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Quality Assurance in the Physical Therapy Department: Current Practices in North Dakota Acute Care Hospitals

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QUALITY ASSURANCE IN THE PHYSICAL THERAPY DEPARTMENT:
CURRENT PRACTICES IN NORTH DAKOTA
ACUTE CARE HOSPITALS

by



Wade D. Burgess
Bachelor of Science in Physical Therapy
University of North Dakota, 1980

An Independent Study

Submitted to the Graduate Faculty of the

Department of Physical Therapy

School of Medicine

University of North Dakota

in partial fulfillment of the requirements

for the degree of

Master of Physical Therapy

Grand Forks, North Dakota

May
1993

This Independent Study, submitted by Wade D. Burgess in partial fulfillment of the requirements for the Degree of Master of Physical Therapy from the University of North Dakota, has been read by the Chairperson of Physical Therapy under whom the work has been done and is hereby approved.

A handwritten signature in black ink, appearing to read "H. J. Larson", written over a horizontal line.

(Chairperson, Physical Therapy)

PERMISSION

Title Quality Assurance in the Physical Therapy Department:
Current Practices in North Dakota Acute Care Hospitals

Department Physical Therapy

Degree Master of Physical Therapy

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ABSTRACT

This independent study report presents a literature review on the development and transformation of the field of quality assurance. Topic areas covered in the review include the role and contributions played by key individuals, government, the Joint Commission, total quality management/continuous quality improvement (TQM/CQI) theory and methods, and the American Physical Therapy Association.

The study also reports the results of a survey performed to ascertain what physical therapy departments in North Dakota hospitals are currently doing in regard to fulfilling quality assurance requirements. A relative lack of emphasis on the monitoring and assessment of treatment goals and patient outcomes, therapist education in the area of TQM/CQI in particular and quality assurance in general, and the differences between JCAHO and state standards were noted areas of concern. The report concludes with a discussion of the methods by which therapists can become more active and knowledgeable in QA/I theory and methodology.

CHAPTER I

INTRODUCTION

Data released by the Health Care Financing Administration (HCFA) in 1992¹ demonstrated that from 1980-1990, consumer payments for health care rose from \$124.6 billion to \$322 billion per year. Federal expenditures during this same period increased by \$119 billion, and payments by private insurers increased by \$120.8 billion. In 1990, the expenditures for health care in the United States accounted for 13.6% of disposable personal income.¹

The rising cost of health care is an area of national concern that raises numerous questions and has been the topic of much debate. Rising health care costs that have been out-of-control led to the recent appointment of Hillary Clinton² to lead a task force to investigate domestic health care policy and make recommendations for reform.

What impact does limiting costs have on quality-of-care? Are health care services being utilized properly? What can we do to make our treatments and interventions more effective? What are health care providers currently doing to improve the quality-of-care at their institutions or practice site? These are questions that are being asked by consumers, taxpayers, government, insurance companies, health care licensing and accreditation organizations, and even corporate business executives.

Since the mid-1980s, a variety of sources have become active participants in addressing the topic of quality health care. The Maryland Quality Indicator Project³ is an example of this type of involvement. This project, conducted by the Maryland Hospital Association, collects data on a variety of screening indicators in order to identify potential patient care delivery problems. Currently, there are 15 indicators which have been developed with physician input. At this time, there are over 600 participating hospitals. Participation allows the hospital to compare its experiences with those of other similar facilities.

Hospital associations in states such as Colorado, New Hampshire, and Wisconsin have been active in advocating for the development of data bases on key indicators for comparison and quality assessment purposes.³ Recently, this concept has also been employed by state health agencies, insurance companies, and other fiscal intermediaries as a viable method for use by their respective clientele.

In the fall of 1985, the Board of Commissioners of the Joint Commission, now known as the "Joint Commission on Accreditation of Healthcare Organizations" (JCAHO), decided that a change in their accreditation format was needed.⁴ Congress, through the Omnibus Budget Reconciliation Act (OBRA) of 1986, commissioned the Institute of Medicine (IOM) to investigate standards for assuring the quality of inpatient services used by providers to meet the Medicare conditions of participation.⁵ Hospital Corporation of America

(HCA), the nation's largest chain of hospitals, made a commitment to change to a quality assurance system modeled after the continuous quality improvement concepts of William Edwards Deming.⁶ Interstudy, a health policy organization in Minnesota, is working on a system to track patient outcome.¹ The Hospital Research and Educational Trust of Chicago is conducting an informational project to assist hospitals in determining which data elements are important in terms of quality.¹ A grant from the John A. Hartford Foundation in New York is financing a project by the Leonard Davis Institute called the Corporate Hospital Rating Project.¹ The goal of this project is to develop a system to obtain a single rating to assess the overall quality performance of a hospital.

The examples which were cited are just a few of the multi-party efforts underway that address quality issues in health care. Many of these efforts focus on the utilization of data bases to identify deviations from accepted standards or deviation from the norm. Some of the newer concepts involve methods designed to raise the norm. Other concepts and systems stress the importance of assessing whether the needs of the consumer are being met. The challenge of the 1990s and beyond will be to identify and develop better mechanisms for evaluating and improving the quality of health care and clinical practice. It is vital that health care professionals be at the forefront of this effort.

Are current health professional graduates prepared to utilize quality assurance methods in their daily practices? A study conducted by Ackerman

and Nash⁷ casts serious doubts as to the answer to that question. Their study consisted of a survey of both medical schools and health administration programs. The purpose of the survey was to determine how many of the respective programs included formal education on quality assurance as a part of their curricula. The survey was sent to 127 medical schools and to 97 healthcare administrative programs. Response rates to the survey were 77% for the medical schools and 71% for the health care administration programs. Of those who responded, only 26% of the medical schools and 61% of the health care administration programs⁷ indicated that they include some formal education on quality assurance topics and concepts. A review of course content raised further concerns, especially in the medical school programs. In a related article, Shepard and Jensen⁸ discussed the concept of the null curriculum as it relates to physical therapy educational programs. The concept of the null curriculum refers to the process of deciding which topic areas to leave out of the formal curricula. They further discussed how the influences of achieving technical clinical competence, the development of clinical specialties, and the transition to graduate level entry programs have impacted the curriculum decision-making process. If the programs in physical therapy are similar to the medical school programs that were surveyed by Ackerman and Nash,⁷ one can conclude that quality assurance concepts are often left out of the formal curricula.

Dobrzykowski^{9(p8)} stated that, "As service providers, physical therapists must be proactive in this transformation." The transformation that he refers to is the need to focus attention on our customers and to understand issues of quality. He states further that, "It means accepting the responsibility to create systems that can assure positive changes."^{9(p8)} The importance of accurate, timely documentation and the need for effective therapeutic intervention is understood. The importance of obtaining knowledge and expertise in the development of assurance/improvement systems and the utilization of a scientific clinical data base for assessment of care is a challenge that physical therapists must meet.

The purpose of this study is twofold. One is to provide a review of the development of quality assurance concepts. The second is to identify current quality assurance/improvement practices that are being utilized in physical therapy departments of acute care hospitals in North Dakota. It is through a knowledge of quality assurance/improvement concepts and methodology that therapists will be able to become more active in designing systems for assessing and improving the quality of the care we provide.

CHAPTER II

LITERATURE REVIEW

An eye for an eye, a tooth for a tooth, end results, chart audits, problem focused approach, ongoing quality assessment and improvement, and assessing customer needs are some of the key phrases which have been associated with various quality assessment philosophies over time.¹⁰ These phrases provide some insight into the assessment methods that were utilized in the past and to those that are in use today.¹⁰

In ancient Egypt, the quality of medical care was determined by assessing the health status of the pharaoh.¹⁰ If the pharaoh's health was poor, it was assumed that the care provided by the physician was poor. Action taken to correct the perceived deficiency often involved adversely affecting the health of the physician.¹⁰ Thankfully, action strategies for quality improvement have changed dramatically since then.

The Concept of Quality

If you were to ask a number of patients, "What is quality physical therapy?", you might get answers such as: not having to wait for scheduled appointments, receiving direct care from the physical therapist, or regaining my knee motion so that I do not limp when I walk. If a group of physical therapists were asked that same question, they might respond by talking about adequate

staffing levels or by discussing the effectiveness of prone versus supine lumbar traction. If this question was then asked of an administrator or financial officer, he or she might respond in terms of profit margins or productivity indexes. Fiscal intermediaries might refer to quality in terms of utilization and cost effectiveness.¹¹

The very word "professional" carries a certain implication of quality. One of the concepts associated with professionalism is that of research to expand the body of scientific knowledge to improve methodology, understanding, and practice. The phrase "Primum non nocere," or "Primarily do no harm,"¹² dates back to the Hippocratic Oath of which it is a part. This early phrase was a dimension of quality associated with the profession of medicine. Licensure, certification, accreditation of educational programs, and standards of practice are just some of the methods used by professional organizations and government to assure quality in an effort to "primarily do no harm." The term quality can have many dimensions. An individual's definition of quality depends on personal perspective. Quality can be viewed through the eyes of a consumer, professional health care worker, administrator, or fiscal intermediary. Societal values, such as work ethic and receiving value for your money, may also shape the view of quality.^{12,13}

The first step in measuring quality is to define the perspective from which it is viewed. Drucker^{14(p45)} stated, "Efficiency is concerned with doing things right. Effectiveness is concerned with doing the right things." Quality

assurance in health care has been entrenched in the concepts of setting, maintaining, and promoting good professional standards of health delivery and in doing such with efficiency and a positive cost benefit.¹⁵ Quality is more than just providing the right care for the right patient at the right time. Quality is dynamic in nature. As technology expands and scientific research provides answers to current medical mysteries, the definition of quality must also change and evolve.

Key Individuals

Review of the development and evolution of quality

assurance/improvement (QAI) would be remiss without recognizing some of the key individuals and their contributions. While the application of quality assessment and improvement in the health care industry is relatively new, many of the concepts and practices are not. In 1732, the work of Clifton¹⁶ demonstrated the concern that existed for professionals to provide quality care. He stressed the importance of good documentation and the review of care. Literature typically credits Florence Nightingale^{16,17} with the first quality assurance studies designed to improve care. Her work in the 1850s looked at and assessed the quality of care provided to British soldiers during the Crimean War. Her work was credited with leading to the idea of process standards.

During the early 1990s, two physicians were working on studies which emphasized the importance of end-result assessment. Codman,¹² from the United States, was recognized as the "grand-daddy of outcome studies." About

this same time, a British physician by the name of Groves^{10,13,16} was also advocating a similar approach to the assessment of care. Their works stressed the importance of patient outcomes or end-results as a method to assess the quality of patient care. In 1910, Flexner^{13,16} presented a report to the Carnegie Foundation entitled the "Flexner Report." This report assessed the quality of medical school education programs in the United States. This study was instrumental in enacting stricter admission requirements and curricula change.

In the early 1930s, some exciting work was being conducted in industrial settings. Shewart,^{18,19} a statistician and engineer, had developed and was teaching methods of quality control through the analysis of statistics. Shortly after hearing of Shewart's methods, Deming¹⁸ began to study and learn the systems Shewart espoused. Deming later advanced these methods into a management model and philosophy. Deming has been referred to by some as the "dean of quality management."²⁰

Upon the termination of World War II, Deming and Juran²¹ went to Japan to assist in the rebuilding efforts. Juran has been credited with a number of quality improvement techniques and theory including Juran's Quality Trilogy and the Pareto Principle.²¹ By teaching the Japanese the principle of continuous quality improvement and quality management theory, these men, working separately, laid the foundation for the Japanese to rebuild their war-torn manufacturing industry and economy.

Table 1.--Key Individuals and Their Contributions

<u>Time Period</u>	<u>Name</u>	<u>Contribution</u>
1732	Francis Clifton	Stressed the importance of good documentation and the review of care
1858	F. Nightingale	First documented study in health care
Early 1900s	Dr. E. A. Codman	Grand-daddy of outcome studies
1910	Dr. Abraham Flexner	The Flexner Report. Assessment of medical school education programs
1910s	Frederick Taylor	Scientific management
Early 1930s	Walter Shewart	Industrial methods of statistical control
	William Deming	Dean of quality control
Early 1950s	Joseph Juran	Juran's quality trilogy and the pareto principle
	Paul Lembcke	Beginnings of the medical audit process. Used criteria to assess health care
1960s	Dr. A. Donabedian	Three point focus of structure, process, and outcome
1985	Dennis O'Leary	Selected president of JCAH Board of Commissioners. Father of the "Agenda for Change"
Late 1980s	Donald Berwick Paul Batalden William Conway	Development of quality improvement models for health care based on Deming methods

Back in the United States, industry had returned to the utilization of the scientific management style first formulated by Taylor¹⁸ during the 1910s. This style of management emphasized the use of work standards, rules, and the development of job steps to govern the performance of job tasks and duties. Industry, during this period in the United States, was more concerned with production levels than with quality.

The beginnings of the importance of the use of criteria for the assessment of quality in health care occurred in the 1950s. Lembcke^{10,12} was the first to receive credit for emphasizing the need for explicit objective measures in the assessment process. His work was the beginning of the medical audit process. Weinerman¹⁶ stressed the use of structural criteria to assess care processes. Three other landmark studies of this decade were provided by Peterson, Moorhead, and Payne,¹⁶ respectively: Peterson utilized concurrent assessment and peer review, Moorhead used the concepts of practitioner agreement to criteria and the importance of the medical record for assessment, and Payne incorporated the use of the medical record for the evaluation of disease specific criteria.

Donabedian,¹⁶ in the 1960s, was credited with the three point focus. This focus describes the differences between structure, process, and outcome as well as the role each plays in the assessment of quality care. His work advocated the use of valid criteria for the measurement of outcomes.

Government Influences

In 1960, federal expenditures for personal health care totaled \$2.1 billion; in 1990, federal expenditures for this same item totaled \$180.2 billion.¹ It should be of little or no surprise that as government costs for personal health care have risen, so have its attempts to control costs and assess the necessity of care. Table 2 provides a chronology of various government acts and legislation which have affected quality assessment.

The creation of the Maritime Hospital Service in 1798²² is credited as government's first venture into health care. The Pure Food Act of 1906²² marked the first government attempt to improve care. This legislation first established standards for drug purity. During the 1930s, there were several bills introduced in Congress which addressed the concept of national health insurance. Though these bills were rejected, they did serve as an impetus to the development of voluntary health insurance programs.¹⁶

Care and assistance for the elderly was first addressed by the Social Security Act of 1935.²³ This act created the Old Age Assistance and Old Age Insurance programs for persons over 65. Due to an increased need to provide care for the elderly and an availability of federal funds, there was a proliferation of nursing home facilities. Many of these facilities were poorly managed and in equally poor condition. Recognition of these poor conditions led to the development of licensure requirements. By 1950, all states had licensure requirements which established minimum standards to be met in order to be

Table 2.--Government Acts and Legislation

<u>Year</u>	<u>Act/Legislation</u>	<u>Impact</u>
1798	Maritime Hospital Service	Government's first venture in health care
1906	Pure Food and Drug Act	First government attempt to improve care
1935	Social Security Act of 1935	Created the Old Age Assistance and Old Age Insurance programs
1950s	Nursing Home Licensing Requirements	Development of minimum standards to be met for federal reimbursement
1961	Kefauver-Harris Amendments to the Food, Drug, and Cosmetic Act	First legislation to require drug efficacy
1965	Social Security Amendment of 1965	Inception of the Medicare and Medicaid programs. Brought structural standards into use for the evaluation of nursing homes and hospitals. Conditions of participation required either state certification or Joint Commission accreditation. Established Utilization Review Board
1966	Comprehensive Health Planning 1965	Sought to create better planning and establish priorities for spending in health care
1972	Social Security Amendments of 1972 Bennett Amendment	Repeated the Utilization Review Board Established PSROs
1974	National Health Planning and Resource Development Act	Created the health system agencies
1975	Health Planning and Resource Development Act	Created the first certificate of need program

Table 2. (cont.)

1982	Tax Equity and Fiscal Responsibility Act	Replaced PSROs with PROs
1986	Health Care Quality Improvement Act	Authorized establishment of the National Practitioner Data Bank
	Omnibus Budget Reconciliation Act of 1986	Commissioned the IOM to study and make recommendations regarding the quality review and assurance program for Medicare beneficiaries
1989	Omnibus Budget Reconciliation Act of 1989	Created the Agency for Health Care Policy and Research. Incorporates the ideas of effectiveness research
1992	Health Care Quality Improvement Initiative	Major reform of the PRO program. Initiation of the uniform clinical data set

eligible for federal reimbursement.²³ In 1960, the American Hospital Association, in conjunction with the American Medical Association and the American Nursing Home Association, worked to develop guidelines and standards for medical care in nursing home facilities. This led to the development of guidelines by the U.S. Public Health Service which established minimal standards for medical care in the nursing home setting.²³

The 1960s saw a dramatic increase in government involvement in health care. The 1961 Kefauver-Harris Amendments to the Food, Drug, and Cosmetic Act²² were the first of these. This act upgraded previous requirements for drug purity and also added a requirement that drugs be efficacious.²²

The Social Security Amendment of 1965^{5,13,23} had the most far reaching effects and consequences in health care. This amendment first established the

Medicare and Medicaid programs, led to the development of structure standards for use in the assessment and licensing process of nursing homes and hospitals, granted deemed status to hospitals that had JCAH accreditation, and developed Utilization Boards to look at the necessity of medical services. The early standards and requirements that facilities had to meet were known as the "conditions of participation."^{5,13,23} These conditions could be met either by state certification or by JCAH accreditation. Prior to this amendment, very little had been attempted in the area of assessment and evaluation of utilization of services and its impact on the quality of patient care.

In 1966, the Comprehensive Health Planning Act²³ attempted to look at spending in health care, better planning development, and the establishment of priorities for spending. That same year also saw the passage of the Regional Medical Program Act,²³ which served to provide funding for scientific research that had a goal of improving medical services.

The Social Security Amendments of 1972²⁴ repealed the Utilization Review Boards and replaced these with Professional Standards Review Organizations (PSROs). The goal of the PSROs was to slow the increase in the utilization of medical services while ensuring the provision of high quality care and services.²² The initial reviews performed by the PSROs included quality reviews through chart audits and utilization review by performing admission and length-of-stay analysis.

In 1974, health system agencies were created by the passage of the National Health Planning and Resource Development Act.¹⁶ The purpose of this act was to develop better methods of health care delivery. This law was also intended to curb rising costs by looking at the allocation of health resources. In 1975, similar legislation, titled the Health Planning and Resources Development Act,¹⁶ created the first certificate-of-need program. Again, the goals were to regulate the growth and rising cost of health care.²²

PSROs were replaced in 1982 by the Peer Review Organization Program (PROs).²⁵ This program aimed to correct the administrative deficiencies of the PSROs. PROs were established by the Tax Equity and Fiscal Responsibility Act (TEFRA).²⁵ The Peer Review Improvement Act of 1982,²⁵ which was a part of TEFRA, required that PROs conduct medical review activities. These activities were to include review for medical necessity, quality review, and appropriateness review. Appropriateness was to be used especially in the areas of assessment of the necessity of hospital admissions.^{26,27}

One of the major complaints of the PROs, like the PSROs, is that they utilize a "bad apple" approach and do not effectively change the norms of medical practice.¹⁶

The 1986 Omnibus Budget Reconciliation Act (OBRA)²⁸ led to the authorization of a study performed by the Institute of Medicine (IOM). The scope of this study was to look into the adequacy of standards used to meet Medicare conditions of participation. The IOM was also requested by Congress

to develop a strategy for quality review and assurance for Medicare beneficiaries. The IOM proceeded with an extensive study that included site visits, beneficiary focus group meetings, literature review, and physician focus group meetings. The results and recommendations from the IOM study were presented and discussed in detail in a series of articles published in the Quality Review Bulletin.^{5,29,30,31,32} The recommendations included three goals for quality assurance: 1) continuous quality improvement in health care, 2) assisting organizations and practitioners in the learning of methods of quality assessment and improvement, and 3) the identification of barriers to quality care as well as methods to overcome these barriers.²⁹

The Health Care Quality Improvement Act³⁴ was also passed in 1986. This bill authorized the development and implementation of the National Practitioner Data Bank (NPDB). The NPDB was established to assist hospitals in peer review activities and to restrict the movement of physicians and dentists who had been found guilty of misconduct or incompetent medical practice. Specifically, this act requires that a report be filed with the NPDB whenever malpractice payments are made, when licensure actions are taken by state or professional organizations, and when adverse actions relating to clinical privileges are taken by hospitals. Hospitals are required to query the NPDB when an applicant first applies to the medical staff and at least every two years thereafter.^{33,34} In most hospitals, this coincides with the facilities' reappointment process.

The 1989 OBRA established the Agency for Health Care Policy and Research.²² This agency's purpose was to promote scientific research and incorporated the concept of effectiveness research.

Most recently, in 1992, the Health Care Financing Administration (HCFA) introduced its plans for reform of the PRO program. This plan, the Health Care Quality Improvement Initiative (HCQII),²⁹ attempts to eliminate the subjectivity previously associated with the medical review performed by the PROs. The HCQII is working with the Health Standards and Quality Bureau on the development of a uniform clinical data set for use in the review of medical care.²⁹

The Joint Commission

The first efforts to establish an accreditation process for hospitals occurred in 1912 in the Clinical Congress of Surgeons.³⁵ By the time the Third Clinical Congress of Surgeons met, they adopted a resolution that supported the development of a system to standardize hospital care.³⁵ The following year, the American College of Surgeons was established. One of their explicit goals was to improve the quality of patient care in hospitals. With that goal in mind, they developed the Hospital Standardization Program in 1918, which served as a voluntary accrediting agency for hospitals.¹³

The proliferation of nonsurgical specialties and professions signaled the need for a change. Any accreditation program needed to have the support of the whole medical and health care field. It was with this in mind that the

American College of Physicians, the American Medical Association, the American Hospital Association, and the Canadian Hospital Association worked together to develop the Joint Commission on Accreditation of Hospitals in 1952.^{13,36} The American Dental Association later became a corporate member, while the Canadian Medical Association withdrew to participate with its own national accreditation program.^{13,36} Initial emphasis was on the attainment of minimum standards essential to providing proper treatment and care for patients in a hospital.

In 1970, the JCAH published its first manual of standards which defined sets of optimal achievable standards.³⁵ These standards were based on the assessment of both structure and process but were more structure-oriented. These early standards also included principles for medical care evaluation studies. By 1975, these principles were more refined, and the JCAH was lauded as a main proponent in the use of outcome audits.³⁶ These principles were also the start of performance evaluation procedures (PEP audits) used for the evaluation of patient care.³⁶ Three years later, the JCAH realized that the audit process, though useful, was not having the desired impact on the improvement of care. They found that too often facilities became concerned with fulfilling the numerical audit requirements and often lost sight of the primary goal. With that in mind, the JCAH developed the quality assurance standard in 1979 to be implemented for accreditation purposes in 1981. This standard eliminated the numerical audit requirement and instead required the

development of a hospital-wide quality assurance program to assess care in order to identify and then resolve problem areas. This model came to be known as the problem-focused approach.³⁶

During the 1980s, the problem-focused approach became the primary assessment model used by hospitals for evaluating the quality of care. This approach stressed the need to identify the important aspects of care in any given department or service area. The first two steps in this approach were to identify and then prioritize the important aspects of care. A high volume, high risk, and problem-prone focus was to be utilized for prioritization. The next step in this system was to develop a system with which to monitor the actual care or performance being provided in that particular important aspect of care. Periodically there must be assessment of the data generated from the monitoring activities in order to identify problem areas. Later this wording was changed to identifying opportunities for improvement. Once an area for improvement is identified, there should be appropriate corrective action implemented and a follow-up plan developed. Follow-up would either demonstrate that the action did indeed have the desired effect or that a different action strategy was needed. This process has also been referred to by some as the "ten step approach."³⁷ In 1986, the Joint Commission published a pamphlet entitled Monitoring and Evaluation of the Quality and Appropriateness of Care: A Hospital Example,³⁸ which details this process nicely.

Up until 1984, the QA standard of the JCAH had emphasized the quality and appropriateness of medical care. In 1984, this emphasis was extended to the clinical service sections of the accreditation manual.⁵ Later that decade, there was another wording change intended to incorporate the concept of review of clinical performance. The quality assurance chapter and physical rehabilitation chapter of the 1991 Accreditation Manual for Hospitals³⁹ illustrates the language that prevailed in these chapters during the latter portion of the '80s and into the first part of the '90s. (Appendix A)

Nineteen eighty-seven was a year for change for the Joint Commission. The first of these was a change in name to the Joint Commission on Accreditation of Healthcare Organizations (JCAHO).³⁶ This change was made to reflect their efforts in facilities other than acute care hospitals. The second change was in the philosophy that evolved due to a commitment to keep pace and develop leadership in the field of quality assurance.

The philosophy change actually started soon after Dennis O'Leary was selected as president of the JCAH Board of Commissioners in 1985. It was in the fall of 1985 that the Board of Commissioners became dedicated to modernizing the accreditation process. This eventually led to the release of the Agenda for change in 1987.⁴ This new direction or philosophy emphasized continuous quality improvement, top-down leadership, use of data bases, development of performance indicators, and a shifting of the JCAHO role in the accreditation process to more of a facilitator and educator role.^{4,40,41,42} The 1993

Joint Commission Accreditation Manual for Hospitals⁴³ reflects this change in direction. (Appendix B) Through change and commitment, the Joint Commission continues to serve its mission of improving the quality of health care across the United States.

Total Quality Management/Continuous Quality Improvement

What is all this fuss about total quality management (TQM) and continuous quality improvement (CQI)? As already noted, the continued rise in health care and associated costs is an issue of national importance. How can costs be held down without reducing quality? High professional insurance rates and an eagerness by the public to sue have been blamed as a cause of unnecessary tests and procedures. Due to rising costs, there has also become greater competition for the market share by providers. Corporations and fiscal intermediaries are beginning to demand not only quality care be provided, but that it also must be able to be proved to them.⁴

For the most part, quality improvement efforts in health care have been based on a regulation or standards system. There are standards and regulations that have been established by JCAHO, state licensing boards, government, insurance companies, and other external sources. The major criticism of a regulations based system is that it causes one to look for the "bad apple."^{4,29} This approach involves setting thresholds that will cause cases to fall out for further evaluation. In the past, this has occurred at the outcome end of

the care spectrum. Evaluating care in this method involves looking only at the outliers and does little about improving the norm.

The PROs have been using a review system that incorporates case review after identification by screening systems. Case-based review systems have many good qualities but can be very labor intensive. Screening systems attempt to identify cases where there is a higher probability that assessment will reveal opportunities for improvement.⁴ One problem that has been linked to the use of generic screens is the high percentage of false positives produced. One source⁴ indicated that the false positive rate for generic screens could be 75% or higher. This translates into a significant waste of time and energy evaluating acceptable care. Generic screens, like most types of case review systems, look at care in a retrospective fashion.

Following the lead of Japan, American industry is slowly adopting the total quality management (TQM) concept.⁴⁴ TQM incorporates the idea of continuous quality improvement (CQI) as one of its main tenets.⁴⁵ The terms of TQM and CQI are derived from industrial quality control theory and just recently have begun to be applied to health care settings. The best definition which distinguishes between these two phrases states, "TQM is a way of structuring, managing, and maintaining an organizational environment in which the continual improvement of quality can take place."^{45(p1)}

How has Japan become the leader in the application of this management style? The foundations of this management style were taught to the Japanese

by two Americans, Deming and Juran. William Edwards Deming had been recruited by the Supreme Command for the Allied Powers to help them prepare for the 1951 Japanese census. About this same time, a group called the Union of Japanese Scientists and Engineers (JUSE) had formed for the purpose of helping Japan's rebuilding efforts. Through some early meetings of JUSE, they realized the importance of quality which then led them to some of Shewart's writings on statistical quality control. Several of the members of JUSE remembered having met Deming previously and knew that he had worked with Shewart. This led them to invite Deming to present a lecture to their group. In June of 1950, Deming gave the first of his many lectures in Japan.¹⁸

Having already tried teaching his system to American industry, only to see them revert to the scientific management style, Deming came to the realization that in order for his processes to work, they must be supported by management. In order to support the processes of statistical quality control, he had developed what later would be referred to as the "Deming Management Method."¹⁸

During the early 1950s, Juran was also presenting lectures to the Japanese. Like Deming, his approach involved methods of statistical quality control and associated management theories.²¹ Though the basics had been taught by Americans, the Japanese studied TQM/CQI theory and procedures, learned them diligently, applied them, and then improved upon them.^{21,46}

The words "pioneers in quality" and "quality gurus"⁴⁵ have been used to describe the works of Deming, Juran, Crosby, Donabedian, and others. These men have all provided enormous contributions to the theories and processes which serve as the basis for the various TQM systems and CQI procedures. Donald Berwick, Paul Batalden, and William E. Conway^{45,47} have been instrumental in developing models for health care based on Deming's work.

Deming's 14 points,¹⁸ zappi's,⁴⁸ and coda⁴⁴ are terms used to illustrate various principles of different TQM systems. Table 3 lists some of the more common characteristics found in TQM systems.

Table 3.--Common Characteristics of TQM Systems.^{6,18,44,45,46,48-51}

1. Management leadership	This needs to start right with the CEO and Board of Directors. They must not only "talk the talk" but "walk the walk"
2. Scientific statistical control	A strong emphasis is placed on learning and utilizing the statistical tools and problem-solving techniques involved with CQI
3. Know your customers	Customer needs must be identified. In a hospital setting, this includes among others; staff, physicians, patients, visitors, family, suppliers, intermediaries, and the community
4. Most problems are created by the process not the person	It has been estimated that 85% of identified problems are the result of a system or process defect
5. Total organizational involvement	All of the employees in an organization need to contribute to CQI efforts. The person who is in the best position to improve a process is the person responsible for performing the process
6. Any variation from the ideal is costly	Whenever performance varies from the ideal, there is an increase in cost somewhere

Table 4 provides a listing of some of the statistical tools and terminology associated with TQM/CQI. Appendix C expands on the listing of Table 4 by giving a description and definition of these terms. It is not in the scope of this report to discuss and detail all of the tools and theories behind TQM/CQI, but rather to create a desire to learn more about other systems that can be useful in improving patient care and clinical performance.

Table 4.--CQI Tools and Problem Solving Techniques
(Also see Appendix C)

Audits	Outcome assessment
Benchmarking	Pareto chart
Brainstorming	Performance indicator
Cause and effect diagrams	FOCUS-PDCA cycle
Control charts	Process diagram or flowchart
Guidelines	Satisfaction surveys
Histograms	Scatterplots
Indicators	Screening systems
Juran's trilogy	Run chart
Line graph	

It is important to realize that TQM systems are not necessarily the answer. We also need to understand that the tools we have learned under QA are not all bad. The real key lies in implementing techniques that result in continuous improvement and raise the norms while reducing variations in care. Dennis O'Leary stated, "It if ain't broke, it can still be improved."^{4(p74)} The Joint Commission does not want to sell a certain management style. They do want us to realize though that there are endless opportunities for improvement. In order to reach the goals for tomorrow and beyond, the tools and techniques used for quality assessment need to be refined and perfected.⁴ CQI is an ongoing effort in getting care and performance as close to the ideal as possible.

American Physical Therapy Association

The American Physical Therapy Association (APTA) has always supported the concept of providing quality care and service to patients.⁵² In response to government requirements, the APTA in 1970 released the "Standards for Physical Therapy Practice and Practitioners" and "Guidelines for Developing a System of Peer Review."⁵² These documents, as well as a policy statement on QA, were subsequently approved by the APTA House of Delegates in 1975.⁵²

The APTA initially had two committees that worked in the area of standards development and QA methods. The Quality Assurance Committee and the Standards of Practice Committee were combined in 1980 into the Standards and Quality Assurance Committee.⁵² This committee later dissolved in the early 1980s and the work carried forth by the Committee for Physical Therapy Practice. In 1992, this committee was replaced by the Advisory Panel for Practice.^{52,53}

In 1982, the APTA published the Quality Assurance Manual.⁵² This manual was to serve as a guide for component chapters and membership in general in the development of QA systems. This manual included a section on methods and tools to use in the evaluation of clinical care. In 1982, the patient care audit was the most widely accepted assessment tool.⁵² In 1990, a second edition of this manual was published, which included concepts and tools associated with continuous quality improvement. The APTA Department of

Practice is currently working on an update for this manual to reflect the changes occurring in the field of quality assessment/improvement.⁵³

In a phone interview on January 27, 1992, Patricia Williams⁵³ of the APTA Department of Practice stated, "The APTA tries to work closely with the various government agencies, regulatory bodies, and accrediting organizations in order to provide input into the development of standards, regulations, and guidelines as they pertain to the practice of physical therapy."

The Department of Practice, in conjunction with the Minnesota chapter of the APTA, has developed a workshop/seminar entitled "APTA Component Peer Review Program Development."⁵³ This workshop was initially presented in July 1992, and is scheduled to be repeated in July of 1993. One of the objectives of this program is to assist component chapters in the development of diagnosis-specific practice parameters to be used in the assessment and evaluation of patient care. Those who had attended the initial workshop are scheduled to meet at the Winter 1993 Combined Sections Meeting. Here they will review component progress and discuss their experiences. Due to the vast differences that exist geographically and to the variances in the availability of resources, it is felt that it is best to develop these practice parameters at the component level. Patricia Williams⁵³ stated, "It is hoped that at some point these parameters will become more homogenous."

The APTA, through its various sections and specialty groups, has also been active in the development of clinical competencies and specialty

certification. The APTA is a vital resource for physical therapists. The Quality Assurance Manual⁵² is available through the Office Services Department. The APTA also has a toll-free phone number that can be called to obtain information on a variety of issues. The APTA offices can be reached by calling 1-800-999-APTA.

CHAPTER III
METHODS, RESULTS, DISCUSSION

Methods

A two-page survey was mailed to the therapist responsible for coordinating or performing the physical therapy departmental QAI efforts in acute care hospitals in North Dakota. A listing of all the acute care hospitals in North Dakota had been obtained from the North Dakota Hospital Association. This listing also contained the phone numbers of each facility. Public Health Service and military facilities were excluded for the purposes of this survey. This process identified 48 acute care hospitals in North Dakota.

Phone contacts were then made with each facility in order to ascertain the name of the person responsible for QAI in the physical therapy department of each facility. During the initial contact, the nature of the type of services provided at the facility was determined (i.e., direct facility provided service versus service per contractual arrangement with another facility). The information was obtained either from the switchboard operator, departmental support personnel, or from a therapist of the facility. Phone contacts revealed that one facility currently did not provide or offer any form of PT service.

A pre-survey letter was developed to explain the purpose of the survey, provide a phone number for therapists to contact should questions arise, assure

confidentiality of responses, and offer to provide feedback on survey results. The pre-survey letter was mailed to all 47 facilities that had been identified. A second mailing was made a week later that included a face letter and the questionnaire. (Appendix D) The face letter was provided to reinforce the pre-survey letter and also to give participants the option of completing the survey and returning it by mail or via phone contact.

Two weeks after the second mailing, phone contacts were made to all facilities who had not returned the survey questionnaire. During this contact, therapists were asked if they had any questions. Participants were then given the option of either completing and returning the questionnaire by mail, or of setting an appointment to complete the questionnaire via phone interview. This same process was then followed two weeks later with those facilities who had not completed either of the aforementioned procedures.

Results

Of the 47 facilities, responses were obtained from 44 (93.6%). The three facilities that did not respond were facilities under 50 beds in size and non-JCAHO accredited. Full-time equivalents (FTEs) were used to answer question #4. For hospitals that contracted their PT services, the total therapist time at the facility was used to determine the FTE rate. Tables 5 and 6 show the responses for questions 1-4 of the survey.

Table 5.--Accreditation/Licensure Status by Hospital Bed Size

	Licensed Beds			
	<u>Less than 50</u>	<u>50-99</u>	<u>100-199</u>	<u>200+</u>
JCAHO Accredited (n=22)	10	3	4	5
State Survey and Licensure Only (n=22)	21	1		

Table 6.--Physical Therapist FTEs

Hospital Size	FTEs					
	<u>Less than 1</u>	<u>1</u>	<u>2</u>	<u>3-5</u>	<u>6-10</u>	<u>10+</u>
Less than 50	15	13	3			
50-99	2			2		
100-199				2	1	1
200+				2		3

There were only four facilities that indicated the person responsible for QA/I was not the departmental director. Each of these four were JCAHO facilities, three of which were in the 200+ size category and one in the 50-99 size. Twenty-one of the 22 JCAHO accredited facilities reported that they did have a departmental QA plan, while 17 of the 22 non-accredited facilities indicated that they did. Responses to questions 7-16 were all categorized by whether the department was in a facility that had JCAHO accredited status, or if they were in a facility that was of non-accredited status.

The majority of PT departments in JCAHO accredited facilities utilized a departmental committee structure to accomplish QA/I functions (15/22). In the remaining facilities, two had the therapist meet on a regular basis with the facility's quality assurance coordinator (QAC), two met monthly with a multi-disciplinary group, and three performed the QA functions on their own and then submitted monthly reports to the QAC.

In the non-accredited group, 6/22 utilized a departmental committee structure. Nine facilities indicated that they used a multi-disciplinary group to perform the QA/I functions. Four of these facilities met monthly, while five met quarterly. Of the seven remaining facilities, three reported that they currently were not doing any QA, one met routinely with the QAC, and three performed the functions on their own and then submitted regular reports to the QAC.

Participants reported a wide variety of topics used for monitoring and assessment in their facility over the last two years. Topics and frequency of response for the JCAHO accredited group included:

- treatment goals	13
- customer satisfaction	12
- home instruction	7
- missed treatment appointments	6
- progress notes	4
- diagnosis-specific outcomes	23

Responses from the non-accredited group were less outcome and satisfaction

centered, and instead focused more on departmental statistics, timeliness, and safety issues. The non-accredited group reported only nine diagnosis-specific outcome topics.

Table 7 lists the primary methods/tools that were used by the departments for data collection and assessment purposes. In response to whether the departmental QA plan identified important aspects of care, all but two of the accredited group and four of the non-accredited group stated they did. The important aspects of care that were listed showed considerable variation. In some instances, departments determined the important aspects of care based on the patient types seen (i.e., using a diagnostic grouping). Other departments used more of an assessment, treatment planning, and treatment intervention approach. Still other departments indicated using problem identification/prioritization for determining their important aspects of care. High

Table 7.--Data Collection Methods/Tools

<u>Non JCAHO Group</u>		<u>JCAHO Group</u>
17	Chart Review	22
4	Dept. Stats	14
4	Hospital-wide Stats	14
5	Customer Satisfaction Tool	13
3	Direct Observation	8
8	Log Sheets/Check Lists	11
0	Peer Review	3

volume, high risk, problem-prone analysis was mentioned by a number of facilities. Table 8 summarizes the responses for question 11, while Tables 9 and 10 summarize the responses from questions 12-16.

Table 8.--Indicator and Criteria Selection Methods

<u>JCAHO Group</u>		<u>Non JCAHO Group</u>
5	Therapist Selected	7
1	In Place When Arrived	1
8	Literature Review	4
2	Department Policies and Procedures	4
5	With Input From QA Coordinator	4
2	External-Surveys and Reviews	1
8	Other PT Input	1
3	Analysis of Dept. Statistics	
1	Physician Input	1
	Hospital Developed	1
	Problem-focused Approach (Identified by Others)	8

Table 9.--Central QA Involvement, TQM/CQI Awareness

<u>JCAHO Group</u>		<u>Non JCAHO Group</u>
7	<u>Direct Involvement With Central QA/I</u>	7
	<u>Reporting Responsibilities</u>	
2	Monthly	3
18	Quarterly	18
2	2x/year	1
	Not Reporting	1
	<u>CQI Familiarity</u>	
16	Yes	4
2	No	14
3	Limited	4
	<u>Facility Using or Implementing TQM/CQI</u>	
17	Yes	3
3	No	16
2	Not Sure	3

Table 10.--Continuing Education on QA/I

<u>JCAHO Group</u>	<u>QA/I Continuing Education Received</u>	<u>Non JCAHO Group</u>
6	None	12
7	Materials Provided by QAC or QA Department	3
0	ETN	1
6	Hospital Sponsored Inservices	1
4	Self Reading	2
5	TQM/CQI Workshop	1
3	Hospital Association Workshops	1
3	JCAHO Seminar	0
	Discussion	

The survey findings showed that of the 44 facilities that participated in the study exactly half of these (22) were JCAHO accredited. The other 22 facilities received their licensure through certification from the state after successfully completing the survey process. Appendix E contains the quality assurance and physical rehabilitation conditions of participation that are used in North Dakota for the state survey process. Comparison of these standards to the JCAHO standards demonstrates that the JCAHO standards are much more specific and detailed than those used by the state. Several problems have been noted previously with the state survey process.⁵ These include: the bureaucratic red tape that is involved in their development, administration, and enforcement; the variations in interpretation between states; the lack of requirements for surveyor

qualifications; and the subjectivity in the process that is left in the hands of the survey team. In 1986, guidelines (Appendix E) were published as an appendix to the final regulations of the conditions of participation. Although helpful, the same complaints persist.

Initial realization that half of the hospitals in North Dakota are non-JCAHO accredited may be alarming to some. A study by the IOM had demonstrated that nation-wide, approximately 77% of hospitals meet the conditions of participation through JCAHO accreditation. A closer look at survey responses reveal that if the FTEs of physical therapists who work in JCAHO accredited facilities were added and compared to the figures for those working in non-accredited facilities, 84.6% of the physical therapist FTEs in North Dakota are in facilities that are accredited (91.8 of 108.5).

Analysis of the survey responses did reveal several concerns. Review of the topics selected for monitoring and assessment in the previous year demonstrate that only 15/44 facilities had monitored treatment goals. During that same period, there were only 32 diagnosis-specific outcome study topics that had been assessed in physical therapy departments across the state. Table 9 illustrates that physical therapy departments currently are not utilizing many of the TQM/CQI tools or methods in the performance of QA/I activities. Perhaps the most alarming concern that was identified is the lack of relevant continuing education for physical therapists responsible for coordinating QA/I activities.

Several shortcomings of this study warrant mention. Due to time constraints, field testing of the survey instrument was not accomplished. Had this been performed, better wording of questions could have reduced misunderstanding. The use of open-ended questions for part of the questionnaire, while allowing respondents the freedom of answering, did present difficulties in data summarization. Finally, the survey instrument and all phone interviews were conducted by one person, which invariably allows tester bias to enter in the interpretation of responses. The use of field testing, enlisting a group of experts for instrument development, and using a disinterested third person to conduct phone interviews are items to consider for replication of this study.

CHAPTER IV

CONCLUSIONS

The survey and literature review produced a number of key findings. Differences were recognized between the JCAHO QA/I standards and the conditions of participation utilized by state survey teams. Interpretation of the conditions of participation related to QA/I varies between states and between survey teams. Physical therapy departments in North Dakota demonstrated a relative lack of emphasis in the area of monitoring and assessment of treatment goals and functional patient outcomes. Finally, the many of the physical therapists responsible for coordinating departmental QA/I functions have had no formal relevant training. As Dobrzykowski⁹ mentioned, therapists must become proactive in the QA/I transformation. This can be accomplished by better utilizing and supporting the APTA, by developing improved systems that assess functional outcome and goal achievement, by developing diagnosis-specific practice parameters, by increasing our knowledge base of statistical quality control and TQM/CQI theory and methods, and by better understanding our customers' needs. These recommended activities have implications for physical therapy educational programs, APTA component chapters, and for practitioners. If therapists do not take the initiative to become more involved, the alternative is that external groups, such as government and fiscal intermediaries, will do so

without our involvement. A portion of understanding customers' needs includes understanding the needs of fiscal intermediaries and working with them.

Finally, physical therapists must never lose sight of the ultimate goal which is to assist patients in achieving the highest level of function of which they are capable. This can be achieved by developing improved methods of treatment, better performance of current practices and procedures, and supporting research that establishes or supports the efficacy of physical therapy interventions. Monitoring, assessment, and the continuous improvement of care and performance are vital steps of this process.

APPENDIX A

APPENDIX A. 1991 JOINT COMMISSION QUALITY ASSURANCE (QA)
STANDARDS. PHYSICAL REHABILITATION SERVICES:
MONITORING AND EVALUATION.

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STANDARD

Circle One

QA.1 There is an ongoing quality assurance program designed to objectively and systematically monitor and evaluate the quality and appropriateness of patient care, pursue opportunities to improve patient care, and resolve identified problems.*

1 2 3 4 5 NA

REQUIRED CHARACTERISTICS

QA.1.1 The governing body strives to assure quality patient care by requiring and supporting the establishment and maintenance of an effective hospitalwide quality assurance program.*

1 2 3 4 5 NA

QA.1.2 Clinical and administrative staffs monitor and evaluate the quality and appropriateness of patient care and clinical performance, resolve identified problems, and report information to the governing body that the governing body needs to assist it in fulfilling its responsibility for the quality of patient care.*

1 2 3 4 5 NA

QA.1.3 There is a written plan for the quality assurance program that describes the program's objectives, organization, scope, and mechanisms for overseeing the effectiveness of monitoring, evaluation, and problem-solving activities.*

1 2 3 4 5 NA

QA.1.4 There are operational linkages between the risk management functions related to the clinical aspects of patient care and safety and quality assurance functions.*

1 2 3 4 5 NA

QA.1.5 Existing information from risk management activities that may be useful in identifying clinical problems and/or opportunities to improve the quality of patient care is accessible to the quality assurance function.*

1 2 3 4 5 NA

*The asterisked items are key factors in the accreditation decision process. For an explanation of the use of the key factors, see "Using the Manual," page ix.

Circle One

STANDARD

- QA.2** The scope of the quality assurance program includes at least the activities listed in Required Characteristics QA.2.1 through QA.2.5.3 and described in other chapters of this *Manual* 1 2 3 4 5 NA

REQUIRED CHARACTERISTICS

- QA.2.1** The following medical staff functions are performed:
- QA.2.1.1 The monitoring and evaluation of the quality and appropriateness of patient care and the clinical performance of all individuals with clinical privileges through
- QA.2.1.1.1 monthly meetings of clinical departments or major clinical services (or the medical staff, for a nondepartmentalized medical staff) to consider findings from the ongoing monitoring activities of the medical staff ("Medical Staff" Standard MS.3, Required Characteristics MS.3.7 and MS.3.7.1);*† 1 2 3 4 5 NA
- QA.2.1.1.2 surgical case review ("Medical Staff" Standard MS.6, Required Characteristic MS.6.1.2);* 1 2 3 4 5 NA
- QA.2.1.1.3 drug usage evaluation ("Medical Staff" Standard MS.6, Required Characteristic MS.6.1.3);* 1 2 3 4 5 NA
- QA.2.1.1.4 the medical record review function ("Medical Staff" Standard MS.6, Required Characteristic MS.6.1.4);* 1 2 3 4 5 NA
- QA.2.1.1.5 blood usage review ("Medical Staff" Standard MS.6, Required Characteristic MS.6.1.5);* and 1 2 3 4 5 NA
- QA.2.1.1.6 the pharmacy and therapeutics function ("Medical Staff" Standard MS.6, Required Characteristic MS.6.1.6).* 1 2 3 4 5 NA
- QA.2.2** The quality and appropriateness of patient care, including that provided to specific age groups, in at least the following services are monitored and evaluated:*
- QA.2.2.1 Alcoholism and other drug dependence services, when provided (Standard AL.4); 1 2 3 4 5 NA
- QA.2.2.2 Diagnostic radiology services (Standard DR.4); 1 2 3 4 5 NA
- QA.2.2.3 Dietetic services (Standard DT.7); 1 2 3 4 5 NA
- QA.2.2.4 Emergency services (Standard ER.9); 1 2 3 4 5 NA
- QA.2.2.5 Hospital-sponsored ambulatory care services (Standard HO.7); 1 2 3 4 5 NA
- QA.2.2.6 Nuclear medicine services (Standard NM.4); 1 2 3 4 5 NA
- QA.2.2.7 Nursing care (Standard NC.6); 1 2 3 4 5 NA

*The asterisked items are key factors in the accreditation decision process. For an explanation of the use of the key factors, see "Using the Manual," page ix.

†See page 298 of Appendix B regarding Required Characteristics MS.3.7-MS.3.7.2.

Circle One

QA.2.2.8	Pathology and medical laboratory services (Standard PA.7);	1	2	3	4	5	NA
QA.2.2.9	Pharmaceutical services (Standard PH.6);	1	2	3	4	5	NA
QA.2.2.10	Physical rehabilitation services (Standard RH.4);	1	2	3	4	5	NA
QA.2.2.11	Radiation oncology services (Standard RA.4);	1	2	3	4	5	NA
QA.2.2.12	Respiratory care services (Standard RP.6);	1	2	3	4	5	NA
QA.2.2.13	Social work services (Standard SO.5);	1	2	3	4	5	NA
QA.2.2.14	Special care units (Standard SP.6); and	1	2	3	4	5	NA
QA.2.2.15	Surgical and anesthesia services (Standard SA.4).	1	2	3	4	5	NA
QA.2.3	The following hospitalwide functions are performed:*						
QA.2.3.1	Infection control (Standards IC.1 and IC.2);	1	2	3	4	5	NA
QA.2.3.2	Utilization review (Standard UR.1); and	1	2	3	4	5	NA
QA.2.3.3	Review of accidents, injuries, patient safety, and safety hazards ("Plant, Technology, and Safety Management" Standard PL.1, Required Characteristics PL.1.3.1.3, PL.1.3.1.4, and PL.1.4.3).	1	2	3	4	5	NA
QA.2.4	The quality of patient care and the clinical performance of those individuals who are not permitted by the hospital to practice independently are monitored and evaluated through the mechanisms described in Required Characteristics QA.2.1 through QA.2.3.3 or through other mechanisms implemented by the hospital ("Governing Body" Standard GB.1, Required Characteristic GB.1.15).*	1	2	3	4	5	NA
QA.2.5	Relevant findings from the quality assurance activities listed in Required Characteristics QA.2.1 through QA.2.3.3 are considered as part of						
QA.2.5.1	the reappraisal/reappointment of medical staff members ("Medical Staff" Standard MS.5, Required Characteristic MS.5.3.1.5);*	1	2	3	4	5	NA
QA.2.5.2	the renewal or revision of the clinical privileges of individuals who practice independently ("Medical Staff" Standard MS.5, Required Characteristic MS.5.3.1);* and	1	2	3	4	5	NA
QA.2.5.3	the mechanisms used to appraise the competence of all those individuals not permitted by the hospital to practice independently ("Governing Body" Standard GB.1, Required Characteristic GB.1.15).*	1	2	3	4	5	NA

PREAMBLE

The monitoring and evaluation process is designed to help health care organizations effectively use their quality assurance resources by focusing on high-priority quality-of-care issues. In order to accomplish this, the process involves

- identification of the most important aspects of the care (for example, procedures or treatments) the organization (or department or service) provides;
- use of measurable indicators to systematically monitor these aspects of care in an ongoing way;
- evaluation of the care when thresholds are reached in the monitoring process to identify opportunities for improvement or problems in the quality and appropriateness of care; and
- taking actions to improve care or solve problems, and evaluation of the effectiveness of those actions.

Because the use of indicators to monitor important aspects of care involves the collection and aggregation of data about a series of events or activities, the monitoring and evaluation process can be used to identify trends or patterns of care that may not be evident when only case-by-case review is performed. Indicators can also be used to identify important single events that may represent poor-quality care. Whether focused on patterns or single events, the use of indicators helps to efficiently identify situations in which case review (for example, peer review) is most likely to identify either opportunities to improve care or correctable deficiencies in care. Although the monitoring and evaluation process will not identify every case of substandard care, it does help the organization identify situations on which its attention could be most productively focused.

The process is composed of the following ten steps:

1. Assign responsibility for monitoring and evaluation activities;
2. Delineate the scope of care provided by the organization;
3. Identify the most important aspects of care provided by the organization;
4. Identify indicators (and appropriate clinical criteria) for monitoring the important aspects of care;
5. Establish thresholds (levels, patterns, trends) for the indicators that trigger evaluation of the care;
6. Monitor the important aspects of care by collecting and organizing the data for each indicator;
7. Evaluate care when thresholds are reached in order to identify either opportunities to improve care or problems;
8. Take actions to improve care or to correct identified problems;
9. Assess the effectiveness of the actions and document the improvement in care; and
10. Communicate the results of the monitoring and evaluation process to relevant individuals, departments, or services and to the organizationwide quality assurance program.

Standard QA.3 and Required Characteristics QA.3.1 through QA.3.2.8 address the second through tenth steps of this process.

Circle One

STANDARD

QA.3 Monitoring and evaluation activities, including those described in Standard QA.2, Required Characteristics QA.2.1 through QA.2.4, reflect the activities described in Required Characteristics QA.3.1 through QA.3.2.8.* 1 2 3 4 5 NA

REQUIRED CHARACTERISTICS

QA.3.1 There is a planned, systematic, and ongoing process for monitoring, evaluating, and improving the quality and appropriateness of care provided to patients.* 1 2 3 4 5 NA

QA.3.1.1 This process is designed to effectively utilize quality assurance resources to

QA.3.1.1.1 identify and take opportunities to make important improvements in patient care; and 1 2 3 4 5 NA

QA.3.1.1.2 identify and correct problems that have the greatest (or an important) effect on patient care. 1 2 3 4 5 NA

QA.3.1.2 The monitoring process is designed to identify

QA.3.1.2.1 patterns or trends in care that warrant evaluation; and/or 1 2 3 4 5 NA

QA.3.1.2.2 important single clinical events in the process or outcome of care that also warrant evaluation. 1 2 3 4 5 NA

QA.3.1.3 The evaluation is designed to

QA.3.1.3.1 determine the presence or absence of an opportunity to improve, or a problem in the quality and/or appropriateness of care; and 1 2 3 4 5 NA

QA.3.1.3.2 determine how to improve care or correct the problem. 1 2 3 4 5 NA

QA.3.2 The monitoring and evaluation process has the characteristics described in Required Characteristics QA.3.2.1 through QA.3.2.8.* 1 2 3 4 5 NA

QA.3.2.1 Those aspects of care that are most important to the health and safety of the patients served are identified.* 1 2 3 4 5 NA

QA.3.2.1.1 These important aspects of care are those that

QA.3.2.1.1.1 occur frequently or affect large numbers of patients; 1 2 3 4 5 NA

QA.3.2.1.1.2 place patients at risk of serious consequences or of deprivation of substantial benefit when 1 2 3 4 5 NA

QA.3.2.1.1.2.1 the care is not provided correctly; or 1 2 3 4 5 NA

QA.3.2.1.1.2.2 the care is not provided when indicated; or 1 2 3 4 5 NA

*The asterisked items are key factors in the accreditation decision process. For an explanation of the use of the key factors, see "Using the Manual," page ix.

Circle One

QA.3.2.1.1.2.3 the care is provided when not indicated; and/or	1	2	3	4	5	NA
QA.3.2.1.1.3 tend to produce problems for patients or staff.	1	2	3	4	5	NA
QA.3.2.2 Indicators are identified to monitor the quality and appropriateness of important aspects of care.*	1	2	3	4	5	NA
QA.3.2.2.1 The indicators are related to the quality and/or appropriateness of care and may include clinical criteria (sometimes called "standards, guidelines or parameters of care or practice").	1	2	3	4	5	NA
QA.3.2.2.1.1 These indicators are						
QA.3.2.2.1.1.1 objective;	1	2	3	4	5	NA
QA.3.2.2.1.1.2 measurable; and	1	2	3	4	5	NA
QA.3.2.2.1.1.3 based on current knowledge and clinical experience.	1	2	3	4	5	NA
QA.3.2.2.1.2 These indicators reflect structures of care (for example, resources), processes of care (for example, procedures, techniques), or outcomes of care (for example, complication rates).	1	2	3	4	5	NA
QA.3.2.3 Data are collected for each indicator.*	1	2	3	4	5	NA
QA.3.2.3.1 The frequency of data collection for each indicator and the sampling of events or activities are related to						
QA.3.2.3.1.1 the frequency of the event or activity monitored;	1	2	3	4	5	NA
QA.3.2.3.1.2 the significance of the event or activity monitored; and	1	2	3	4	5	NA
QA.3.2.3.1.3 the extent to which the important aspect of care monitored by the indicator has been demonstrated to be problem-free.	1	2	3	4	5	NA
QA.3.2.4 The data collected for each indicator are organized so that situations in which an evaluation of the quality or appropriateness of care is indicated are readily identified.*	1	2	3	4	5	NA
QA.3.2.4.1 Such evaluations are prompted by						
QA.3.2.4.1.1 important single clinical events; and	1	2	3	4	5	NA
QA.3.2.4.1.2 patterns of care or outcomes that are at variance with predetermined levels of care or outcomes (sometimes called "thresholds for evaluation").	1	2	3	4	5	NA
QA.3.2.5 When initiated, the evaluation of an important aspect of care						
QA.3.2.5.1 includes analysis of trends and patterns in the data collected on the indicators;*	1	2	3	4	5	NA
QA.3.2.5.2 includes review by peers when analysis of the care provided by a practitioner is undertaken; and*	1	2	3	4	5	NA
QA.3.2.5.3 identifies opportunities to improve, or problems in, the quality and/or appropriateness of care.*	1	2	3	4	5	NA

*The asterisked items are key factors in the accreditation decision process. For an explanation of the use of the key factors, see "Using the Manual," page ix.

Circle One

QA.3.2.6	When an important opportunity to improve, or problem in, the quality and/or appropriateness of care is identified.*	1	2	3	4	5	NA
QA.3.2.6.1	action is taken to improve the care or to correct the problem; and*	1	2	3	4	5	NA
QA.3.2.6.2	the effectiveness of the action taken is assessed through continued monitoring of the care.*	1	2	3	4	5	NA
QA.3.2.7	The findings, conclusions, recommendations, actions taken, and results of the actions taken are						
QA.3.2.7.1	documented; and*	1	2	3	4	5	NA
QA.3.2.7.2	reported through established channels.*	1	2	3	4	5	NA
QA.3.2.8	As part of the annual appraisal of the hospital's quality assurance program, the effectiveness of the monitoring and evaluation process is assessed.*	1	2	3	4	5	NA

STANDARD

QA.4	The administration and coordination of the hospital's overall quality assurance program are designed to assure that the activities described in Required Characteristics QA.4.1 through QA.4.5 are undertaken.*	1	2	3	4	5	NA
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REQUIRED CHARACTERISTICS

QA.4.1	Each of the monitoring and evaluation activities outlined in Standards QA.2 and QA.3 is performed appropriately and effectively.*	1	2	3	4	5	NA
QA.4.2	Necessary information is communicated among departments/services when problems or opportunities to improve patient care involve more than one department/service.*	1	2	3	4	5	NA
QA.4.3	The status of identified problems is tracked to assure improvement or resolution.*	1	2	3	4	5	NA
QA.4.4	Information from departments/services and the findings of discrete quality assurance activities are used to detect trends, patterns of performance, or potential problems that affect more than one department/service.*	1	2	3	4	5	NA
QA.4.5	The objectives, scope, organization, and effectiveness of the quality assurance program are evaluated at least annually and revised as necessary.*	1	2	3	4	5	NA

*The asterisked items are key factors in the accreditation decision process. For an explanation of the use of the key factors, see "Using the Manual," page ix.

STANDARD

- RH.4** As part of the hospital's quality assurance program, the quality and appropriateness of patient care provided by any physical rehabilitation service, whether provided singly, in combination, or as part of a comprehensive physical rehabilitation program or unit, are monitored and evaluated in accordance with Standard QA.3 and Required Characteristics QA.3.1 through QA.3.2.8 in the "Quality Assurance" chapter in this *Manual*.*
- 1 2 3 4 5 NA

REQUIRED CHARACTERISTICS

- RH.4.1** The director of the comprehensive physical rehabilitation program or unit or the director of each rehabilitation service, whether provided singly or in combination, is responsible for implementing the monitoring and evaluation process.*
- 1 2 3 4 5 NA
- RH.4.1.1** The department/service participates in*
- RH.4.1.1.1** the identification of the important aspects of care for the department/service:
- 1 2 3 4 5 NA
- RH.4.1.1.2** the identification of the indicators used to monitor the quality and appropriateness of the important aspects of care; and
- 1 2 3 4 5 NA
- RH.4.1.1.3** the evaluation of the quality and appropriateness of care.
- 1 2 3 4 5 NA
- RH.4.2** Monitoring and evaluation of the quality and appropriateness of care addresses the extent to which functional or behavioral goals, established in accordance with Required Characteristic RH.1.2.4, are achieved by patients.
- RH.4.3** When an outside source(s) provides physical rehabilitation services, or when there is no designated physical rehabilitation department/service, the medical staff is responsible for implementing the monitoring and evaluation process.*
- 1 2 3 4 5 NA

*The asterisked items are key factors in the accreditation decision process. For an explanation of the use of the key factors, see "Using the Manual," page ix.

The "Physical Rehabilitation Services" chapter became effective for accreditation purposes on July 1, 1986.

The revised standard and required characteristics concerning the monitoring and evaluation process (RH.4 through RH.4.2) became effective for accreditation purposes on July 1, 1989.

The revised required characteristic concerning the development of a treatment plan for a patient's physical rehabilitation (RH.1.2.3) became effective for accreditation purposes on January 1, 1990.

The revised required characteristic concerning necessary documentation in patient's medical medical record (RH.3.3.3) became effective for accreditation purposes on January 1, 1990.

The added required characteristic concerning the inclusion of goal attainment information in the monitoring and evaluation process for rehabilitation services (RH.4.2) is effective for accreditation purposes on January 1, 1991.

APPENDIX B

APPENDIX B. 1993 JOINT COMMISSION QUALITY ASSESSMENT AND IMPROVEMENT (QA) STANDARDS. PHYSICAL REHABILITATION SERVICES. RH.4 AND RH.1.2.1 - 1.2.7.

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PREAMBLE

This chapter describes those hospital activities that are designed to assess and improve the quality of patient care. The standards place emphasis on the role of the hospital's leaders—governance, managerial, medical, nursing, and other clinical leaders—in assessing and improving patient care and emphasize, clarify, and provide greater flexibility in certain steps of the quality assessment and improvement processes. The standards in this chapter are based on the following principles:

- A hospital can improve patient care quality—that is, increase the probability of desired patient outcomes, including patient satisfaction—by assessing and improving those governance, managerial, clinical, and support processes that most affect patient outcomes.
- Some of these processes are carried out by medical, nursing, and other clinicians, some by governing body members, some by managers, and some by support personnel; many are carried out jointly by more than one of these groups.
- Whether carried out by one or more groups, the processes must be coordinated and integrated; this coordination and integration requires the attention of the managerial and clinical leaders of the hospital.
- Most governance, managerial, medical, nursing, other clinical, and support staff are both motivated and competent to carry out the processes well. Therefore, opportunities to improve the processes—and, thus, improve patient outcomes—arise much more frequently than mistakes and errors. Consequently, the hospital's principal goal should be to help everyone improve the processes in which he/she is involved, without shirking its responsibility to address serious problems involving deficits in knowledge or skill.

These principles underlie the assessment and improvement of quality. For hospitals, the natural next step in the steady progression of approaches from implicit review by peers, to medical audits, to systematic quality assurance, is to quality improvement.

Beginning with the 1992 *Accreditation Manual for Hospitals, Volume I (AMH, Vol I)*, the Joint Commission is incrementally revising the standards on quality assessment and improvement to help hospitals use their current commitment, resources, and approaches to improving patient care quality more effectively and efficiently. Currently, the standards are designed to emphasize the role of hospital leaders in quality improvement activities, to encourage hospitals to evaluate their current activities in light of the above principles, and to assist those hospitals that are already moving toward quality improvement.

Standards QA.1 through QA.1.6 address the important role that the hospital's leaders play collectively and individually in assessing and improving patient care quality. These standards emphasize the governance, managerial, medical, nursing, and other clinical leaders' responsibilities to set expectations for quality assessment and improvement, to provide resources and training needed

for these activities, to foster communication and coordination, and to personally participate in improvement activities.

The standards continue to encourage hospitals to expand their assessment and improvement activities by emphasizing the importance of

- the full series of interrelated governance, managerial, support, *and* clinical processes that affect patient outcomes;
- organizing quality assessment and improvement activities around the flow of patient care, in which the interrelated processes are often cross-disciplinary and cross-departmental;
- focusing on how well the processes in which individuals participate are performed, how well the processes are coordinated and integrated (for example, the "handoffs"), and how the processes can be improved;
- trying to find better ways to carry out processes, as well as initiating action when a problem is identified; and
- integrating efforts to improve patient outcomes with those to improve efficiency (that is, improving value).

Rather than foster an approach to quality assessment and improvement activities that is department and discipline specific, direct care focused, and individual and problem oriented, the standards that address these activities foster an approach that reflects the principles described above. This approach is expected to better harness the professional instinct for ongoing improvement.

QA.1

The organization's leaders set expectations, develop plans, and implement procedures to assess and improve the quality of the organization's governance, management, clinical, and support processes.*

1 2 3 4 5 NA

QA.1.1 The leaders undertake education concerning the approaches and methods of quality improvement.

1 2 3 4 5 NA

QA.1.2 The leaders set priorities for organizationwide quality improvement activities that are designed to improve patient outcomes.

1 2 3 4 5 NA

QA.1.3 The leaders allocate adequate resources for assessment and improvement of the organization's governance, managerial, clinical, and support processes, through

QA.1.3.1 the assignment of personnel, as needed, to participate in quality improvement activities;

1 2 3 4 5 NA

QA.1.3.2 the provision of adequate time for personnel to participate in quality improvement activities; and

1 2 3 4 5 NA

QA.1.3.3 information systems and appropriate data management processes to facilitate the collection, management, and analysis of data needed for quality improvement.

1 2 3 4 5 NA

QA.1.4 The leaders assure that organization staff are trained in assessing and improving the processes that contribute to improved patient outcomes.

1 2 3 4 5 NA

*The leaders responsible for performing the identified functions include at least the leaders of the governing body; the chief executive officer and other senior managers; the elected and appointed leaders of the medical staff and the clinical departments, and other medical staff members in hospital administrative positions; and the nursing executive and other senior nursing leaders.

QA.1.5 The leaders individually and jointly develop and participate in mechanisms to foster communication among individuals and among components of the organization and to coordinate internal activities. 1 2 3 4 5 NA

QA.1.6 The leaders analyze and evaluate the effectiveness of their contributions to improving quality. 1 2 3 4 5 NA

QA.2

The organization has a written plan for assessing and improving quality that describes the objectives, organization, scope, and mechanisms for overseeing the effectiveness of monitoring, evaluation, and improvement activities. The plan includes at least the activities listed in QA.2.1 through QA.2.4.2 and described in other chapters of this Manual.

1 2 3 4 5 NA

QA.2.1 The following medical staff quality assessment and improvement activities are performed:

QA.2.1.1 the assessment and improvement of the quality of patient care and the clinical performance of individuals with clinical privileges through

1 2 3 4 5 NA

QA.2.1.1.1 participation by members of each department/service in intra- and/or interdepartmental/service monitoring and evaluation of care; periodic review of the care; and communication of findings, conclusions, recommendations, and actions to members of the department/service;

1 2 3 4 5 NA

QA.2.1.1.2 evaluation and improvement in the use of surgical and other invasive procedures;

1 2 3 4 5 NA

QA.2.1.1.3 evaluation and improvement in the use of medications;

1 2 3 4 5 NA

QA.2.1.1.4 the medical record review function;

1 2 3 4 5 NA

QA.2.1.1.5 evaluation and improvement in the use of blood and blood components; and

1 2 3 4 5 NA

QA.2.1.1.6 the pharmacy and therapeutics function.

1 2 3 4 5 NA

QA.2.2 The quality of patient care, including that provided to specific age groups, in all patient care services is monitored and evaluated. 1 2 3 4 5 NA

QA.2.2.1 The departments/services in which care is monitored and evaluated include at least those addressed in other chapters in this Manual, when provided.

1 2 3 4 5 NA

QA.2.2.2 The director of each department/service is responsible for including the department's/service's activities in the monitoring and evaluation process.

1 2 3 4 5 NA

QA.2.2.2.1 The department/service participates in

QA.2.2.2.1.1 the identification of important aspects of care relevant to the department/service;

1 2 3 4 5 NA

QA.2.2.2.1.2 the identification of indicators used to monitor the quality of the important aspects of care; and

1 2 3 4 5 NA

QA.2.2.2.1.3 the evaluation of the quality of care.

1 2 3 4 5 NA

QA.2.2.3 When the hospital provides a patient care service for which there is no designated department/service, the organization's leaders assign responsibility for implementing a monitoring and evaluation process.

1 2 3 4 5 NA

QA.2.2.3.1 When the hospital, in its care of patients, requires the services of another, off-site health care organization, the monitoring and evaluation process examines the appropriateness of the hospital's use of the services and the degree to which the services aid in its care of patients.

1 2 3 4 5 NA

QA.2.3 The following hospitalwide quality assessment and improvement activities are performed:

QA.2.3.1 infection control (see IC.1 and IC.2);

1 2 3 4 5 NA

QA.2.3.2 utilization review (see UR.1); and

1 2 3 4 5 NA

QA.2.3.3 review of accidents, injuries, patient safety, and safety hazards (see PL.1, PL.1.3.1.2, PL.1.3.1.3, PL.1.3.1.4, and PL.1.4.3).

1 2 3 4 5 NA

QA.2.4 Relevant results from the quality assessment activities listed in QA.2.1 through QA.2.3.3

1 2 3 4 5 NA

QA.2.4.1 are used primarily to study and improve processes that affect patient care outcomes; and

1 2 3 4 5 NA

QA.2.4.2 when relevant to the performance of an individual, are used as a component of the evaluation of individual capabilities (see MS.2.7.3, MS.2.15.1.3, NC.2.1.1, and GB.1.14).

1 2 3 4 5 NA

QA.3

There is a planned, systematic, and ongoing process for monitoring, evaluating, and improving the quality of care and of key governance, managerial, and support activities that has the characteristics described in QA.3.1 through QA.3.1.7.2.

1 2 3 4 5 NA

QA.3.1 Those aspects of care that are most important to the health and safety of the patients served are identified.

1 2 3 4 5 NA

QA.3.1.1 These important aspects of care are those that

QA.3.1.1.1 occur frequently or affect large numbers of patients;

1 2 3 4 5 NA

QA.3.1.1.2 place patients at risk of serious consequences or of deprivation of substantial benefit when

1 2 3 4 5 NA

QA.3.1.1.2.1 the care is not provided correctly; or

1 2 3 4 5 NA

QA.3.1.1.2.2 the care is not provided when indicated; or

1 2 3 4 5 NA

QA.3.1.1.2.3 the care is provided when not indicated; and/or

1 2 3 4 5 NA

QA.3.1.1.3 tend to produce problems for patients or staff.

1 2 3 4 5 NA

QA.3.1.2 Indicators are identified to monitor the quality of important aspects of care.

1 2 3 4 5 NA

QA.3.1.2.1	The indicators are related to the quality of care and may include clinical criteria (sometimes called "clinical standards," "practice guidelines," or "practice parameters.")	1	2	3	4	5	NA
QA.3.1.2.1.1	These indicators are						
QA.3.1.2.1.1.1	objective;	1	2	3	4	5	NA
QA.3.1.2.1.1.2	measurable; and	1	2	3	4	5	NA
QA.3.1.2.1.1.3	based on current knowledge and clinical experience.	1	2	3	4	5	NA
QA.3.1.3	Data are collected for each indicator.	1	2	3	4	5	NA
QA.3.1.3.1	The frequency of data collection for each indicator and the sampling of events or activities are related to						
QA.3.1.3.1.1	the frequency of the event or activity monitored;	1	2	3	4	5	NA
QA.3.1.3.1.2	the significance of the event or activity monitored; and	1	2	3	4	5	NA
QA.3.1.3.1.3	the extent to which the important aspect of care monitored by the indicator has been demonstrated to be problem-free.	1	2	3	4	5	NA
QA.3.1.4	The data collected for each indicator are organized so that situations in which an evaluation of the quality of care is indicated are readily identified.	1	2	3	4	5	NA
QA.3.1.4.1	Such evaluations are prompted at a minimum by						
QA.3.1.4.1.1	important single clinical events; or	1	2	3	4	5	NA
QA.3.1.4.1.2	levels or patterns/trends in care or outcomes that are at significant variance with predetermined levels and/or patterns/trends in care or outcomes.	1	2	3	4	5	NA
QA.3.1.4.2	Such evaluations may also be initiated by comparison of the hospital's performance with that of other organizations ("benchmarking").	1	2	3	4	5	NA
QA.3.1.4.3	Such evaluations may also be initiated when there is a desire to improve overall performance, whether or not the aspect of care was being monitored.	1	2	3	4	5	NA
QA.3.1.5	When initiated, the evaluation of an important aspect of care						
QA.3.1.5.1	includes a more detailed analysis of patterns/trends in the data collected on the indicators;	1	2	3	4	5	NA
QA.3.1.5.2	is designed to identify opportunities to improve, or problems in, the quality of care; and	1	2	3	4	5	NA
QA.3.1.5.3	includes review by peers when analysis of the care provided by an individual practitioner is undertaken.	1	2	3	4	5	NA
QA.3.1.6	When an important opportunity to improve, or a problem in, the quality of care is identified.						
QA.3.1.6.1	action is taken to improve the care or to correct the problem; and	1	2	3	4	5	NA

QA.3.1.6.1.1 The action taken may be the testing of a strategy for improvement on a limited basis prior to full implementation (if appropriate), or the immediate implementation of the strategy in all departments/services to which it may be applicable.

1 2 3 4 5 NA

QA.3.1.6.2 the effectiveness of the action taken is assessed through initiating or ongoing monitoring of the care.

1 2 3 4 5 NA

QA.3.1.7 The conclusions, recommendations, actions taken, and results of the actions taken are

QA.3.1.7.1 documented; and

1 2 3 4 5 NA

QA.3.1.7.2 reported through established channels.

1 2 3 4 5 NA

QA.4

The administration and coordination of the hospital's approach to assessing and improving quality are designed to assure that the activities described in QA.4.1 through QA.4.4 are undertaken.

1 2 3 4 5 NA

QA.4.1 Each of the quality assessment and improvement activities outlined in QA.2 and QA.3 is performed appropriately and effectively.

1 2 3 4 5 NA

QA.4.2 Necessary information is communicated among departments/services and/or professional disciplines when opportunities to improve patient care or problems involve more than one department/service and/or professional discipline.

1 2 3 4 5 NA

QA.4.2.1 Information from departments/services and the findings of discrete quality assessment and improvement activities are used to detect trends, patterns, opportunities to improve, or potential problems that affect more than one department/service and/or professional discipline.

1 2 3 4 5 NA

QA.4.2.2 There are operational linkages between the risk management functions related to the clinical aspects of patient care and safety and quality assessment and improvement function.

1 2 3 4 5 NA

QA.4.2.3 Existing information from risk management activities that may be useful in identifying opportunities to improve the quality of patient care and/or resolve clinical problems is accessible to the quality assessment and improvement function.

1 2 3 4 5 NA

QA.4.3 The status of identified opportunities or problems is tracked to assure improvement or resolution.

1 2 3 4 5 NA

QA.4.4 The objectives, scope, organization, and effectiveness of the activities to assess and improve quality are evaluated at least annually and revised as necessary.

1 2 3 4 5 NA

NOTES AND COMMENTS:

RH.4

Monitoring and evaluation of the quality of care addresses the extent to which functional or behavioral goals, established in accordance with RH.1.2.4, are achieved by patients.

1 2 3 4 5 NA

RH.1.2 At least the following requirements are included in the process of providing for any physical rehabilitation service to patients:

RH.1.2.1 Consistent with applicable law and hospital policy, physical rehabilitation services are initiated by a physician or other qualified individual.

1 2 3 4 5 NA

RH.1.2.2 On referral for physical rehabilitation services, a functional assessment and evaluation are performed by a qualified professional.

1 2 3 4 5 NA

RH.1.2.3 A treatment plan is developed based on an evaluation that includes an assessment of functional ability appropriate to the patient.

1 2 3 4 5 NA

RH.1.2.3.1 The patient and the family participate as appropriate in the development and implementation of the treatment plan.

1 2 3 4 5 NA

RH.1.2.4 Measurable goals, which are described in functional or behavioral terms, are established for the patient and include time frames for achievement.

1 2 3 4 5 NA

RH.1.2.5 The treatment plan is designed to achieve stated goals and is developed by the referring individual, the rehabilitation services staff, and, to the extent possible, the patient and family.

1 2 3 4 5 NA

RH.1.2.6 The patient's progress and the results of treatment are assessed on a timely basis, which is at least monthly for outpatients and at least every two weeks for inpatients.

1 2 3 4 5 NA

RH.1.2.6.1 Treatment goals are revised as appropriate.

1 2 3 4 5 NA

RH.1.2.7 The patient's progress and response to treatment are documented in the medical record.

1 2 3 4 5 NA

APPENDIX C

APPENDIX C. CQI TOOLS AND PROBLEM SOLVING TECHNIQUES

Audits ⁵²	A structured analysis of patient care. Uses criteria relating to a specific aspect of care. Is usually performed retrospectively on a sample from the population of interest.
Benchmarking ^{44,45,50,51,54}	A technique that involves comparing your practices and performance against a similar organization. Typically you look to compare against the best that can be found.
Brainstorming ^{44,45,46}	A group problem solving technique. Sometimes referred to as group thinking. Is used to generate a list of ideas in a short time. Can be used anywhere in the quality improvement process when multiple ideas are needed.
Cause and effect diagrams ^{18,44,55}	Also referred to as either a fishbone or Ishikawa diagram. Sometimes used in brainstorming sessions. Uses a pictorial method to depict an event (either desirable or undesirable) and a listing of causes.
Control charts ^{45,56}	A method of plotting and studying variability. Occurrences important to outcomes are charted on an ongoing basis. From this a mean and upper and lower control limits can be identified. Can also be useful in demonstrating improved performance.
Guidelines ⁵⁷	Deal with practitioners. Are documents which contain standardized specifications relating to care or performance. Incorporate expert opinion and the best scientific evidence available.
Histograms ^{18,55}	A graphic method to display data. Useful for showing a frequency and a relative shape of the distribution.

APPENDIX C. Continued

Indicator ⁵⁷	A quantitative measure used to monitor functions that affect patient outcomes. May be rate based or sentinel based. Data elements need to be specified with each indicator.
Juran's trilogy ^{21,46,58}	Refers to Juran's model of TQM. This model views quality management as consisting of quality control, quality planning, and quality improvement. Each of these functions has its own components and tenets.
Line graph	A graphic display of data. Events of interest are plotted on a line. Allows for easy identification of the mean and is useful for looking at variability.
Outcome Assessment ^{47,59}	Donabedian is credited with the development of the structure-process-outcome paradigm. Useful for assessing quality when they are causally related. Structure refers to physical and organizational characteristics of where care is provided. Process relates to what is actually done for the patient. Outcome is what was accomplished for the patient.
Pareto chart ^{18,44,45}	A graph or bar chart that ranks factors in order of frequency. Useful in determining priorities.
Performance indicator ⁵⁷	A type of indicator that monitors actual performance of important functions that affect patient outcomes.
FOCUS-PDCA cycle ^{6,21,44,46,50}	A model for continuous improvement. First modeled by Shewart and then refined by Deming. Find a process to improve; organize a team that knows the process; clarify current knowledge of the process; understand causes of process variation;

APPENDIX C. Continued

select the process improvement strategy; plan the improvement; do data collection, data analysis, and improvement; check data for improvement and customer outcome; act to hold gains and continued improvement.

Process diagram^{18,45,55}

Graphically displays an entire process. Like a map. Useful in visualizing the steps of a process and how the details are performed.

Satisfaction surveys

A method used to gather information on customer needs. Could take the form of questionnaires, interviews, or comment cards. Reliability and validity are important issues to consider with surveys.

Scatterplots^{18,46}

A graphic method of charting the relationship between two variables. Can check on correlation between two variables. Can be useful when looking at cause and effect relationships between two variables.

Screening systems^{51,57,60}

A method used for determining cases that warrant further review and assessment. Screens can be rate related or occurrence related.

Run chart⁴⁵

A type of line graph that generally displays a variable over time.

APPENDIX D

APPENDIX D. SURVEY QUESTIONNAIRE

QUALITY ASSURANCE IN THE PHYSICAL THERAPY DEPARTMENT:
Current Practices in North Dakota Acute Care Hospitals

1. Is your facility JCAHO accredited?
2. Is your facility surveyed by the State Health Department?
3. How many beds is your facility licensed for?
less than 50, 50-99, 100-199, 200 or more
4. How many full time physical therapists are employed in your department (FTEs)?
5. Are you also the director of PT Services for your facility?
6. Does your department have a written quality assurance/improvement plan?
7. Describe the structure of the QA/I process for your department. (i.e., committee or task force, membership, meeting frequency).
8. Describe the type of monitoring and review activities your department has been involved with over the last two years.
9. What methods have you used for data collection for your monitoring and review activities? Who collects the data?
10. Does your departmental plan identify important aspects of care? If so, please identify.

APPENDIX D. Continued

11. How were the monitoring plan indicators and criteria selected?

12. Does your department have any direct involvement with your hospital's central QA/I effort? If so, how?

13. What are your department's reporting responsibilities in regard to QA/I activities?

14. Are you familiar with continuous quality improvement (CQI)/total quality management (TQM) theories and practices?

15. Is your facility integrating CQI philosophy into its QA/I processes and plan?

16. What types of continuing education have you attended in regard to quality assurance/improvement?

APPENDIX E

GUIDELINES AND SURVEY PROCEDURES

Medicare and medicaid programs; conditions of participation for hospitals; final regulations. Appendix A. Federal Register. June 17, 1986;A13-A18,A104-A107.

REGULATIONS

INTERPRETIVE GUIDELINES

SURVEY PROCEDURES

Rev.
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§482.21 Condition of Participation: Quality assurance (QA).

The governing body must ensure that there is an effective, hospital-wide QA program to evaluate the provision of patient care.

§482.21 Condition of Participation Quality assurance (QA).

The condition requires that each hospital develop its own QA program to meet its needs. The methods used by each hospital for self-assessment (QA) are flexible. There are a wide variety of techniques used by hospitals to gather information to be monitored. These may include document-based review (e.g., review of medical records, computer profile data, continuous monitors, patient care indicators or screens, incident reports, etc.); direct observation of clinical performance and of operating systems and interviews with patients and/or staff. The information gathered by the hospital should be based on criteria and/or measures generated by the medical and professional/technical staffs and reflect hospital practice patterns, staff performance, and patient outcomes.

§482.21 Condition of Participation: Quality assurance (QA).

Survey of the QA condition should be coordinated by one surveyor. However, each surveyor should review the quality assurance plan. Each surveyor as he/she surveys the other conditions should determine if there is evidence of monitoring and evaluation of that condition. A hospital that continually evaluates the quality of care generally provides high quality patient care. A hospital-wide QA program should focus on the objective and systematic monitoring and evaluations of the quality and appropriateness of patient care, efforts to improve patient care and identification and resolution of patient care problems.

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Interview the staff person(s) responsible for managing the QA program. Items for discussion include:

- o Description of the organization of the QA program and its method of operation including its accountability to the governing body.
- o How does the medical staff monitor clinical performance?
- o How is the quality and appropriateness of patient care monitored and evaluated?
- o How are hospital policies and clinical privileges revised based on QA?

Use the following sources to determine if the hospital's QA program monitors and evaluates all major areas of patient care.

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- o Readmissions
- o Medical records evaluation reports
- o Incident reports
- o Infection control report
- o Blood utilization reports
- o Pharmacy reports or drug usage review
- o Medication errors
- o Laboratory, radiology, and other diagnostic clinical reports - e.g., repeat testing
- o Committee/department reports
- o Surgical case review/tissue review reports
- o Medical and surgical services review - for appropriateness of diagnosis and treatment
- o Use of experimental drugs and procedures (method of approval)
- o Patient/staff complaints
- o Evaluation of the granting of clinical privileges - e.g., must be commensurate with the individual's documented training experience and current competence
- o Reappraisal/reappointment of medical staff
- o Utilization review
- o Appropriateness of discharge

(a) Standard: Clinical plan.

The organized hospital-wide QA program must be ongoing and have a written plan of implementation.

(a) Standard: Clinical plan.

Ongoing means that there is a continuous and periodic collection and assessment of data concerning the important aspects of patient care. Assessment of such data enable areas of potential problems to be identified and indicates additional data which should be collected and assessed in order to identify whether a problem exists. The QA program must provide the hospital with findings regarding quality of care.

The QA plan should include at least the following:

(a) Standard: Clinical plan.

Review the hospital's written QA plan. Verify that the hospital's QA plan includes the elements specified in the interpretive guidelines.

- (1) All organized services related to patient care including services furnished by a contractor, must be evaluated.

- o Program objectives
- o Organization involved
- o Hospital-wide in scope
- o All patient care disciplines involved
- o Description of how the program will be administered and coordinated
- o Methodology for monitoring and evaluating the quality care
- o Ongoing
- o Setting of priorities for resolution of problems
- o Monitoring to determine effectiveness of action
- o Oversight responsibility-reports to governing body
- o Documentation of the review of its own QA plan

- (1) "All organized services" means all services provided to patients by staff accountable to the hospital through employment or contract. All patient care services furnished under contract must be evaluated as though they were provided by hospital staff.

This means that all patient services must be evaluated as part of the QA program, that is:

- o Dietetic services
- o Medical records
- o Medical staff care-appropriateness and quality of diagnosis and treatment
- o Laboratory service
- o Nursing service
- o Pharmaceutical service
- o Radiology service
- o Hospital wide functions

- (1) Determine that the scope of the QA program includes an evaluation of all services provided directly or under arrangement (including the services of the medical staff). To avoid duplication of effort and assure adequate attention to problems of the hospital, determine that mechanisms are in place to assure appropriate communication across departments and services.

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- Infection control
- Utilization review (for hospitals under PRO review this requirement does not apply)
- Discharge planning program

If the hospital offers these optional services, they must also be evaluated:

- o Anesthesia services
- o Emergency services
- o Nuclear medicine services
- o Outpatient services
- o Psychiatric services
- o Rehabilitation services
- o Respiratory services
- o Surgical services

Each department or service should address:

- o Patient care problems
- o Cause of problems
- o Documented corrective actions
- o Monitoring or follow-up to determine effectiveness of actions taken.

(2) Nosocomial infections and medication therapy must be evaluated.

(3) All medical and surgical services performed in the hospital must be evaluated as they relate to appropriateness of diagnosis and treatment.

(3) All services provided in the hospital must be periodically evaluated to determine whether an acceptable level of quality is provided. The services provided by each practitioner with hospital privileges must be periodically evaluated to determine whether that are of an acceptable level of quality and appropriateness.

(2) Determine that nosocomial infections and medication therapy are evaluated by the hospital. These are hospital-wide functions and may be evaluated as such.

(3) Determine that the hospital is monitoring patient care including clinical performance. Determine that a review of medical records is conducted and that the records contain sufficient data to support the diagnosis and to determine that the procedures are appropriate to the diagnosis.

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(b) Standard: Medically-related patient care services.

The hospital must have an ongoing plan, consistent with available community and hospital resources, to provide or make available social work, psychological, and educational services to meet the medically-related needs of its patients. The hospital also must have an effective, ongoing discharge planning program that facilitates the provision of followup care.

(1) Discharge planning must be initiated in a timely manner.

(b) Standard: Medically-related patient care services.

To be considered effective, the discharge planning program must result in each patient's record being annotated with a note regarding the nature of post hospital care arrangements.

(b) Standard: Medically-related patient care services.

Review the hospital discharge planning program. Determine through an examination of discharge records if the plan provides for discharge planning for all patients.

Review the hospital's plan for providing or making available timely services to meet the medically related social work, psychological and educational needs of its patients. Where the services are to be provided by other than hospital staff, review the documentation of the agreements (e.g., contracts, memoranda of understanding, letters of agreement, etc.) to assure that services are available to all patients needing them.

(1) Interview several patients who are to be discharged (within about 48 hours) to determine if the patients need post discharge care and/or other services. Verify that needed services have been arranged for to ensure a timely and smooth transition to the most appropriate type of setting for post-hospital or rehabilitative care.

Ascertain whether the patient and/or family have been trained to provide post hospital care, e.g., give medications, injections, stoma care.

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(2) Patients, along with necessary medical information, must be transferred or referred to appropriate facilities, agencies, or outpatient services, as needed, for follow-up or ancillary care.

(c) Standard: Implementation.

The hospital must take and document appropriate remedial action to address deficiencies found through the QA program. The hospital must document the outcome of the remedial action.

Where appropriate, ascertain whether arrangements have been made for the patient to be admitted to a skilled nursing facility or home health agency.

(2) Verify that the plan specifies that the necessary information, (e.g., functional capacity of an individual, the nursing and other care requirements of the patient, discharge summary, referral forms) is transferred to the provider of post-hospital care.

(c) Standard: Implementation.

Determine if the hospital has taken appropriate action to correct problems identified by the QA program. Examine reports, minutes, of meetings, etc. to determine that the hospital has documented the remedial action and its outcome.

Examples of appropriate remedial action may include but are not limited to:

- o Changes in policies and procedures
- o Staffing and assignment changes
- o Appropriate education and training
- o Adjustments in clinical privileges
- o Changes in equipment or physical plant
- o Review and revisions of a plan itself

§482.56 Conditions of Participation:
Rehabilitation services.

If the hospital provides rehabilitation, physical therapy, occupational therapy, audiology, or speech pathology services, the services must be organized and staffed to ensure the health and safety of patients.

- (a) Standard: Organization and staffing.

§482.56 Conditions of Participation:
Rehabilitation services.

- (a) Standard: Organization and staffing.

§482.56 Conditions of Participation
Rehabilitation services.

- (a) Standard: Organization and staffing.

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The organization of the service must be appropriate to the scope of the services offered.

- (1) The director of the services must have the necessary knowledge, experience, and capabilities to properly supervise and administer the services.

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Each service, whether provided through a single discipline department or within a multi-discipline department, functions with established lines of authority and responsibility that ensure accountability in patient care and administrative matters regarding the provision of the service.

- (1) Each service must be accountable to an individual that directs the overall operation of the service. An individual may serve as director of more than one service either as the director of a multiservice department or as the director of single service departments.

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Review administrative and patient care policies, organizational charts, position descriptions and, if the services are provided under an agreement, review policies and contracts to determine responsibilities and delegations of authority relative to each service provided.

For each service an adequate number of qualified staff is available to ensure safe and efficient provision of services. The number of qualified staff is based on the type of patients treated and the frequency, duration, and complexity of treatment required. At least one qualified professional must be on the premises to:

- o Evaluate each patient;
- o Initiate the plan of treatment; and
- o Instruct and supervise supportive personnel when they are used to furnish services.

Review medical records to document that a qualified professional evaluates the patient and initiates the treatment.

- (1) Review the organization and policies and procedures under which services are provided to determine the director's responsibility.

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(2) Physical therapy, occupational therapy, or speech therapy, or audiology services, if provided, must be provided by staff who meet the qualifications specified by the medical staff, consistent with State law.

(b) Standard: Delivery of services.

Services must be furnished in accordance with a written plan of treatment. Services must be given in accordance with orders of practitioners who are authorized by the medical staff to order the services, and the orders must be incorporated in the patient's record.

The director may be part-time or full-time. In all situations the director retains professional and administrative responsibility for personnel providing the service. If the director is part-time, the time spent directing the service should be commensurate with the scope of services provided.

(b) Standard: Delivery of services.

Verbal orders regarding treatment are acceptable if documented and signed by the person accepting the order.

The time, date, and contents of the verbal order and the practitioners name must be

Verify through a review of the director's position description that the director has the authority and responsibility for seeing that services are provided consistent with facility policies, State law, and accepted standards of practice. Discussion with the director will assist in determining if he/she has the necessary knowledge, experience and capabilities.

(2) Review medical staff documentation to ascertain that they have established staff qualifications as appropriate, for physical therapists, physical therapy assistants, occupational therapists, occupational therapy assistants, and audiologists consistent with State law. Documentation should be available indicating the service provided and the various level of personnel permitted to provide the service. Verify that there is a procedure for periodically reviewing the qualifications and keeping informed of changes in State law regarding personnel qualifications.

(b) Standard: Delivery of services.

Verify that each patient has a plan of treatment established in writing prior to the beginning of treatment. The plan is established by the practitioner ordering the service in collaboration with an individual qualified to provide the service.

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entered in the record at the time of the order and be countersigned by the practitioner as soon as possible.

Initially the plan may be general in nature but is developed in more detail subsequent to evaluation of the patient by qualified personnel. The plan should include treatment goals and type, amount, frequency and duration of services. Changes in the treatment plan should be documented in writing and supported by clinical record information such as evaluations, test results, or orders.

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