility using this data to improve their performance: "We received a reward, a national award for lowering our readmission rate."

*Emergency Services Initiatives*

A third example of the use of assessment data to improve patient care was the various initiatives of the emergency department during the past two years since arrival of the present clinical leader. These initiatives included the development and implementation of care paths and the formation and work of two performance improvement teams - the admission process team and the lab process team. Review of written reports revealed that during the past two years, this department had gone from having no care paths to having a
total of 22. The stated purpose of the care paths was “…to assist in the standardization of treatments for multiple high volume complaints.” In addition, written reports documented that implementing the care paths had resulted in a decreased length of stay and cost as well as improved documentation.

The next two performance improvement initiatives - the admission process team and the lab process team - might best be described as works in progress since these teams were still active. The clinical leader of emergency services described the overall goal of both the admission process team and the lab process team was “…to decrease throughput time.”

In an oral report to the Quality Committee regarding the admission process team, the clinical leader described the various data indicating an opportunity to improve. These data were identified as patient complaints regarding wait times, lengthy turn around time for patients admitted from the emergency department, and the number of patients leaving without being seen. In addition, during the oral report to the Quality Committee, the clinical leader of emergency services stated: “It takes a lot to change the minutes of care - to eat away at the minutes” in the emergency department. The clinical leader also described during the oral report the various actions taken and the current impact on the turn around time for patients treated and released, turn around time for patients admitted from the emergency department, and the number of patients who leave without being seen.

Regarding the lab process team, the clinical leader for emergency services identified the mission of this team was “…to decrease throughput time for lab specimens…” to results. During an oral presentation to the Quality Committee, a member of the lab process team stated that this team was working on improving communication between the lab and the emergency room. In addition, it was reported that even though the emergency room physicians perceived an improvement in the process as a result of some changes in
the process, the times had not changed significantly and that the revised process may need to be revisited since it was not clear that "...where we are is where we want to stay."

*Improving Compliance Efforts*

This health care facility must demonstrate compliance with various regulatory requirements (state, federal, or corporate) and accreditation standards. There were examples of the use of data to improve compliance efforts such as the organ/tissue initiative, the corporate initiative to decrease the rate of a specific surgical procedure, the back injury prevention program, and the credentialing/recredentialing process.

*Organ/Tissue Donation Initiative*

One example of the use of assessment data that related to compliance with a regulatory requirement involved monitoring by this state’s donor service organization. A written report submitted to the Quality Committee referenced the change in the state legislation regarding organ and tissue donation and this facility’s responsibility for reporting potential donors. This report also included the results of the state’s audit on compliance, which revealed an opportunity to improve the reporting of potential donors.

Information in a written report filed in the Quality Committee notebook (later in the same year as the previous report) identified that this facility had historically made five or less referrals per month to donor services. The report also stated that in light of the recent passage of legislation regarding organ donation, this state’s donor service organization assisted with the development of this facility’s current policy. This report also included data which demonstrated improvement in the number of referrals and improved compliance with the new legislation. Another written report the following year indicated
continued improvement in compliance as well as the opportunity to continue striving for 100% compliance.

* Corporate Initiative to Reduce the Rate of a Particular Surgical Procedure

An example of the decision utility of data related to a corporate based activity was the initiative to decrease the rate of a particular surgical procedure performed at this facility by two to three percent. A report filed in the Quality Committee notebook identified the annual rate this procedure was performed at this facility from 1993 through the first quarter of 1998. The rate documented in this report exceeded the targeted rate for all but one year.

The minutes of the Quality Committee reflected a follow-up report (six months later) on this initiative, which stated that the rate at which this surgical procedure was performed had “...increased drastically in 1998.” In addition, the written report included the corporate goal for this surgical procedure, which was between two and three percent less than the current rate at this facility. The report also addressed the potential positive financial impact on this facility of decreasing the rate this procedure was performed in light of reimbursement issues. A third report reflected a revision of the initial goal by the team studying this issue to narrow the focus of the initial study to decrease the rate of this surgical procedure in one particular subgroup of patients.

*Back Injury Prevention Program

The 1999 Comprehensive Accreditation Manual of Hospitals published by the Joint Commission on Accreditation for Healthcare Organizations identifies one of the accreditation functions as the management of the environment of care. An example of the
decision utility of assessment data to improve the safety of the environment of care was
the back injury prevention program. The safety coordinator discussed that data indicated
a performance improvement opportunity to reduce the number of back injuries and the
back injury program began in 1993. The safety coordinator described the back injury
program and discussed the decrease in the number of back injuries after implementation
of the back injury prevention program. The various components of this program included
a pre-employment physical assessment; availability of back support belts; annual review;
and a transfer, turning, and body mechanics training program. The outline of this two
hour orientation for all new employees was found in the Risk Management/Safety Policy
and Procedure notebook.

I observed while attending the two day new employee hospital orientation that the
content as outlined in the Risk Management/Safety Policy and Procedure notebook was
addressed. In fact, for those who were to be involved in patient care, there was additional
instruction with a return demonstration on specific transfer techniques in the afternoon of
the second day. During orientation information was also shared about how to obtain a
back support belt, if desired.

The safety coordinator acknowledged: “You’re always going to have people hurting
their back. We’re in an industry where that’s not 100% avoidable.” However, the safety
coordinator also shared the belief that the initiatives implemented during the past several
years had resulted in a decrease in the number of back injuries. In addition, the Quality
Committee minutes (1998) identified that there had been a decrease in the number of
back injuries in 1997 as compared to 1996, and the minutes revealed that pre-employment
physical testing began during the first quarter of 1998.
Another example of the decision utility of assessment data, which related to accreditation standards, was the use of assessment data collected on physicians and used in the credentialing and recredentialing process. The Comprehensive Accreditation Manual for Hospitals (1999) includes standards on both the credentialing and recredentialing process for the medical staff. More specifically, the standards state the following:

* The mechanisms for appointment or reappointment and initial granting and renewal or revision of clinical privileges are...fully documented in the medical staff bylaws, rules and regulations and policies.... (p. MS-33)

* For an applicant for initial appointment to the medical staff and for initial granting of clinical privileges, the hospital verifies information about the applicant’s licensure, specific training, experience, and current competence provided by the applicant with information from the primary source(s) whenever feasible. (p. MS-35)

* Appointment or reappointment to the medical staff and the initial granting and renewal or revision of clinical privileges are also based on information regarding the applicant’s competence. (p. MS-38)

* Appointment or reappointment to the medical staff and the granting, renewal, or revision of clinical privileges are made for a period of no more than two years. (p. MS-40)

* Departmental or major clinical service recommendations are part of the basis for developing recommendations for continued membership on the medical staff or for delineating individual clinical privileges. (p. MS-41)

The medical staff coordinator described the process for credentialing and recredentialing members of the medical staff. This person stated that their policies and
procedures were the medical staff bylaws. In addition, the medical staff coordinator described the detailed application and primary source verification process that must be completed prior to submitting the application to the Credential’s Committee. Following approval by the Credential’s Committee, the applicant was recommended to the Medical Executive Committee and, ultimately, to the Board. After approval of the applicant for privileges by the Board, the physician would be “...put on provisional staff” and assigned a proctor for six months. At the end of this six month period, the proctor would review their records and make a final written recommendation regarding whether this physician should be granted full staff privileges.

Furthermore, the medical staff coordinator stated that members of the medical staff were reappointed every two years. This process was described as similar but not quite as complicated. However, part of this process included that the chair of the department to which the physician in question belonged (for example, Medicine or Family Practice) must make a written recommendation. Making this written recommendation included that the department chair must review the record of this physician’s activities at this facility or their record of quality. The information reported as being in this record of quality was the number of admissions (inpatient and outpatient), the number of procedures (inpatient and outpatient), and data regarding events - such as, “...They have no events but they’ve treated over 100 patients.” The actual quality file and the credential/recredential’s file were reported to be kept in separate departments and these functions were performed by different individuals.

Improving Customer Satisfaction

In addition to improving patient care and compliance, an example of the decision utility of various assessment data regarding customer satisfaction was the customer/guest
relations program recently developed and implemented for this facility. New employees were introduced to this guest relations program during the first day of new employee orientation. More specifically, during orientation the majority of the first day was devoted to this customer/guest relations program. Attendees were told that this program was "...about customer service and how we treat each other." In addition, the facilitator stated that it was "...important to be happy at work." The class was informed that the program was created by employees of this facility and that the booklet about the program was also developed by employees of this facility. The orientation instructor identified that this program focused on the following four components: "pre-employment selection process; current associate implementation; associate recognition; [and] service recovery and accountability."

The booklet about the guest relations program that was distributed during orientation identified the vision for this facility, which was "to be the best at customer service [and] to live the core values every day." A report filed in the Quality Committee notebook identified that the program was "...designed to improve customer satisfaction, expedite recovery of customer service opportunities, decrease associate turnover, improve associate satisfaction, [and] enhance associate recognition." The goal of this initiative was "...to create a culture so committed to excellence in customer service that those who act out of alignment with the core values and guest service standards would recognize the need for personal change without being told." Another part of this program was that employees were asked to commit in writing to the behavioral standards.

Review of documents and interviews with individuals, who were part of the Quality Committee and also served on the customer/guest relations team, revealed that the impetus for this program was the results of assessment data and a corporate directive to develop a program on diversity. The specific assessment data involved results of the
associate survey as well as data on patient satisfaction. One individual involved in the development of this program stated:

We took the idea of diversity and related that to our patients. We took the idea of improved patient satisfaction and service satisfaction and related that. And then we took the whole area of employee satisfaction and employees feeling good about where they work and...put them under one theme.

The quantitative measurements for this recently implemented program included results from a call system to both inpatients and outpatients within 48 hours of discharge; a semi-annual survey of inpatients and outpatients conducted by an independent organization; survey data addressing associate satisfaction (to be administered again during the first quarter of 2000); data on the associate turnover rate and termination for cause; and data obtained through field trips. The formal written report on this program included 1998 data on guest relations from the call back system, associate satisfaction data from 1997 and 1998 on two questions pertaining to this program, and data on termination for cause.

However, the comparability of the data from these measurements may be impacted by some recent events. For example, preparations were underway to administer the associate survey when I concluded data collection, but there was a new associate survey form. Comparison of the survey items from the 1998 spot check questions of ten key issues, which had been identified as an opportunity for improvement from the 1997 associate survey, with the current corporate form revealed a change in the wording such that the items were not directly comparable. In addition, during the last meeting of the Quality Committee that I attended, there was extensive discussion regarding the personalized customer feedback call system. Specifically, there was discussion about several issues: the decreased number of calls being made by leaders, the potential impact the decreased
number of calls might have on the data obtained, and potential strategies that might improve the number of calls being made.

*Improving Support Services*

Another example involving the use of assessment data to aid decision making related to a support service, specifically, the department responsible for information services. The oral and the written reports regarding this initiative identified that the problem involved the number of calls received per month that were "...unrelated to capital projects and generally involve moves and changes, hardware problems, software problems, and other general support issues." The oral and written reports identified that the team evaluated the organization of the department as well as the current computerized system, which included the computerized patient record or chart. In light of the fact that the patient's chart was computerized, the team stated in their report that computer systems were involved "...directly in patient care processes and any downtime or time lost due to ineffective service can disrupt the patient care processes and cause patient dissatisfaction."

The team reported that they analyzed and categorized the various reasons for calls to information services. They also evaluated the capabilities of the computer system and the organization and roles of members in the department. The minutes recorded that the solution involved the development of a process for streamlining the management of calls to information services. In addition, the minutes recorded: "The project team has changed its focus and is currently implementing a new computer system to support the data management associated with the support program." The impact of this initiative was to be evaluated via the results of a satisfaction survey developed as part of this project,
which would ascertain the level of associates’ satisfaction regarding various aspects of this project.

A second example of the use of assessment data to improve a support service was the initiation of the project to computerize the physician preference list in surgery and also to standardize supply packages for various surgical procedures. The written report stated: “We needed a mechanism to link resource usage with information to help us identify, control, and reduce costs.” The report further described this project as actually

...two projects in one: one involving new “case carts” containing all of the supplies we need for a procedure bundled logically according to a care event and delivered in a multi-featured plastic container on wheels; the other involving an operating room software installation to provide computerized doctor preference cards, scheduling, inventory maintenance, business tools, and perioperative charting.

The impetus for this project was identified as the lack of a system for “...tracking usage and enabling standardization of supplies with the physicians in a given specialty or given group thereby decreasing your cost.” This planned initiative was not completed at the end of my data collection. There were issues of cost, system compatibilities and interface problems, and changes in personnel that were reported to have impacted the complete implementation of this initiative. Despite ongoing concerns about cost and system problems, one positive result of this initiative was reported as being the development of automated preference cards for surgical procedures since prior to this time there had been no systematic means of doing this.

Incentive Use of Data

In addition to utilizing data for decision making, there were initiatives which utilized data as an incentive. One example was the individual physician report card that was
being developed during the time of my research. The second example was related to the customer/guest relations program.

**Physician Report Card**

The medical director described a new initiative for the medical center, which was to serve as an incentive. This initiative was "...to publish a very complete report card for each physician..." This report card would provide each physician with feedback on their inpatient practice such as the number of admissions per DRG (Diagnosis Related Group), readmission rates, mortality rate, average length of stay, cost per discharge and complication rate. The physician would also be provided local, state and national data for comparison. The medical director reported that this initiative was to "...have a basic format that we can repeat every six months," and the medical director presented the type of data the report card would contain at a meeting of the Quality Committee.

The medical director described the premise of this initiative as follows: "The basic premise being that physicians have the kind of egos that make them want to be in the best 25 percent and not the worst 25 percent and [when] they look at their data, they're going to improve." However, the medical director also discussed that not all physicians would respond that way and that some might disdain the data and disregard it. In addition to being a motivation to improve, the medical director also described a negative type incentive associated with this initiative. The negative aspect was that the medical director and the chair of the Physicians' Quality Committee would review each physician's data and in the event that the quality data on a physician's "...readmission rate, complication rate, mortality rate are a standard deviation beyond the mean..." then that would be addressed privately with the leadership of the medical staff (such as the chief of staff and/or the chair of the particular department). Furthermore, it was related that the
leadership of the medical center “...will be involved and they’ll want to address real discrepancies in cost, length of stay and that kind of stuff.”

**Behavioral Standards Commitment**

Another example of using data as an incentive related to the customer/guest relations program. The stated goal of this program was “...to create a culture so committed to excellence in customer service that those who act out of alignment with the core values and guest service standards would recognize the need for personal change without being told.” One aspect of this program was the pre-employment agreement. This involved the prospective employee(s) (as well as current employees) personally committing “...to model these standards by signing the Behavioral Commitment Statement.” These behavioral standards addressed such items as personal appearance, attitude, general safety, and customer/guest relation skills. One interviewee stated that new employees were told in the beginning: “...This is what we stand for, here are our core values, these are the kinds of people we’re looking for, [and] they have to sign a behavioral statement.”

The application listed the ten behavioral standards. In fact, when an individual came to the facility to complete an application, they were asked to view a video which described the mission, core values, customer service vision, and behavioral standards of this organization. During the first day of new employee orientation, new employees were provided with a small card listing these behavioral standards, and it was suggested that each employee place this card in the pocket behind their badge for future reference. In addition, as part of the first day of orientation, new employees participated in various activities emphasizing courtesy, customer relation skills, employee attitudes and diversity.

Thus, a part of this initiative included both clearly communicating the behavioral standards or expectations and also holding employees accountable for acting in
accordance with those standards. More specifically, one interviewee who participated in the customer/guest relations program development stated that it was important to rally your employees around your goals, help them understand those goals, and then hold those employees to some behavioral standards.

As previously discussed, one measurement of the effectiveness of this program was the associate turnover rate. It was reported during an interview with an individual knowledgeable about this program that the data revealed that the overall associate turnover rate did not change but "...there was a spike in for cause termination, which we related to the change in the accountability policy...." The formal, written report on the customer/guest relations program included the number of terminations for cause during a four year period (1995-1998). This data revealed a marked increase beginning in 1996. (It was not clear when work first began on this initiative.) More specifically, the number in 1996 was more than three times the number in 1995. The interpretation of this data as stated in the written report was: "The increased numbers indicate a willingness on the part of leaders to take appropriate action when indicated."

**Data as Information**

Astin (1993) also discusses the use of assessment data as a means of producing information that can foster the learning process. There was also evidence of data being utilized as information at this facility.

For example, this organization participated in a corporate wide assessment project that provided data on over 50 indicators. This assessment project included a variety of indicators such as readmission rates, cesarean section rates, surgical site infection rates for specific types of surgical procedures, average length of stay for specific diagnoses, number of delinquent medical records, data on unscheduled returns to the emergency
room, and the length of time in the emergency department. This facility was also involved in collecting and analyzing various risk stratified clinical data. In addition, various committees collected and monitored data regarding specific indicators - such as, patient falls, medication errors, adverse drug reactions, blood culture contamination rates, and the incidence of methicillin resistant staph aureus (MRSA) infections.

The medical director addressed the issue of data analysis and the need to "avoid drowning in data and never seeing the information..." and briefly discussed five strategies for transforming data into meaningful information. The five strategies were as follows:

[1] ...If we're as good as the mean or better, or if there's not a tremendous amount of variation from practitioner to practitioner, and it fits the 20/80 of what we do, then we should look at it more carefully.

[2] If it's large volume, large cost, or high risk, look at it carefully.

[3] ...If it meets high cost, high volume, high risk and there's significant variation, then you drill down into the components of it and begin to look at the process.

[4] If it's small volume, minimal risk,...just collect it and have it available if you want to use it.

[5] If the outcomes fall within the parameters that an organization sets for itself and there's no tremendous variation, then...just put the data out there.

Section VI: Brief Summary

In summary, using my four research questions as an organizing structure, this chapter presented the various ways that the performance improvement program affected this particular acute care facility as revealed through multiple data sources. The chair of the Quality Committee described the current performance improvement program as a journey
that continues to evolve and data portrays aspects of this continuing journey.

Specifically, participants in the performance improvement program provided insight regarding this evolution such as the involvement of employees, the incorporation of the performance improvement into the culture, the change in the role and character of the Quality Committee, the various modes to participate in performance improvement endeavors, the ownership of initiatives by department/areas/teams, and the emphasis on measurement.

Participants also provided insight regarding the perceived effect of the performance improvement program. These included the four perceived driving forces regarding the quality efforts; the reason for a two committee structure; communication between the two committee structure; the function of the Quality Committee; the three categories of hindrances or constraining factors on performance improvement activities; the impact of case management including care paths, the case manager and the multidisciplinary cooperative groups; the impact of customer satisfaction; and the proactive and reactive responses to corporate initiatives, regulatory requirements, and/or accreditation standards.

In addition, data revealed seven ways the performance improvement program affected the operations. These included identifying the goals or ends of the performance improvement program, developing a seven step process for improving performance and processes, establishing a format for reporting on various initiatives, developing a reporting calendar or schedule, providing a written record of performance improvement activities, providing a forum for sharing about initiatives, and providing a forum for sharing information.

Research also yielded insight regarding the various uses of data. One use was to facilitate decision making to improve patient care and to improve compliance efforts. A second use of data was to serve as an incentive such as the physician report card and the behavioral standards commitment. Last, data were used merely to provide information.
Thus, research data provided insight regarding the evolution of the performance improvement program at this facility. In addition, various data facilitated my understanding of how implementation of the plan for performance improvement affected this facility; thus, providing answers to my guiding research questions.
CHAPTER 5
SUMMARY, DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH

Introduction

The purpose of this case study was to explore how implementation of the plan for performance improvement, the performance improvement program required in the performance improvement standards of the Joint Commission on Accreditation of Healthcare Organizations, affected an acute care setting. The content of this chapter will be organized into four sections. Section I will summarize my findings. Section II will discuss my findings in relationship to current literature on the application of performance improvement philosophy, management methods, and tools in a health care setting. Section III will present my conclusions about how the performance improvement program affected this acute care facility. Last, Section IV will address implications for future research.

Section I: Summary of Findings

My research was guided by four initial questions. The summary of findings will be discussed in relationship to my guiding research questions, which were as follows:

(1) Who are the participants in the performance improvement program at this particular acute care setting?
(2) How do members of the health care team at this particular acute care setting perceive the effect of the performance improvement program?
(3) How does the performance improvement program affect the operation of this particular acute care setting?
(4) What is the decision utility of the various performance improvement data?

Participants in the Performance Improvement Program

The performance improvement plan at this facility described the performance improvement program as using "...an interdisciplinary approach to continuously improve the quality of patient care/services in a manner that is efficient, effective, and consistent with the philosophies and goals of the institution and..." the corporation with whom this organization was affiliated. The performance improvement activities were to be accomplished through two separate committees - the Quality Committee and the Physicians' Quality Committee.

The Quality Committee membership consisted primarily of leaders of the acute care setting and all were employees of either the acute care setting or the corporation. The Physicians' Quality Committee membership consisted of two categories of members: those with voting privileges and those without voting privileges, and the vast majority of those with voting privileges were elected leaders of the medical staff. In addition to members of these two committees, interviews, review of documents, and observations revealed participation by a variety of health care providers on different performance improvement projects. Participation may have been via committee, multidisciplinary cooperative group, or special team. Of particular note was the recently developed and implemented customer/guest relations program, which had the goal of impacting the culture of the organization.
Perceptions of the Effect of the Performance Improvement Program

Interviewees provided insight as to this facility's journey regarding performance improvement and their various perceptions of the effect of the performance improvement program at this facility reflecting Bolman and Deal's (1997) symbolic frame. One insight centered on the evolution of the performance improvement journey which was described as evolving from having a few people responsible for quality assurance type activities to a much broader perspective of performance improvement involving diverse people from all levels. More specifically, one interviewee stated that quality reports “used to be something you literally pulled out for your surveys. Now, it’s how you do business.” Furthermore, departments/areas were now responsible or accountable for identifying performance improvement opportunities, deciding whether it was feasible to undertake a particular project, and determining specific measures of success - not the Quality Committee.

Another insight related to the perceived impetus or driving force of the concern with quality or performance improvement at this facility. These perceptions varied and included compliance with various regulatory or accrediting agency requirements, the effect of the mission and core values of this organization, the issue of economic viability and/or market competition, and the concern with satisfying customers. Third, responses to accreditation standards, regulatory requirements, and/or corporate initiatives included both proactive and reactive actions. Fourth, performance improvement activities were to be accomplished through two committees, a hospital/medical center committee and a physician committee, due to expressed concerns regarding confidentiality, privacy, malpractice, and time of the respective meetings. A fifth insight was the communication process between the two committees and efforts to promote communication - such as, designing membership of the committee to overlap.
Sixth, interviewees described diverse functions of the Quality Committee. These included improving the operation of departments; facilitating compliance with accreditation and/or regulatory requirements; being a resource, a sounding board and reporting outlet; coordinating reports on performance improvement activities; serving as a information storehouse; and conducting an annual retreat to review the current Performance Improvement Plan and draft proposed revisions to the plan.

Interviewees, also, provided examples of several performance improvement initiatives, which demonstrated the concern with customer satisfaction and the impact of the case management system. In addition, interviewees described hindrances or constraining forces on performance improvement initiatives. These hindrances included the availability of resources; the impact of reimbursement; and varying perspectives on quality health care, which included the resource frame, the process frame, the outcome frame, or different combinations of these three frames.

*The Performance Improvement Program’s Effect on the Operation of this Facility*

Interviews, review of documents and observations revealed that the performance improvement program at this particular acute care setting not only impacted the culture but also affected the operation of this facility in seven ways, reflecting Bolman and Deal’s (1997) structural frame. First, the Performance Improvement Plan identified the goals or ends of the performance improvement program at this facility. Second, the performance improvement program provided a formal seven step process to facilitate the efforts of various performance improvement teams. Third, the performance improvement program formalized the format for writing reports on performance improvement initiatives. Fourth, this program established a reporting schedule for the Quality Committee. Fifth, the program provided a written record of the various performance improvement
initiatives. Sixth, the monthly committee meetings provided a forum for reporting on various performance improvement initiatives. Last, the monthly committee meetings provided a forum for sharing information with leaders about corporate initiatives, accreditation issues, or other issues of concern.

The Uses of Performance Improvement Data

Not only was this facility involved in collecting and reporting data, there was evidence that various performance improvement data were utilized in the three different ways identified by Astin (1993) - to aid decision making, to serve as an incentive, and/or to provide information. Oral and written reports to the Quality Committee reflected the use of data to aid decision making. Sometimes the decisions affected a particular department, such as the use of a written shift report format, and at other times the decisions had a wider impact - for example, the customer/guest relations program.

Some of the examples of the decision utility of data related to improving patient care, such as the preoperative class for joint replacement patients, the congestive heart failure initiative, the readmission initiative, and the emergency services initiatives. Other examples of the use of assessment data related to improving compliance with regulatory requirements, corporate initiatives, and/or accreditation standards; improving customer/guest relations and, ultimately, satisfaction with the services received; and improving the service of support areas.

In addition, data were utilized in two additional ways. One way was as an incentive and the other was to provide information on various performance indicators. The two examples of the use of data as an incentive were the internal development of individual physician report cards and the pre-employment agreement to comply with the ten
behavioral standards of the facility. An example of data being utilized as information was the data this facility routinely collected on specific performance indicators.

Section II: Discussion

Chapter IV presented my findings of how implementation of the performance improvement program affected this particular acute care setting and I briefly summarized those findings in Section I of this chapter. In this section I will discuss my findings in relationship to current literature on the application of performance improvement philosophy, management methods, and tools in a health care setting regarding the following six areas: involvement of employees; roles of the performance improvement oversight committee; the functions of teams; the use of assessment data; the impact of variation; the abundance of data; and a limiting factor on performance improvement initiatives.

Involvement of Employees

A key component of performance improvement philosophy is involvement of employees (Deming, 1986, Berwick et al., 1990). Specifically, Berwick, Godfrey, and Roessner (1990) state,

Quality management sees each person in an organization as part of one or more processes. The job of every worker is to receive the work of others, add value to that work, and supply it to the next person in the process. (p. 32)

Data demonstrated the involvement of employees beginning with new employee orientation where new employees were introduced to this concept and the five strategies
for continuously improving quality. These were "customer orientation, alignment of activities with mission and goals, community wide commitment, accent on system study and improvement, [and] A NEVER ENDING JOURNEY TOWARD EXCELLENCE" [all caps in original]. In addition, new employees became acquainted with the mission and goals of this facility and the corporate organization and new employees were informed that each employee participated in fulfilling the mission of this facility. In fact, during the first day of orientation, attendees participated in an activity related to the continuous quality improvement program.

Review of documents identified individuals who had worked on or were currently working on various projects. Some of the projects had only a few members while others were much larger. Some of the projects were departmental in focus and others more multidisciplinary such as the customer/guest relations team or the team for standardizing supplies in the operating room. In fact, a staff nurse shared that on the unit where he/she worked that they rotated membership on teams.

*Roles of the Oversight Committee*

Another key component of performance improvement philosophy and management methods includes development of an oversight committee. Berwick, Godfrey, and Roessner (1990) discuss five roles of the oversight committee formed to strategically design the quality improvement endeavor. These are to "...plan training of managers and teams; plan the technical infrastructure for improvement; create and maintain procedures for nomination and selection of processes to be worked on; create and maintain forms of recognition and celebration of the work of quality improvement teams; and evaluate and improve the quality effort itself" (p. 42).
According to this facility’s performance improvement plan (1998-2000), there was not one particular committee with that designated function. However, as gleaned from multiple data sources, the Quality Committee seemed to assume the oversight role since that committee initiated the annual review of the Performance Improvement Plan and then submitted the proposed revisions to other committees for their review and approval. Thus, even though an oversight committee was not clearly designated in the Performance Improvement Plan, the Quality Committee will be considered as the oversight committee of this facility for the purpose of discussing the five roles of the oversight committee.

As previously stated, Berwick, Godfrey, and Roessner (1990) identify planning for “...training of managers and team...” (p. 42) as a role of the oversight committee. The Performance Improvement Plan (1999) listed the roles of the Quality Committee members or liaisons and the functions of the Physicians’ Quality Committee. The role of training was listed as a role of the Quality Committee. Specifically, a member of the Quality Committee was assigned as a liaison for a department/area and was, therefore, responsible for working with those teams and providing instruction on the seven step performance improvement method.

Another role of the quality oversight committee that Berwick, Godfrey, and Roessner (1990) identify is to plan the infrastructure. Performance improvement activities were accomplished through two separate quality committees at this facility, one consisting of employees of the medical center and the other consisting, primarily, of physicians, who were members of the voluntary medical staff. According to the reporting calendars, some items were reported at both committees - for example, the multidisciplinary cooperative groups, infection control, safety, risk management, and utilization management. However, there were other items such as medical record review, autopsy and death review that were addressed only at the Physicians’ Quality Committee.
Even though both committees were responsible for approving the Performance Improvement Plan, the Quality Committee initiated the annual review and revision of this facility's performance improvement plan, which provided an organizing frame for the performance improvement program.

Berwick, Godfrey, and Roessner (1990) discuss the issue of separating clinical quality and hospital quality. They state, “The first projects chosen by NDP [National Demonstration Project] teams tended to be on nonclinical processes...” (p. 154). They identify that “at least one reason for this focus on nonclinical issues may have been chariness about treading on doctors’ turf. ‘Clinical quality’ is regarded as the territory of physicians...” (p. 154). Furthermore, they state, “We have come to believe that many of the distinctions drawn between ‘business processes’ and ‘clinical processes’ in medical organizations are misleading. Better processes make for smoother business and better technical care” (p. 155) [italics in original]. However, they also acknowledge that “such divisions may be convenient at first, avoiding conflicts of turf and authority between...managers and clinical chiefs or between traditional quality assurance functions and those of quality improvement, but they may be shortsighted” (p. 155).

In regards to the continuation of the two quality committees at this facility, the chair of the Quality Committee stated: “We have conceptually thought about making it one group,” but the committees have remained separate because of issues relating to privacy and confidentiality. Thus, even though business processes and clinical processes are related, the chair of the Quality Committee emphasized that this facility had “...created an improvement process that works for our organization, our culture and where we are,” which included maintaining the two committee structure.

In addition to planning the infrastructure, the chair of the Quality Committee discussed the importance of procedures in the performance improvement program. One example was designing committee membership to ensure overlapping members among
committees. The stated purpose of having overlapping members was to facilitate communication and was reflected in the membership of committees/groups. For example, there were those who attended both the Quality Committee and the Physicians’ Quality Committee meetings and/or one or both of the quality committee meetings as well as other administrative meetings.

Other procedures discussed by the chair of the Quality Committee were the seven step process and the method of tracking the numerous projects. The chair stated:

It’s important that we use a process. We use a seven step process. We’re working for improvement. We have to have as an organization a systematic way to get reports in, to track information, and to track progress and improvement.

However, individual departments/areas were responsible for deciding which projects to undertake and not the Quality Committee. Even though the Quality Committee was not responsible for deciding which projects to undertake, the Quality Committee had developed a form “...that helps you decide if this is a good, viable, CQI [continuous quality improvement] project and it’s not that it has to go to Quality Committee for them to approve.” Departments/areas had designated times when reports were due to the Quality Committee but, also, had the option to submit their report in written form only. Written reports were stored in the Quality Committee notebook; were available for review, if desired; and were tracked via the quality matrix, which was updated and shared periodically with members of the Quality Committee.

The monthly Quality Committee meetings were scheduled for two hours and the four meetings I observed lasted between 80 minutes and the entire two hours with from three to five oral reports being presented. (I did not time the length of each of the oral presentations.) Clearly, there was a mechanism whereby all members of the Quality Committee had the potential to be informed about all the various quality initiatives, but the limitation with this procedure related to the substantial effort required of committee
members to be informed of the various performance improvement initiatives that had not
been presented orally to the committee.

The fourth role of the oversight committee that Berwick, Godfrey, and Roessner
(1990) identify is to "...create and maintain forms of recognition and celebration of the
work of quality improvement teams..." (p. 42). According to the 1999 Performance
Improvement Plan, one of the roles of the Quality Committee members/liaisons was
"recognizing and communicating improvement results." The chair of the Quality
Committee stated that the Quality Committee was about reviewing reports, sharing
information, and celebration.

In recognizing the efforts of individuals who participated in performance improvement
initiatives, a facility-wide initiative had been undertaken, which was designed to promote
and recognize new ideas. This initiative included a "...financial incentive program for
team ideas that reduce expenses, or improve quality, or improve customer satisfaction."
However, after implementing this initiative and evaluating it's effectiveness, it was
decided to cancel this initiative and this was discussed at length during the last Quality
Committee meeting I observed. In fact, during the oral presentation to the Quality
Committee regarding the decision to cancel the contract with the external agency, part of
the discussion focused on the importance of having some means of recognizing
associates. Specifically, the chair of the Quality Committee commented on the
importance of being sensitive to the need to recognize associates and the committee
discussed potential methods to recognize ideas and contributions - such as, reporting the
various initiatives in the internally published communication paper.

The fifth role of the oversight committee that Berwick, Godfrey, and Roessner (1990)
discuss involves evaluating and improving the quality effort. As previously stated, the
Quality Committee initiated the annual review of the performance improvement plan and
proposed revisions to the plan for the review and approval by other committees and the board. This was the focus of the Quality Committee’s annual retreat, which had been conducted for the past three years (since 1997). Thus, even though the Performance Improvement Plan did not designate the Quality Committee as the oversight committee, this committee demonstrated aspects of the five roles of a quality oversight committee with the exception of creating and maintaining methods for the committee to nominate and select performance improvement initiatives (Berwick, et al., 1990) since that was not a function of this committee.

**The Functions of Teams**

In addition to involving employees and having an oversight committee, another emphasis of performance improvement philosophy and management methods included the use of teams. Berwick, Godfrey, and Roessner (1990) state, “Most improvement occurs through special evanescent project teams. These teams are assembled for the purpose of carrying out a specific improvement assignment under the authority of the Quality Council” (p. 42). During review of documents (including the Quality Committee matrix), there was evidence of the use of various multidisciplinary teams to improve processes. There was also evidence, at times, of smaller, more departmentalized teams working on a project. The importance of using multidisciplinary teams was emphasized by several interviewees. For example, one individual stated: “You have people from every perspective now involved in quality.” This individual described the experience of being on a performance improvement team as an “...enlightening and empowering experience for everyone on that team because they all bring great knowledge to this project that you’re working on.” Another individual described the benefit of a multidisciplinary team as follows: “Even though each of us had different areas we
wanted to concentrate on, we had somebody there who could let us know what the limitations were of what we could and could not do.” Thus, clearly, the existence and benefit of utilizing teams to improve processes and performance was evident at this facility.

The Use of Assessment Data

Berwick, Godfrey, and Roessner (1990) discuss the use of assessment data in an organization which utilizes the philosophy of performance improvement. They state,

"Unlike other approaches to improvement, however, in which measurement is used to reward and discipline people, measurement in the quality management effort is used to gain knowledge of the processes, so that they can be understood, predicted, and improved." (p. 41)

There were numerous examples of the use of assessment data at this facility. Assessment data were used to identify opportunities to improve and also to assess the results of performance improvement efforts. Some examples included the trended results from the associate survey, the data on the readmission rate, the data on the use of a specific classification of medications to treat patients diagnosed with congestive heart failure, the data on turn around times in the emergency room, the data on compliance with state legislation regarding organ donation, and the data on the readmission rate of patients participating in the congestive heart failure clinic.

In addition to examples of using data to identify opportunities for improvement and then measuring the gains, there were other examples that gave the impression of being more congruent with the reward and discipline use of assessment data. One example involved the centralized cardiac monitoring center. The formal written report for this initiative identified that as a result of the newly developed system there now existed a
dependable method of checks and balances between the monitoring center and the nursing units. The report also stated: “We are now at the point that failure to comply with proper procedures are resulting in disciplinary action.” However, in a performance improvement environment where the purpose of assessment data is to understand and improve processes (Berwick, et al., 1990), the emphasis of this report seemed more on discipline and not on understanding the cause of any further variation.

The second example related to the behavioral standards developed in conjunction with the recently implemented customer/guest relations program. According to the formal written report, the goal of this initiative was “…to create a culture so committed to excellence in customer service that those who act out of alignment with the core values and guest service standards would recognize the need for personal change without being told.” One measure of success for this program included the associate turnover rate and, even though the associate turnover rate had not changed, there was an increase in the number of terminations for cause. The formal written report revealed that there was an increase in the termination for cause in the year this program was implemented (1998) as well as the two preceding years. In regards to the increase in the number of terminations for cause, the written report stated: “The increased numbers indicate a willingness on the part of leaders to take appropriate action when indicated,” which seems to emphasize the discipline aspect and not the aspect of gaining knowledge to improve (Berwick, et al., 1990).

The Impact of Variation

Another key concept that accompanies the emphasis on measurement in an organization utilizing performance improvement philosophy, methods, and tools is the concept of variation. The causes of variance include those due to a common cause or a
cause inherent in the system or process and those due to a special cause - such as caused by someone or related to a special event (Deming, 1986). Furthermore, Deming (1994) states that variation exists “...between people, in output, in service [and] in product” (p. 98). In regards to variance specific to health care, the literature discusses the variation in the practice of physicians (Wennburg, 1984; Berwick, et al., 1990; Brook, 1991; Brook & Lohr, 1985).

Not only does the practice of medicine vary among physicians but the consumers of that health care or the patients also vary in numerous ways - such as weight, age, sex, socioeconomic status, health history, genetic history, personality, and coping skills. Therefore, Berwick, Godfrey, and Roessner (1990) state, “In health care, unlike industry, it is not always clear exactly what activities are leading to what clinical results” (Berwick, et al., 1990, p. 160).

However, even though there may be a “…murky connection in medical care between inputs and outputs” (Berwick, et al., 1990, p. 160) [italics in original], measuring and analyzing data was an important activity at this facility. Specifically, one interviewee discussed the importance of measurement at this facility and stated: “We have to quantify all our indicators. We’re constantly measuring quality across the continuum...” and comparing those results to internal and external data bases.

Assessing quality at this facility incorporated both continuous quality improvement or performance improvement (CQI or PI) and quality assurance (QA). Johnson and McLaughlin (1999) discuss that the focus of quality improvement is on reducing the variation in the system while “the emphasis of QA seems to be on dealing with the outliers rather than on changing the process mean or variation” (Johnson & McLaughlin, 1999, p. 96) [italics in original]. In other words, quality assurance activities focus on special causes of variation rather than common cause or causes inherent in the system or process (Deming, 1986).
Some examples of performance improvement activities were the customer/guest relations program, the class for joint surgery patients, the clinic for selected patients with congestive heart failure, the use of a particular classification of medications to treat selected patients with congestive heart failure, and the development of care paths for the emergency department.

On the other hand, there was also evidence of quality assurance activities such as reviewing the medical records by a non-physician reviewer using screening criteria to identify if an event occurred that met the screening criteria, trending the events that did not require physician peer review, or scheduling a meeting with a physician to review that event. Furthermore, it was reported by the person responsible for trending this type of information and arranging peer review sessions that the results of this retrospective record review “...end up on a physician’s profile and that is their record of quality that we keep at the hospital that is used in the credentialing and recredentialing process.”

The Abundance of Data

Berwick, Godfrey and Roessner (1990) express the following opinion: “Data useful for quality improvement abound in health care” (p. 147). Clearly, for a health care facility accredited by the Joint Commission on Accreditation of Healthcare Organizations, such as this one, data abound as reflected in the accreditation standards. For example, the improving organizational performance standards in the accreditation manual state,

Data that the organization considers for collection to monitor performance include the following: performance measures related to accreditation and other requirements; risk management; utilization management; quality control; staff opinions and needs; behavior management procedures, if used; outcomes of processes
or services; autopsy results, when performed; performance measures from acceptable databases; customer demographics and diagnoses; financial data; infection control surveillance and reporting; research data; and performance data... (JCAHO, 1999, p. PI-10)

In addition, these standards state, "Organizations are required to collect data about the needs, expectations, and satisfaction of individuals and organizations served" (JCAHO, 1999, p. PI-10) and specify that

at a minimum, the organization identifies performance measures related to the following processes...:

* medication use;
* operative and other procedures that place patients at risk;
* use of blood and blood components;
* restraint use;
* seclusion when it is part of the care or service provided; and
* care or service provided to high-risk populations. (JCAHO, 1999, p. PI-11)

In addition to the data that the Performance Improvement chapter specifies that an organization must collect, other standards require additional data. For example, the environment of care standards specify data collection involving safety, security, control of hazardous materials, emergency preparedness, life safety, medical equipment, and utility systems. Specifically, the standards identify the

...ongoing monitoring of performance regarding actual or potential risk related to one or more of the following:

* staff knowledge and skills;
* level of staff participation;
* monitoring and inspection activities;
* emergency and incident reporting; or
inspection, preventive maintenance, and testing of equipment. (JCAHO, 1999, p. EC 9-10)

Another example of collecting assessment data involves the human resources function. This standard states, “The hospital regularly collects aggregate data on competence patterns and trends to identify and respond to staff’s learning needs (JCAHO, 1999, p. HR-4). Another measurement in the human resources standards is HR.5 which states, “The hospital assesses each staff member’s ability to meet the performance expectations stated in his or her job description” (JCAHO, 1999, p. HR-4).

A fourth example is in the management of information function which specifies, “Medical records are reviewed on an ongoing basis for completeness and timeliness of information...” (JCAHO, 1999, p. IM-12) The medical staff function contains a fifth example. This involves the “...ongoing monitoring of information concerning the individual’s professional performance; judgment; and clinical or technical skills” (JCAHO, 1999, p. MS-40).

The Performance Improvement Plan (1999) of this facility identified specific measurement activities, as previously described. In addition, the medical director discussed the task of reviewing data from various data bases and transforming that data into usable information. More specifically, he identified that the following data needed to be analyzed more carefully: high cost, high risk, high volume, and/or large variation. Thus, even though I did not review the specific data collected and reviewed by the Physicians’ Quality Committee, based on the accreditation standards, interviews, and my review of numerous reports submitted to the Quality Committee including results of corporate-wide indicator projects, clearly, there was an abundance of data useful for improving performance.
Limiting Factor on Performance Improvement Initiatives

Despite an abundance of data and, conceivably, numerous performance improvement opportunities in a health care setting, McLaughlin and Simpson (1999) address a human factor, which limits the number of performance improvement initiatives that can be in progress at any one time. They state,

The limit on the number of teams is related to the capacity of the facilitators to fully train and support the teams as well as to the number of processes that can be in flux at one time without confusing people. (McLaughlin & Simpson, 1999, p. 42)

More specifically, they identify that between five and twelve teams may be active at any one time based on the size of the particular institution.

The recommendation for between five to twelve performance improvement projects contrasted with the 1999 reporting schedule for just the Quality Committee. Reports were to be submitted biannually resulting in over 130 designated reporting areas annually. Each month there were reports due from eight to fifteen reporting areas and time for only seven to eight oral reports per meeting based on the guide for oral reports. (This guide specified that an oral report should last fifteen minutes and the committee was scheduled to meet for two hours per month.) As compared to the 1999 reporting schedule, however, the 2000 Quality Committee reporting schedule revealed that the total number of designated reports had declined (total due was about 65).

In summary, this section discussed the findings of the performance improvement program at this facility as they related to specific issues in the current literature on the application of performance improvement philosophy, management methods, and tools in a health care setting. The specific issues discussed included the involvement of employees, roles of the oversight committee, the functions of teams, the role of
measurement, the impact of variation, the abundance of data, and a human factor limiting the number of performance improvement initiatives.

Section III: Conclusions

The chair of the Quality Committee used the metaphor of a journey to describe the evolution of the performance improvement program at this facility, which began about seven to eight years prior to my data collection. Also occurring in close time proximity was the development and implementation of the case management system at this facility with its focus on improving processes of care and decreasing cost. Both of these changes coincided with changes occurring in the health care environment. These changes included the transition of the voluntary accreditation standards from departmental standards and quality assurance to performance-focused standards and performance improvement and the changes from growth and expansion in health care to an environment emphasizing cost containment and accountability (Relman, 1988; O’Leary, 1996; Patterson, 1995). Thus, the changes occurring at this facility did not occur in a vacuum but were reflective of changes occurring in the health care environment.

This facility’s performance improvement journey was described as transitioning from a system, which had involved a few people in quality assurance type activities to a system that employed the use of teams or groups, measuring and analyzing data, and a seven step process to improve performance. Transitioning from a focus of assuring quality to a focus of measuring performance, analyzing data and using data to improve performance may involve only using the tools of performance improvement or it may change the culture and the process for making decisions (McLaughlin & Simpson, 1999). In light of
the findings of this case study and the literature, changing the culture of the organization and the decision making process depends on leadership in five key areas.

First, leaders establish and clarify the mission, vision and values of the organization and inspire the buy in or commitment of others (Berwick, et al., 1990; Kouzes & Posner, 1995; Deming, 1994). Second, leaders make the strategic decision not only to utilize the tools of performance improvement but also to adopt the philosophy of performance improvement which focuses on involving personnel in the process of collecting data, analyzing data and using data to improve processes (McLaughlin & Kalunzy, 1999); thus, changing the process for making decisions (McLaughlin & Simpson, 1999). Third, it is those who lead that foster an environment or culture that regularly collects assessment data for the purpose of learning about processes, understanding processes, and making decisions to improve processes or performance, which is in stark contrast to using data to reward or punish (Berwick, et al., 1990). Fourth, leaders commit the resources - time, people, and money - required for those in the organization to acquire the knowledge and skills about performance improvement philosophy and methods and, subsequently, utilize those skills to improve processes or performance (Berwick, et al., 1990; Johnson & McLaughlin, 1999).

Fifth, those in leadership both empower and facilitate the involvement of various members of the health care team on various performance improvement initiatives (Berwick, et al., 1990; Kouzes & Posner, 1995). One means of facilitating involvement of various members of the health care team at this facility involved the development of multidisciplinary cooperative groups and another means involved the development of two committees to oversee performance improvement activities at this facility, one consisting of employees of the medical center and the other consisting, primarily, of physicians. Berwick, Godfrey, and Roessner (1990) discuss the development of a two committee structure and offer the following opinion: “We have come to believe that many of the
distinctions between ‘business processes’ and ‘clinical processes’ in medical organizations are misleading” (p. 155). Furthermore, they conclude, “Such divisions may be convenient at first, avoiding conflicts of turf and authority between, say, managers and clinical chiefs, or between quality assurance functions and those of quality improvement, but may be shortsighted” (p. 155). Regardless of the specific factors influencing the decision to have a two committee structure, this alludes to the leadership challenge of involving physicians in a performance improvement program in an acute care setting, especially one which has a dual leadership structure: one for the medical staff and the other for the organization.

In summary, transitioning to measuring performance, analyzing performance data and using data to improve organizational performance is a requirement of the voluntary accreditation process. However, transitioning the organization to adopt the philosophy as well as the methods of performance improvement involves more than compliance. It requires the commitment of leadership to change the culture and the process for making decisions (McLaughlin & Simpson, 1999).

Section IV: Recommendations for Future Research

McLaughlin and Simpson (1999) state, “Because CQI [continuous quality improvement] is new, there is little information about how effective such an effort will be after five or ten years” (p. 42); therefore, there is the need for further research in this area. This was a case study of how a performance improvement program affected only one particular not-for-profit acute care facility that was affiliated with a well-known religious denomination and was part of a larger corporation. However, the diversity of health care settings creates an environment conducive to future research opportunities regarding the
effect of a performance improvement program. These opportunities include exploring in depth how the implementation of a performance improvement program affects one or more acute care facilities or to explore the effect across several facilities using either quantitative or qualitative means.

One opportunity for future research would be to conduct another case study in other acute care facilities affiliated with this religious denomination and corporation in the same geographic region and then a different region. A second research opportunity would involve examining this phenomenon in a not-for-profit acute care facility affiliated with a different religious denomination. There is also the opportunity to study this phenomenon in an acute care setting affiliated with a medical school. In addition to acute care settings in a metropolitan area, there is an opportunity to study this phenomenon in a rural acute care setting. A fifth possibility is conducting a case study involving for-profit acute care facilities - both rural and/or metropolitan. A sixth opportunity is conducting a case study involving different acute care facilities (for example - for-profit acute care hospital/medical center, not-for-profit hospital/medical center with a religious affiliation, not-for-profit hospital/medical center without a religious affiliation, and an acute care hospital/medical center affiliated with a medical school) in a particular geographic section of the country. Thus, the vast diversity of health care settings provides numerous research opportunities.

In addition to conducting additional case studies of this phenomenon as described, there is an opportunity to examine leadership issues that arise when developing and implementing a performance improvement program in an acute care setting. There is also the opportunity to examine how the various health care educational programs are preparing their graduates to practice in the current health care environment, which includes performance improvement philosophy and management strategies, in view of educators' dilemma of what content to include in any given program of study (Palmer,
1998; Konner, 1987). A related potential area for future research would be to examine the perception of recent graduates from the various health care professions as to their educational preparation regarding the philosophy and management strategy of performance improvement. Another area for research would be to examine how various health care employers perceive the preparedness of new graduates to function in a performance improvement environment.

Other potential research areas relate to the safety and risk management programs of various health care settings in light of the increasing literature and research on the impact of a system on human errors (IOM, 2000; Reason, 1990; Bogner, 1994). Reason (1990, 1994) classifies errors as active or latent. He defines active failures as "...errors and violations committed by those in direct contact with the human-system interface" (Reason, 1994, p. xi). On the other hand, he states,

*Latent failures* are the delayed-action consequences of decisions taken in the upper echelons of the organization or system. They relate to the design and construction of plant and equipment, the structure of the organization, planning and scheduling, training and selection, forecasting, budgeting, allocating resources and the like.

(Reason, 1994, p. xi) [italics in original]

Furthermore, the recent report by the Institute of Medicine, *To Err is Human* (2000), stresses building safe systems. They state, "The focus must shift from blaming individuals for past errors to a focus on preventing future errors by designing safety into the system" (p. 5). Thus, there is an opportunity to learn how a systems and performance improvement approach affects a safety/risk management program from the perspective of various health care practitioners.

In conclusion, Berwick, Godfrey, and Roessner (1990) relate a scenario of an intern being chided by the supervising junior resident about not having personally examined a spinal tap specimen. In the scenario, the junior resident states, "'That is your patient in
there, and so far as you can be concerned, nobody has looked at the spinal until you, yourself have’ (p. 16) [italics in original]. The authors follow this scenario with the description of a modern acute care setting and ask, “...Can any one person be held totally accountable for the care we create together? Or is that the ideal of a romantic past, which no longer serves patients well in the complex present?” (p. 16). Systems thinking and systems management strategies are being applied to the largest, costliest, and most complex sociotechnical system, the health care system (Cott, 1994). Therefore, it is prudent to systematically inquire how this practice affects various health care settings, educational programs, and individual practitioners (Worthen & Sanders, 1987).
REFERENCES
References


National Center for Health Services Research. (1977, September). Quality assessment focus on outcomes. *Medical Care Supplement, 15* (9), iii-84.


APPENDICES
APPENDIX A
APPENDIX A

SECTION I - Patient-Focused Functions
1. Patient Rights and Organizational Ethics
2. Assessment of Patients
3. Care of Patients
4. Education
5. Continuum of Care

SECTION II - Organization Functions
1. Improving Organization Performance
2. Leadership
3. Management of the Environment of Care
4. Management of Human Resources
5. Management of Information
6. Surveillance, Prevention and Control of Infection

SECTION III - Structures with Functions
1. Governance
2. Management
3. Medical Staff
4. Nursing

(JCAHO, 1999, p. UM-4)
Dear Participant,

You are invited to participate in a research study. The purpose of this study is to explore how the concern with quality including measuring performance, analyzing the performance data, and improving performance affects this facility as perceived through multiple data sources. The benefit of this study is that it will contribute to the body of knowledge about performance improvement programs in a service industry (particularly, a health care setting) and the effect of the health care accrediting agency’s performance improvement standards on a particular facility.

The study will consist of ongoing observations, review of documents, collection of documents and artifacts, and interviews (which may be taped) with various participants. It is anticipated that the entire data collection will take about three months.

There are no anticipated risks of this study since data will be gathered in the usual work environment. Participation in the study is voluntary and participants may withdraw at any time. Data from participants who withdraw before data collection is completed will be destroyed.

The information in the study will be kept confidential. Data obtained during this study will be stored securely and will be made available only to persons conducting the study unless you specifically give permission in writing to do otherwise. No reference will be made in oral or written reports linking you to the study.

The specific amount of time for each interview will vary but will last no longer than one hour. Interviews may be audiotaped with your consent and all interviews will be transcribed by the interviewer either from the audiotape or handwritten notes. A copy of the transcript of your interview will be shared with you requesting candid feedback about the accuracy of the transcription. Following an opportunity for feedback, the tape will be erased.

If you have questions at any time about the study or the procedures, you may contact me via e-mail at pjenkins@utk.edu or via the Leadership Studies Unit Office in the College of Education at the University of Tennessee (238 Claxton Addition, Knoxville, TN 37996-3400, phone 423-974-2216). If you have questions about your rights as a participant, contact the Compliance Section of the Office of Research at (423) 974-3466.

Respectfully,

Patricia C. Jenkins, R.N., M.S.N
Doctoral Candidate, The University of Tennessee
A CASE STUDY of a PERFORMANCE IMPROVEMENT PROGRAM at an ACUTE HEALTH CARE FACILITY

INFORMED CONSENT FORM
You are invited to participate in a research study. The purpose of this study is to explore how the concern with the quality of health care including measuring performance, analyzing the performance data, and improving performance affects this health care facility as perceived through multiple data sources.

INFORMATION
The study will consist of ongoing observations, review of documents, collection of artifacts and documents, and interviews (which may be taped) with various participants. It is anticipated that the entire data collection will take about three months. The specific amount of time for each interview will vary but will last no longer than one hour. All interviews will be transcribed by the interviewer. A copy of the transcript of his/her interview will be shared with each interviewee with a request for candid feedback about the accuracy of the transcription. Following an opportunity for feedback, the tape will be erased.

RISKS
There are no anticipated physical risks associated with this study since data will be gathered in the usual work environment. Participation in the study is voluntary and participants may withdraw at any time. Data from participants who withdraw before data collection is completed will be destroyed. The interviewer will attempt to conduct the interview in a comfortable environment and will promote a relaxed atmosphere.

BENEFITS
The results of this study will contribute to the body of knowledge about performance improvement programs in service industries (particularly, a health care setting) and the effect of the health care accrediting agency's performance improvement standards on a particular health care facility.

CONFIDENTIALITY
The information in the study will be kept confidential. Signed consent forms will be stored securely at the University of Tennessee for three years past the completion of the study. Data from the study will be stored securely and will be made available only to persons conducting the study unless you specifically give permission in writing to do otherwise. No reference will be made in oral or written reports linking you to the study.

CONTACT
If you have questions at any time about the study or the procedures, you may contact the researcher, Patricia C. Jenkins, via e-mail (pjenkins@utk.edu) or via the Leadership
Studies Unit Office in the College of Education at the University of Tennessee (238 Claxton Addition, Knoxville, TN 37996-3400, phone 423-974-2216). If you have questions about your rights as a participant, contact the Compliance Section of the Office of Research at (423) 974-3466.

PARTICIPATION

Your participation in this study is voluntary; you may decline to participate without penalty. If you decide to participate, you may withdraw from the study at any time without penalty. If you withdraw from the study before data collection is completed, your data will be destroyed.

CONSENT

I have read the above information and agree to participate in this study. I have received a copy of this form.

Participant’s name (print)______________________________

Participant’s signature______________________________

Date________________
APPENDIX C
# APPENDIX C

## Time Period of Data Collection

<table>
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<th>Observation</th>
<th>Document Review</th>
<th># Interviews</th>
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APPENDIX D
APPENDIX D

TIMETABLE OF DATA COLLECTION

AUGUST

Observation  Documents/Artifacts Interviews
Employee Orientation  Policy & Procedure Manuals  Educator
QC Meeting  - Risk/Safety  Sr. Vice President
- Human Resource  Consultant-Regulatory Compliance
- Nursing  Infection Control Nurse
- Organizational Patient Care  Safety Coordinator
PI Plan
List of QC Members
Plan for Provision of Care
Scope of Services
Handouts from Orientation
Copy of Infection Control Report
Guest/Customer Service Booklet

September

Observation  Documents/Artifacts Interviews
JCAHO Presentation  Coordinator-Regulatory Compliance
Manuals:  VP-Resource Development
- Performance Improvement  Leader for Clinical Outcomes &
- Infection Control  Case Management
Infection Control Plan  Chair of Quality Committee
Infection Control Committee  Leader of Ambulatory Services
Membership List
### October

<table>
<thead>
<tr>
<th>Observation</th>
<th>Documents/Artifacts</th>
<th>Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preoperative Class</td>
<td>1999 Quality Committee minutes, agendas, reports</td>
<td>Director-Strategic Resources</td>
</tr>
<tr>
<td>QC Meeting</td>
<td>1998 Quality Committee minutes, agendas, reports</td>
<td>Director-Pharmacy</td>
</tr>
<tr>
<td></td>
<td>Quality Matrix</td>
<td>Director-Physician Practices</td>
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<tr>
<td></td>
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<td>Case Manager (Orthopedics)</td>
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<tr>
<td></td>
<td></td>
<td>Medical Staff Liaison to QC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sr. Services Liaison to QC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Leader - Continuum of Care</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chief Nursing Officer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Home Health Liaison to QC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Case Manager (Cardiac)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medical Director</td>
</tr>
<tr>
<td></td>
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<td>Chief Financial Officer</td>
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</table>

### November

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<tr>
<th>Observation</th>
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<th>Interviews</th>
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<tr>
<td>Quality Committee</td>
<td>1998 Quality Committee minutes, agendas, reports</td>
<td>Medical Staff Coordinator</td>
</tr>
<tr>
<td>Women's Center</td>
<td>(continued)</td>
<td>Decision Support</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Leader-Surgical Services</td>
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<tr>
<td></td>
<td></td>
<td>Director-Internal Audit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Director-Materials Management</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Case Manager (Women's Services)</td>
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</table>
APPENDIX D

TIMETABLE OF DATA COLLECTION
(continued)

December

<table>
<thead>
<tr>
<th>Observation</th>
<th>Documents/Artifacts Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morning with Case Manager</td>
<td>Home Health Liaison to QC</td>
</tr>
<tr>
<td></td>
<td>Staff Nurse</td>
</tr>
<tr>
<td></td>
<td>Leader-Business Services</td>
</tr>
<tr>
<td></td>
<td>Medical Director-Laboratory</td>
</tr>
<tr>
<td></td>
<td>Physician-Family Practitioner</td>
</tr>
<tr>
<td></td>
<td>Physician-Internal Medicine</td>
</tr>
<tr>
<td></td>
<td>Physician-Surgeon</td>
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<tr>
<td></td>
<td>Business Leader-Acute Care</td>
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January

<table>
<thead>
<tr>
<th>Observation</th>
<th>Documents/Artifacts Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality Committee</td>
<td>Quality Committee Reports</td>
</tr>
<tr>
<td></td>
<td>Mid-1995-1997</td>
</tr>
<tr>
<td></td>
<td>2000 Corporate Strategic Plan</td>
</tr>
<tr>
<td></td>
<td>Physician-Family Practitioner</td>
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</tbody>
</table>

February

<table>
<thead>
<tr>
<th>Observation</th>
<th>Documents/Artifacts Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000 Quality Committee - minutes, agenda, reports</td>
<td>Chief Executive Officer</td>
</tr>
<tr>
<td>PI Plans (1998-2000)</td>
<td>Sr. Vice President</td>
</tr>
<tr>
<td>(continued)</td>
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</tr>
</tbody>
</table>
APPENDIX E
# APPENDIX E

## EVOLUTION of INTERVIEW QUESTIONS

<table>
<thead>
<tr>
<th>Month</th>
<th>Focus of Interview Question</th>
<th># Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>August</td>
<td>1. Would you share with me about what you do?</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>2. How do you perceive the concern with quality affects this facility?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Help me learn about the organizational structure of this facility.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Are there other individuals you suggest I contact?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. May I contact you again, if it would facilitate my research?</td>
<td></td>
</tr>
<tr>
<td>September through first week of October</td>
<td>1. Would you share with me about what you do?</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>2. How do you define quality health care?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. How do you perceive the concern with quality affects this facility?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Help me learn about the organizational structure of this facility.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. What do you perceive to be the driving force behind the concern with quality at this facility?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6. Are there other individuals you suggest I contact?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7. May I contact you again, if it would facilitate my research?</td>
<td></td>
</tr>
<tr>
<td>2nd week of October through February</td>
<td>1. Would you share with me about what you do?</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>2. How would you define the term quality health care?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. How do you perceive the concern with quality affects this facility?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. What do you perceive to be the driving force behind the concern with quality at this facility?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. Are there other individuals you suggest I contact?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6. May I contact you again, if it would facilitate my research?</td>
<td></td>
</tr>
</tbody>
</table>

Note: After having completed reviewing several documents, observing new employee orientation and a Quality Committee meeting, and conducting 14 interviews, there emerged a consistency in the planned interview questions. This occurred by the second week of October.
APPENDIX F
# APPENDIX F

**MEMBERS of the QUALITY COMMITTEE**

<table>
<thead>
<tr>
<th></th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Chairperson</td>
</tr>
<tr>
<td>2</td>
<td>Medical Director</td>
</tr>
<tr>
<td>3</td>
<td>Senior Services Liaison to QC</td>
</tr>
<tr>
<td>4</td>
<td>Director - Strategic Resources</td>
</tr>
<tr>
<td>5</td>
<td>Leader - Business Services</td>
</tr>
<tr>
<td>6</td>
<td>Medical Staff Liaison to QC</td>
</tr>
<tr>
<td>7</td>
<td>Home Health Care Liaison to QC</td>
</tr>
<tr>
<td>8</td>
<td>Decision Support Representative</td>
</tr>
<tr>
<td>9</td>
<td>Director - Materials Management</td>
</tr>
<tr>
<td>10</td>
<td>Leader - Continuum of Care</td>
</tr>
<tr>
<td>11</td>
<td>Chief Operating Officer</td>
</tr>
<tr>
<td>12</td>
<td>Vice President - Resource Development</td>
</tr>
<tr>
<td>13</td>
<td>Leader of Clinical Outcomes &amp; Case Management</td>
</tr>
<tr>
<td>14</td>
<td>Chief Nursing Officer</td>
</tr>
<tr>
<td>15</td>
<td>Consultant - Regulatory Compliance</td>
</tr>
<tr>
<td>16</td>
<td>Leader - Ambulatory Services</td>
</tr>
<tr>
<td>17</td>
<td>Director - Internal Audit</td>
</tr>
<tr>
<td>18</td>
<td>Leader - Women’s Services</td>
</tr>
<tr>
<td>19</td>
<td>Director - Physician Practices</td>
</tr>
<tr>
<td>20</td>
<td>Director - Pharmacy</td>
</tr>
<tr>
<td>21</td>
<td>Chief Executive Officer</td>
</tr>
<tr>
<td>22</td>
<td>Leader - Surgical Services</td>
</tr>
</tbody>
</table>
## APPENDIX G
### Individuals Contacted

<table>
<thead>
<tr>
<th></th>
<th>Position</th>
<th></th>
</tr>
</thead>
</table>
| 1 | Nurse educator                                                           | 41| Staff Nurse
| 2 | Senior Vice President                                                    | 42| CEO/President *
| 3 | Chair of Quality Committee *                                            | 43| Surgical Clinical Leader
| 4 | Consultant for Regulatory Compliance *                                   | 44| Cardiovascular Surgeon
| 5 | Clinical Outcomes Leader *                                              | 45| Medical Director of ER
| 6 | Vice President of Resource Development *                                 | 46| Strategic Resources
| 7 | Medical Staff Liaison to Quality Committee *                             | 47| Director *
| 8 | Safety Coordinator                                                       |   | Chief Financial Officer
| 9 | Infection Control Nurse                                                  |   |
|10 | Clinical Leader of Emergency Services *                                  |   |
|11 | Chief Operating Officer *                                                |   |
|12 | Cardiac Case Manager                                                    |   |
|13 | Orthopedic Case Manager                                                 |   |
|14 | Physician Practice Director *                                            |   |
|15 | Board Coordinator                                                       |   |
|16 | Service Line Leader - Women’s Services *                                 |   |
|17 | Director of Materials Management *                                       |   |
|18 | Director of Pharmacy *                                                  |   |
|19 | Medical Director *                                                       |   |
|20 | Chief Nursing Officer *                                                 |   |
|21 | Senior Services Liaison to Quality Committee*                           |   |
|22 | Director of Internal Audit *                                            |   |
|23 | Service Line Leader - Care Continuum *                                  |   |
|24 | Decision Support Liaison to Quality Committee *                         |   |
|25 | Home Health Liaison to Quality Committee*                               |   |
|26 | Leader of Business Services *                                           |   |
|27 | Service Line Leader - Surgery *                                         |   |
|28 | Medical Staff Coordinator                                               |   |
|29 | Case Manager/Educator - Women’s Services                                |   |
|30 | Chief of Staff                                                           |   |
|31 | Business Leader                                                         |   |
|32 | Cardiac Clinical Leader                                                 |   |
|33 | Clinical Leader of Transition                                           |   |
|34 | Vice Chief of Staff                                                     |   |
|35 | Medical Director of Laboratory                                          |   |
|36 | Internal Medicine Physician and Medical Director of a Large Group of Physicians |   |
|37 | Internal Medicine Physician                                             |   |
|38 | OB/GYN Physician                                                         |   |
|39 | Family Practice Physician and Member of Physicians’ Quality Committee   |   |
|40 | Family Practice Physician                                               |   |
| * | Members of the Quality Committee                                        |   |
### APPENDIX H

**Individuals Interviewed**

<table>
<thead>
<tr>
<th>Title of Individual</th>
<th>Date of Interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Nurse Educator</td>
<td>8/18/99</td>
</tr>
<tr>
<td>2. Senior Vice President</td>
<td>8/20/99 &amp; 2/2/00</td>
</tr>
<tr>
<td>4. Infection Control Nurse</td>
<td>8/31/99</td>
</tr>
<tr>
<td>5. Safety Coordinator</td>
<td>8/31/99</td>
</tr>
<tr>
<td>7. Chair of Quality Committee *</td>
<td>9/8/99</td>
</tr>
<tr>
<td>9. Vice President of Resource Development *</td>
<td>9/15/99</td>
</tr>
<tr>
<td>10. Director of Strategic Resources *</td>
<td>10/4/99</td>
</tr>
<tr>
<td>11. Director of Pharmacy *</td>
<td>10/4/99</td>
</tr>
<tr>
<td>12. Medical Staff Liaison to Quality Committee *</td>
<td>10/5/99</td>
</tr>
<tr>
<td>13. Orthopedic Case Manager</td>
<td>10/5/99</td>
</tr>
<tr>
<td>15. Senior Services Liaison to Quality Committee *</td>
<td>10/18/99</td>
</tr>
<tr>
<td>16. Service Line Leader - Continuum of Care *</td>
<td>10/19/99</td>
</tr>
<tr>
<td>17. Chief Nursing Officer *</td>
<td>10/20/99</td>
</tr>
<tr>
<td>19. Cardiac Case Manager</td>
<td>10/22/99</td>
</tr>
<tr>
<td>20. Medical Director *</td>
<td>10/25/99</td>
</tr>
<tr>
<td>22. Medical Staff Coordinator</td>
<td>11/1/99</td>
</tr>
<tr>
<td>23. Women’s Services Case Manager</td>
<td>11/1/99</td>
</tr>
<tr>
<td>24. Decision Support Liaison to Quality Committee*</td>
<td>11/2/99</td>
</tr>
<tr>
<td>26. Director of Internal Audit *</td>
<td>11/16/99</td>
</tr>
<tr>
<td>27. Director of Materials Management *</td>
<td>11/22/99 &amp; 12/14/99</td>
</tr>
<tr>
<td>28. Staff Nurse</td>
<td>12/9/99</td>
</tr>
<tr>
<td>29. Leader of Business Services</td>
<td>12/10/99</td>
</tr>
<tr>
<td>30. Medical Director of Laboratory</td>
<td>12/10/99</td>
</tr>
<tr>
<td>31. Cardiovascular Surgeon</td>
<td>12/13/99</td>
</tr>
<tr>
<td>32. Family Practitioner and Member of Physicians’ Quality Committee</td>
<td>12/14/99</td>
</tr>
<tr>
<td>33. Internal Medicine Physician and Medical Director for a large physician practice</td>
<td>12/17/99</td>
</tr>
<tr>
<td>34. Business Leader for Acute Services</td>
<td>12/31/99</td>
</tr>
<tr>
<td>35. Family Practitioner</td>
<td>1/18/00</td>
</tr>
<tr>
<td>36. Chief Executive Officer and President *</td>
<td>2/2/00</td>
</tr>
</tbody>
</table>

* Member of the Quality Committee
APPENDIX I
APPENDIX I
List of Documents Reviewed

1. Information received during orientation
   a. associate handbook
   b. handbook on corporate program emphasizing legal/ethical behavior
   c. handbook on the guest/customer relations program

2. Policy and Procedure Manuals
   a. Risk Management/Safety
   b. Nursing Service
   c. Human Resources
   d. Organizational

3. Plan for Provision of Care

4. Scope of Services

5. JCAHO Presentation Manuals
   a. Infection Control
   b. Improving Organizational Performance

6. The Infection Control documents
   a. Infection Control Program
   b. The Infection Control Committee

7. 1998/1999 Performance Improvement Team Matrix


9. Quality Committee Project Summary Form for 1999 and 2000

10. Quality Committee notebook containing the monthly agenda, minutes and reports (both filed and those given orally) for 1998 - January 2000

11. September 1995-1997 Quality Committee notebooks containing reports (no minutes or agendas)

12. 2000 Associate Satisfaction Survey form

13. Xeroxed information from Board Bylaws addressing
   a. The medical staff
   b. Resolution to have a Board Professional Relations and Quality Committee
APPENDIX I
List of Documents Reviewed (continued)

14. Reporting Schedules
   b. Physicians’ Quality Committee Reporting Schedule (2000)

15. 2000 schematics
   a. Organizational Performance Improvement Model
   b. Quality Committee and Focus Groups
   c. 2000 Schematic relating flow of physician quality information

16. 2000 Quality Committee Member/Liaison Contract

17. Handouts on medical staff peer review process

18. Care Path for Atrial Fibrillation
APPENDIX J
APPENDIX J

List of Artifacts

1. Information received during orientation:
   a. information on patient rights and responsibilities
   b. employee orientation schedule
   c. handout on ergonomics
   d. handout on work related injury/illness
   e. instructions for phone use
   f. departmental welcome checklist
   g. handout on normal duties associated with security officers
   h. handouts regarding handwashing procedure
   i. handout on the spread of infection
   j. handout regarding tuberculosis
   k. handout on emergency pages and procedures
   l. handouts regarding engineering and safety
   m. handouts regarding risk management and examples of incident reports
   n. handouts on the wellness program
   o. handouts listing individuals in Human Resources and their phone number

2. Attendance Grid for Medical Executive Committee meeting (1998-1999)

3. Excerpt from monthly newsletter on laboratory accreditation survey

4. Notes from monthly newsletter regarding opening of the ambulatory surgery center

5. Handout on the corporate organizational quality award process
APPENDIX K

EMERGING CATEGORIES

Mission, Vision, Values of Organization

Performance Improvement

Legal/Ethical, Regulatory, Accountability

Money, Financial Issues

Customers, Customer Relations

Leadership, Strategic Direction

Trust

Standard of Care

Framing
APPENDIX L
## APPENDIX L

### Contents of the “Project Evaluation Tool” (2000)

The scoring scale was as follows:

1 = low impact  
2 = moderate impact  
3 = high impact

### Dynamic Culture:

<table>
<thead>
<tr>
<th>Points</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>*</td>
<td>Decision is based on Core Values</td>
</tr>
<tr>
<td>*</td>
<td>Accountability is clearly determined</td>
</tr>
<tr>
<td>*</td>
<td>Develops associate potential professionally, spiritually or personally</td>
</tr>
<tr>
<td>*</td>
<td>Can be shared with other service lines, area(s) or regions</td>
</tr>
</tbody>
</table>

### Trusting Relationships

To what extent (1, 2, or 3)

<table>
<thead>
<tr>
<th>Points</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>*</td>
<td>Does this impact the “trust” relationship with your customer(s)</td>
</tr>
<tr>
<td>*</td>
<td>Is the baseline or comparative data available for this project</td>
</tr>
</tbody>
</table>

### Innovation

To what extent (1, 2, or 3)

<table>
<thead>
<tr>
<th>Points</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>*</td>
<td>Does this idea/project bring in “new dollars”</td>
</tr>
<tr>
<td>*</td>
<td>Does this idea/project represent “best practice” (as compared to a national benchmark)</td>
</tr>
<tr>
<td>*</td>
<td>Promote community wellness</td>
</tr>
</tbody>
</table>

### Demonstrating Value

To what extent (1, 2, or 3)

<table>
<thead>
<tr>
<th>Points</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>*</td>
<td>Does this impact community benefit</td>
</tr>
<tr>
<td>*</td>
<td>Does this impact patient care outcomes (reduce LOS, morbidity/mortality, patient satisfaction)</td>
</tr>
<tr>
<td>*</td>
<td>Does this impact cost savings</td>
</tr>
</tbody>
</table>

### Market Growth

To what extent (1, 2, or 3)

<table>
<thead>
<tr>
<th>Points</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>*</td>
<td>Does this help us partner with other providers</td>
</tr>
<tr>
<td>*</td>
<td>Does this increase accessibility to our services</td>
</tr>
</tbody>
</table>

### Additional Points

<table>
<thead>
<tr>
<th>Points</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>*</td>
<td>Project can be completed within six months or less (1 point)</td>
</tr>
<tr>
<td>*</td>
<td>Long term benefit (benefit will repeat yearly) (1 point)</td>
</tr>
</tbody>
</table>

What are the measures/indicators you will utilize to measure success with this project?
APPENDIX M
APPENDIX M

Content of the Project Summary Form

A. Identifying information regarding the project and members of the team

B. The Dimensions of performance addressed by the project
   1. efficacy
   2. appropriateness
   3. availability
   4. effectiveness
   5. timeliness
   6. continuity
   7. safety
   8. efficiency
   9. respect and caring

C. The Joint Commission chapters that were applicable:
   1. Patient Rights and Organizational Ethics
   2. Patient Assessment
   3. Care of Patient
   4. Patient/Family Education
   5. Continuum of Care
   6. Improving Organizational Performance
   7. Environment of Care
   8. Management of Human Resources
   9. Management of Information
   10. Surveillance and Prevention of Infection
   11. Leadership

D. Measures of Success
   1. Customer Satisfaction
   2. Cost Reduction
   3. Market Share
   4. Productivity
   5. Maintain/Improve Performance Improvement Results
   6. Community Health
The form also contained the following 14 sections that were to be addressed by the individual completing the report.

1. Identify the specific outcome indicators the project will measure to determine the project’s success.

2. How does this project relate to the...[name of health system’s] strategic plan?

3. What potential liability might be associated with the project?

4. How will this project impact your department or the health system financially?

5. How will this project impact productivity?

6. How will it impact services in other departments?

7. How will this project impact customer satisfaction?

8. List the patient outcomes (timeliness of service, decreased length of stay, reduced morbidity and mortality, increased access, etc.) that will be impacted.

9. What impact will it have on associate satisfaction or our core values?

10. How does this project link with other projects within the system?

11. How can this project improve market share?

12. In what ways will it promote community health?

13. Is this project part of...[other required projects] or a regulatory requirement?

14. Where is the team currently in the seven-step process?

In addition, there was a final section to be completed following completion of the project to evaluate the effectiveness of the project.
APPENDIX N
APPENDIX N

Similar Content between the 1998-2000 Performance Improvement Plans

I. Purpose
II. Goals and Objectives
III. Authority
IV. Confidentiality Policy
V. Scope of Program
VI. Committee Organization and Function
   A. Statement of Mission (1999 and 2000 only)
   B. Representatives to Quality Committee
   C. Appointment of Quality Committee Chair
   D. Roles of Quality Committee Members/Liaisons
   E. Membership of Physicians' Quality Committee
      1. Voting members
      2. Non-voting members
   F. Scope of Physicians' Quality Committee
   G. Chair of Physicians' Quality Committee
   H. Special Functions of Physicians' Quality Committee
   I. Medical Staff Peer Review Process
      1. Primary review
      2. Secondary review
      3. Departmental review
      4. Relationship with other activities
APPENDIX O
APPENDIX O

Seven Step Process for Performance Improvement Initiatives

Step 1: Project Summary
   A. Identify team members and Quality Committee liaison
   B. What is being worked on and why
   C. Demonstrate use of the Quality Committee Project Summary Form to assess value of the project
   D. Identify specific outcome indicators to measure success of project

Step 2: Current Situation
   A. Describe how the process worked prior to the improvement
   B. Include the baseline measurements used in rationale for project

Step 3: Cause Analysis
   A. Identify reasons why the present process is/is not effective

Step 4: Actions taken/solutions
   A. Plan (PDCA)
   B. Do/Pilot (PDCA)

Step 5: Results/Comparative Measurements
   A. Check (PDCA)

Step 6: Standardization of Process
   A. Act (PDCA) (What is the action for implementation?)

Step 7: Future Plans/Next Steps:
   A. Need for continued monitoring? Yes__ No__
   B. If “yes,” frequency and by whom?

Lessons learned:
VITA

Patricia Cagley Jenkins was bom in Knoxville, Tennessee. She attended the schools in the public system in Knox County where she graduated from Karns High School in June 1972. She enrolled in The University of Tennessee in Knoxville, Tennessee during June 1972 and graduated June 1976 with a Bachelor of Science in Nursing. She received her licensure as a Registered Nurse in September of 1976. After working as a staff nurse, she began pursuing a master's degree in nursing in September 1977 at The University of Tennessee in Knoxville, Tennessee while continuing to work full-time as a Registered Nurse. She received a Master of Science in Nursing in December 1980.

In January 1981 she began teaching nursing in the associate degree nursing program at Cleveland State Community College in Cleveland, Tennessee. She taught in this associate degree nursing program until May 1995 when she took a one year leave of absence to pursue course work toward a doctorate in education with an emphasis in leadership studies at The University of Tennessee in Knoxville, Tennessee. Following this one year leave of absence, in June 1996 she resigned from Cleveland State Community College and assumed a position as Director of Quality Resource Management at Athens Regional Medical Center in Athens, Tennessee while continuing to enroll in classes required in her doctoral program. While working at Athens Regional Medical Center, she assisted in preparing for the hospital’s accreditation survey. In December 1997 she resigned the position at Athens Regional Medical Center to pursue her doctoral studies on a full-time basis.

While completing the requirements for the doctoral degree, in August 1998 she began working on a part-time basis as a clinical nursing instructor in the associate degree
nursing program at Roane State Community College in Harriman, Tennessee. She
going on to work in this capacity while completing the requirements for her doctoral
degree. The doctoral degree was received in May 2001.