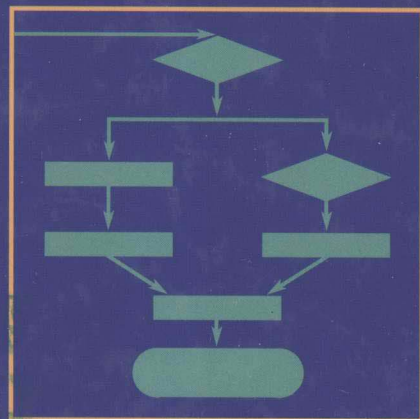
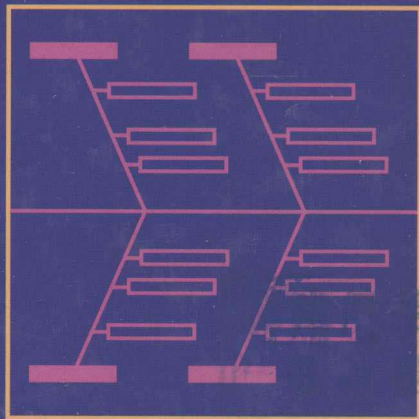
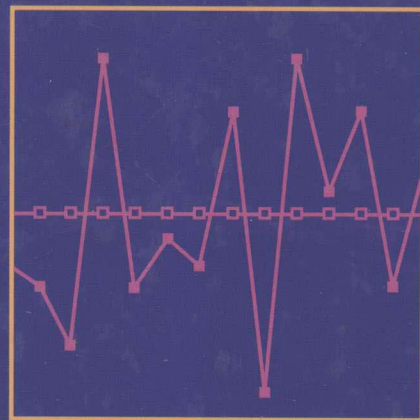
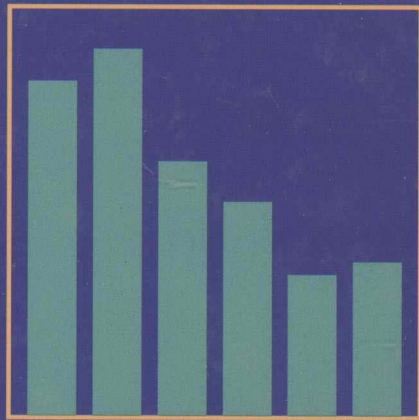


IMPROVING QUALITY AND PERFORMANCE

Concepts, Programs, and Techniques



Patricia Schroeder

IMPROVING QUALITY AND PERFORMANCE

Concepts, Programs, and Techniques

Patricia Schroeder, RN, MSN

Nursing Quality Consultant
Quality Care Concepts, Inc.
Thiensville, Wisconsin

with 94 illustrations



St. Louis Baltimore Boston Chicago London Madrid Philadelphia Sydney Toronto

Executive Editor: N. Darlene Como
Associate Developmental Editor: Brigitte Pocta
Project Manager: Barbara Bowes Merritt
Editing and Production: Carlisle Publishers Services
Designer: Betty Schulz

Copyright © 1994 by Mosby-Year Book, Inc.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without prior written permission from the publisher.

Permission to photocopy or reproduce solely for internal or personal use is permitted for libraries or other users registered with the Copyright Clearance Center, provided that the base fee of \$4.00 per chapter plus \$.10 per page is paid directly to the Copyright Clearance Center, 27 Congress Street, Salem, MA 01970. This consent does not extend to other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collected works, or for resale.

Printed in the United States of America
Composition by Carlisle Communications, Ltd.
Printing/binding by Maple Vail-Binghamton

Mosby-Year Book, Inc.
11830 Westline Industrial Drive
St. Louis, Missouri 63146

Library of Congress Cataloging in Publication Data

Improving quality and performance : concepts, programs, and techniques
/[edited by] Patricia Schroeder. — 1st ed.

p. cm.

Includes bibliographical references and index.

ISBN 0-8016-7003-9

1. Total quality management.
2. Nursing—Quality control.
3. Medical care—Quality control. I. Schroeder, Patricia S.

[DNLM: 1. Quality Assurance, Health Care. 2. Nursing Services—standards. 3. Nursing Care—standards. WY 100 T348 1994]

RT85.5.I55 1994

610.73'068'5—dc20

DNLM/DLC

for Library of Congress

93-2547

CIP

CONTRIBUTORS

P. Mardeen Atkins, BSN, RN

Manager, Nursing Quality Management
Cleveland Clinic Foundation
Cleveland, Ohio

Dawn Bailey, BSN, RN

Nurse Manager
Cleveland Clinic Foundation
Cleveland, Ohio

Lori Blashford, BSN, RN

Staff Nurse
Cleveland Clinic Foundation
Cleveland, Ohio

Mary Ellen Blatt, BSN, RN, CNN

Nurse Manager
Cleveland Clinic Foundation
Cleveland, Ohio

Lisa A. Bonadonna, RN, MS

Director, Staff Support
Medical University of South Carolina Medical Center
Charleston, South Carolina

Catherine J. Buck, MS, RN

Patient Care Director—Dialysis Unit
Froedert Memorial Lutheran Hospital
Milwaukee, Wisconsin

Sharon J. Coulter, MN, MBA, RN

Chairman, Division of Nursing
Cleveland Clinic Foundation
Cleveland, Ohio

Cheryl Czech, RN, C

Cardiac Floor Section Leader
Bellin Hospital
Green Bay, Wisconsin

Geri Day, MS, RN, CPHQ

Quality, Standards, and Research Specialist
Bon Secours Hospital
Grosse Pointe, Michigan

Barbara Dianda-Martin

Manager, Cardiac Surgical Intensive Care
St. Vincent Medical Center
Toledo, Ohio

Rita S. Fogel, MS, RN, CNA

Associate Administrator for Nursing Education
Quality Improvement and Research
Long Island Jewish Medical Center
New Hyde Park, New York

Mary E. Geary, MN, RN, ARNP

Clinical Nurse Specialist
Lakeland Regional Medical Center
Lakeland, Florida

Beatrice Hessen, RN, C

Staff Nurse
Bon Secours Hospital
Grosse Pointe, Michigan

Mimi Jenko, MN, RN

Clinical Nurse Specialist
formerly, Lakeland Regional Medical Center
Lakeland, Florida

Pete Knox, BS, MS

Quality Education Manager
Bellin Hospital
Green Bay, Wisconsin

Judy Malinowski, BSN, RN, C

Nurse Manager
Bon Secours Hospital
Grosse Pointe, Michigan

Nancy E. Miller, RN, MS

Nurse Specialist—QA and Special Projects
Beth Israel Hospital
Boston, Massachusetts

G. John Pandl, MSW, MBA

Director of Continuous Quality Improvement
Froedert Memorial Lutheran Hospital
Milwaukee, Wisconsin

Lenard L. Parisi, MS, RN

QA Coordinator—Critical Care
The New York Hospital
New York, New York

Patricia Schroeder, MSN, RN

Nursing Quality Consultant
Quality Care Concepts, Inc.
Thiensville, Wisconsin

Sandra Shumway, MSN, RN

Assistant to the Chairman, Division of Nursing
Cleveland Clinic Foundation
Cleveland, Ohio

Elaine L. Smith, MS, RN, CNA

Assistant Director of Nursing Education
Long Island Jewish Medical Center
New Hyde Park, New York

Toni C. Smith, EdD, RN

Program Director, Nursing Methods, Procedures,
and Quality
Assistant Professor
University of Rochester Medical Center
Strong Memorial Hospital
Rochester, New York

Rhonda R. Stockard, RN, MS

Assistant Vice President for Nursing Quality Assur-
ance, Education, and Research
St. Vincent Medical Center
Toledo, Ohio

Pamela A. Triolo, PhD, RN

formerly, Director, Quality Management Training and
Development
University of Iowa Hospitals and Clinics
Iowa City, Iowa
currently, Chief Nursing Officer, University Hospital
and Assistant Dean, College of Nursing
University of Nebraska Medical Center
Omaha, Nebraska

Jo Marie Walrath, RN, MS

Director of Nursing
The Johns Hopkins Hospital
Baltimore, Maryland

Jean Walters, MS, RN

Vice President
Patient Care Services
Froedert Memorial Lutheran Hospital
Milwaukee, Wisconsin

Cathleen Krueger Wilson, PhD, RN

Senior Partner
Specialty Applications
Scottsdale, Arizona

Janet E. Yskes, BSN, RN

Staff Nurse
Critical Care Unit
Bellin Hospital
Green Bay, Wisconsin

To my family

Steve and Amy
Walter and Irene
Jeanne, Chuck, Mike, Liz, and Tim—

A very high quality group—
With much love and gratitude

PREFACE

Improving quality and performance has become the commitment of the 1990s for health care organizations. Society, enamored of industrial models for quality improvement and outraged at spiraling health care costs, is calling for the use of new approaches to quality. Governmental, regulatory, and accrediting agencies have labeled quality improvement as the key to many of the overwhelming problems in the U.S. health care system. Health care professionals and organizations have begun to commit to the philosophies of quality improvement with unprecedented energy and resources. Quality improvement holds the potential for creating a new paradigm for health care delivery.

Beyond the passion and enthusiasm, however, lies a mandate. The Joint Commission on Accreditation of Healthcare Organizations has incorporated expectations for quality and performance improvement in its standards for accreditation. This mandate has created more than a little concern. Those agencies that have been the forerunners in adopting quality improvement principles and programs have no more than five years of experience, a time span considered by industry to be minimal and premature in disclosing program benefits. Can multiple health care agencies across the United States reasonably adopt approaches that are relatively untested in health care settings, with evidence of success that is only now being demonstrated?

This book describes the concepts, programs, and tools and techniques used in quality improvement. It is intended to pro-

vide real-world perspectives on this evolving science. It demonstrates that quality improvement is a powerful tool to positively change care and service, yet it is not fast, not foolproof, and not without a need for major investment in people and other resources.

Commitment to quality improvement may be the most significant action we can take to move forward into the 21st century, but it cannot be considered a religion or be undertaken with blind obedience. Quality improvement must be considered a science and a process that require personal and organizational commitment, continuous critical thinking, and a willingness to create change to meet the needs of patients, families, and other customers.

Improving Quality and Performance: Concepts, Programs and Techniques is a book rich with insight and examples. Section I addresses the building blocks of improving quality in organizations. Chapters describe QI concepts, programs, techniques, and roles. They blend theory, literature, and practical experience, and can serve as an ongoing reference for clinical settings.

Section II provides examples of quality improvement activities carried out in health care settings. These chapters reflect hospital-based activities, because hospitals generally have been the first settings of care delivery to adopt QI approaches. As you will see, however, the experiences can be applied to other health care settings. The chapters reflect organizations at various stages in QI implementation, from those that began a total QI commitment several years ago, to those that have made early steps into the

process. Readers will be able to relate to the examples, irrespective of the current state of their own agency.

The examples provided share important lessons about the impact of QI on professionals, organizations, and patients. Authors have graciously shared both their successes and failures in early QI efforts. They show that there is much to learn from industrial examples, but the unique features of health care settings must always be acknowledged. They reinforce the message that QI is not a “magic bullet” and that it requires constant support and nurturing in order to flourish. These authors and organizations are leaders and trailblazers, and we owe them a debt for helping us to learn from their experience.

Quality improvement is an exciting opportunity in health care today, one that I believe will be energizing and supportive to nurses in particular. It is a science based on getting to know the *customer* (patients and families), constant attention to better meeting the customer’s needs, careful analysis of processes of care and service, empowerment of front-line providers, and collaboration with others. These are all issues that nurses have long sought to achieve. The time has come to create organizationwide approaches to move forward in synchrony. Through strategic efforts and the sharing of our lessons, perhaps the best is yet to be.

ACKNOWLEDGMENTS

Whenever a project requires a prolonged and coordinated effort to complete, there are always those whose participation and support must be acknowledged.

First, and foremost, my thanks to contributing authors, who were generous in sharing their work, but also courageous in their willingness to put forward early experiences and allow others to learn from their examples.

Sincere thanks also goes to Darlene Como, an exceptional woman, friend, and editor, who has taught me much over our 12 years of collaboration; Jackie Katz and Jay

Katz, treasured colleagues and friends, who have catalyzed outstanding efforts to improve health care quality, expanded my horizons, made the world a better place, but, most significantly, enriched my life; Madeline Wake and Judith Fitzgerald Miller, leaders whose wisdom, creativity, and mentoring have always served as a beacon to me; and Rhonda Stockard, Len Parisi, Ellie Green, Nancy Gorham, and Cheryl Anderson, valued colleagues whose ideas never cease to inspire me and whose friendship provides invaluable support.

IMPROVING QUALITY AND PERFORMANCE

Concepts, Programs, and Techniques

CONTENTS

SECTION I Improving Quality and Performance: Concepts and Strategies, 1

- 1 Improving Quality and Performance: The Concepts, 3
Patricia Schroeder
- 2 Improving Quality and Performance: The Programs, 12
Patricia Schroeder
- 3 Improving Quality and Performance: Tools and Techniques, 22
Patricia Schroeder
- 4 Improving Quality and Performance: Implications for the Team Facilitator/Quality Adviser, 47
Toni C. Smith
- 5 Improving Quality and Performance: Implications for Managers, 53
Cathleen Krueger Wilson
- 6 Improving Quality and Performance: Implications for Staff Education and Development, 61
Rita S. Fogel and Elaine L. Smith

SECTION II Improving Quality and Performance: Applications and Examples, 71

- 7 From QA to QI: People, Materials, and Methods Bridge the Transition, 73
Mimi Jenko and Mary E. Geary
- 8 Monitoring Skin Integrity within a CQI Structure, 85
Geri Day, Judy Malinowski, and Beatrice Hessen
- 9 Patient Identification: A Quality Imperative, 95
Rhonda R. Stockard and Barbara Dianda-Martin
- 10 Patient Satisfaction: A CQI Pilot Project, 102
Sharon J. Coulter, P. Mardeen Atkins, Dawn Bailey, Mary Ellen Blatt, Lori Blashford, Sandra Shumway
- 11 Cutting the Blame Rope in the Transfer Tug-of-War: A QI Project Team Approach, 116
Janet E. Yskes, Cheryl Czech, and Pete Knox

- 12 **Incident Reporting within the Framework of CQI:
Data Collection or Finger Pointing?, 130**
Lenard L. Parisi
- 13 **“If Only They Would”: Creating Change Through a
Quality Initiative, 137**
Nancy E. Miller
- 14 **Moving from QA to CQI: Getting Started, 146**
Lisa A. Bonadonna
- 15 **Creating A Quality Corporate Culture through
100 Percent Employee Involvement, 157**
Catherine J. Buck, G. John Pandl, and Jean Walters
- 16 **Total Quality Management in an Academic Teaching
Hospital: Early Experiences, 170**
Jo Marie Walrath
- 17 **Planning and Implementing Total Quality
Management, 181**
Pamela A. Triolo
- 18 **Improving Quality and Performance:
Lessons Learned, 193**
Patricia Schroeder

Glossary, 197

SECTION I IMPROVING QUALITY AND PERFORMANCE

Concepts and Strategies

Section I contains the nuts and bolts for improving quality and performance in health care. It begins with the concepts of quality improvement (QI) and the principles that form the basis of today's continuous quality improvement initiatives. These concepts are then integrated into discussions of programs and models for QI implementation in Chapter 2. While no two models are alike, this chapter describes core components and real-world experiences to plan and effectively implement a QI initiative.

Chapter 3 provides a how-to overview of common QI tools and techniques, and adds

examples to help in their application. Chapters 4, 5, and 6 describe functions and roles that are essential to and are significantly affected by QI and its impact. These chapters address the roles of the team facilitator, manager, and staff developers. The examples add depth and perspective to the discussions.

These building blocks will provide readers with the necessary tools to get started on the never-ending journey. They should be considered not so much as a mandatory step-by-step procedure but rather as a map to guide early efforts.

CHAPTER ONE

IMPROVING QUALITY AND PERFORMANCE: THE CONCEPTS

Patricia Schroeder

Today's approaches to managing and improving quality in health care are moving in a new and positive direction. While strategies in this movement may vary somewhat among applications in different settings, in general, the new efforts in quality improvement can be characterized as organization-wide, collaborative, enthusiastic, and focused on refining processes of care rather than assigning blame to people. Expectations have been redefined. The goal for quality initiatives in many health care organizations has shifted from achieving accreditation to improving care and service. Philosophically, quality has shifted from mandate to opportunity. Many organizations can accurately claim improvements in both effectiveness and efficiency as a result of this new commitment and approach to quality.

Quality improvement has taken health care by storm. Current concepts about quality and how to achieve it, most notably as applied in manufacturing industries, have been the subject of much discussion, literature, education, and debate. The concepts are being addressed by professional associations, consumer groups, payers, regulators, and accreditors, as well as by the providers and organizations themselves. They are considered the key to survival in the 1990s and beyond.

But what exactly is quality improvement (QI), and how does it relate to health care? This chapter will answer that question and will provide perspectives on the fit of QI initiatives in U.S. health care organizations.

UNDERSTANDING THE TERMS

The field of quality assurance always had a language of its own. Terms were complex, subject to change, and frequently redefined within different settings.

QI also carries a complex changing vocabulary. Even the very term *quality improvement* is not consistently used as the primary label for quality-related concepts. Other labels include the following:

- Continuous quality improvement (CQI)
- Total quality management (TQM)
- Total quality systems (TQS)
- Quality systems improvement (QSI)
- Total quality (TQ)

The list could continue. Most confusingly, while some terms dealing with quality do have unique meanings, many people use the terms interchangeably.

This ongoing problem of vocabulary requires all to look carefully beneath the terms and labels themselves, and to clarify the definitions before making assumptions about an author's ideas. For the purpose of this book, *quality improvement* will be used generically as the label for the new approach described by these terms.

A glossary of QI-related terms is provided. Its terms and definitions may vary slightly from those used in other settings. It is unlikely that terms will be universally defined and used consistently any time soon. It is, therefore, most helpful to seek consistent use of terms within one's own organization or setting.

WHAT IS QUALITY IMPROVEMENT?

Quality improvement is the commitment and approach used to continuously improve every process in every part of an organization, with the intent of meeting and exceeding customer expectations and outcomes. It stimulates individuals and teams to look at the way they deliver care and service, to identify the root causes of problems in systems, and then to innovate to make improvements. QI integrates strategic leadership, an empowered workforce, and a data-driven effort to refine one's product and service constantly. It is a long-term approach, established through incremental steps: it is an approach that must be tailored to the setting, service, people, and consumers of an organization.

Some consider QI a management approach. Others see it as an attitude or mindset. All concur that QI goes far beyond a set of techniques or a circumscribed "program," and instead is a way of "being" for organizations. QI is a way of doing business that pervades every aspect of the organization.

Discussions of QI in the United States frequently identify it as a paradigm shift in American organizations (with *paradigm* defined as one's fundamental beliefs about something, the model on which thought and action is based). QI has wrought a significant

| Twelve Paradigm Shifts to World-Class Quality | |
|--|--|
| Former Paradigm | New Paradigm |
| Control management | Commitment management |
| Task-focused | Process- and customer-focused |
| Command decisions | Consensus decisions |
| Individual work | Teamwork |
| Experts and labor | Experts all |
| Control through punishment and fear | Control through positive reinforcement |
| One right way | Continuous improvement |
| Record-keeping | Scorekeeping |
| Tall and rigid structure | Flat and flexible structure |
| Unstated values and vision | Shared values and vision |
| Tough on people | Tough on competition |
| Wealth-exploiting | Wealth-creating |
| Copyright 1991, Miller and Howard, Miller Consulting Group. Reprinted with permission. | |

change in thinking about quality and its pursuit in the workplace generally and in health care specifically. This change is summarized in the “Twelve Paradigm Shifts to World Class Quality” (Miller and Howard, 1991, p. 228), shown in the box above. These shifts describe different approaches to organizational structure, management, work design, and attitudes. They speak to a new organization, one that is refocused on its mission.

It is essential to note, however, that the move to quality improvement is not the first time that health care in general and nursing in particular have identified a need for new approaches. In fact, aspects of these paradigm shifts have been identified over the years in discussions of decentralization, work redesign, shared governance, and general team building. Nurse leaders have long sought to implement many of these changes under other labels or titles.

A crucial aspect of quality improvement, one often cited as a major strength, is its organizational focus. That is, it emphasizes that all facets and members of the organization will move with identified principles, thereby providing a synergy to efforts. This synergy extends beyond the organization because QI also is strongly understood and supported by many external customers of health care, including patients and families, payers, business, and government. External customers may also include health care services, settings, and providers involved before or after the time of health care delivery. The global nature of quality improvement is a strength that may serve to increase the likelihood that the goals of QI can be achieved in organizations.

THE LEADERS AND THEIR CONCEPTS

The concepts of quality improvement have been attributed to work that stems from at least as far back as the 1920s. Shewhart, Deming, Juran, Ishikawa, Feigenbaum, and Crosby are some of the names most commonly acknowledged as forerunners.

The three gurus of quality most frequently cited in the United States today are W. Edwards Deming, Joseph Juran, and Philip Crosby. Fig. 1-1 spells out the major tenets of their work (Cambridge Research Institute Management Consultants, 1992).

Deming, an American engineer and statistician, is perhaps the most well known of the three. His early efforts, in a post-World War II society, launched Japan on its internationally renowned quest for quality (Walton, 1986). Deming’s frequently cited 14 points have been described as “changing the philosophy of the organization, empowering the worker to be more productive, and leadership and teambuilding” (Dieneman, 1992, p. 25). Deming’s principles have been applied in a variety of manufacturing and service settings, and are considered the most commonly used framework for QI efforts.

Juran, also a participant in the Japanese quality transition of the 1940s and 50s, developed a trilogy to guide quality improvement, which includes quality planning, quality control, and quality improvement. He is also attributed with addressing the costs of poor quality, which include wasted efforts, extra expenses, and defects.

Crosby came to international prominence in 1979 with the book *Quality Is Free*. His 14 steps emphasize quality as “conformance to requirements” and prevention systems to assure zero defects.

The approaches proposed by Deming, Juran, and Crosby contain key conceptual differences. Some of these have been summarized by the Cambridge Research Institute Management Consultants (see the box on p. 6). Beyond these distinctions, however, are many more common tenets. All three, as well as the other aforementioned leaders, believe QI to be an unceasing, organization-wide effort that focuses on improving processes of work rather than blaming people for errors. Customers of the service or industry must be identified, and their needs must be met. Teamwork and innovation must guide the organization to greater effectiveness and efficiency.

MAJOR PREMISES OF QUALITY IMPROVEMENT

Certain major premises or concepts underlie quality improvement, irrespective of the model, and will be discussed here. They are focus on organizational mission, continuous improvement, customer orienta-

Deming's 14 Points

1. Create constancy of purpose
2. Adopt the new philosophy
3. Cease dependence on inspection
4. End the practice of awarding business on the basis of price
5. Improve constantly
6. Institute training on the job
7. Institute leadership
8. Drive out fear
9. Break down barriers between departments
10. Eliminate slogans, exhortations
11. Eliminate work standards (quotas). Eliminate management by objectives
12. Remove barriers to employees
13. Institute education
14. Transform everyone's job

Crosby's 14 Steps

1. Management commitment
2. Quality improvement team
3. Quality measurement
4. Cost-of-quality evaluation
5. Quality awareness
6. Correction action
7. Ad hoc committee for zero defects
8. Supervise training
9. Zero defects day
10. Goal setting
11. Error-cause removal
12. Recognition
13. Quality councils
14. Do it over again

Four Quality Absolutes

1. Quality defined as conformance to requirements, not "goodness"
2. The system for causing quality is prevention, not appraisal
3. The performance standard must be zero defects, not "that's close enough"
4. The measurement of quality is the price of nonconformance, not indexes

Juran Trilogy*I. Quality Planning*

1. Determine customers
2. Determine customers' needs
3. Develop products for customers
4. Develop processes to produce products

II. Quality Control

1. Evaluate performance
2. Compare performance to goals
3. Act on differences

III. Quality Improvement

1. Establish infrastructure
2. Identify needs for improvement/projects
3. Establish project teams
4. Provide teams with:
 - Resources
 - Motivation
 - Training

Fig. 1-1 Guru overview. *Modified with permission of Cambridge Research Institute Management Consultants, Cambridge, Mass.*

tion, leadership commitment, empowerment, collaboration/crossing boundaries, focus on processes, and focus on data and statistical thinking.

Focus on Organizational Mission

Quality requires consistent efforts toward achievement of the organization's mission. The mission of any organization is its basic purpose and reason for being. If the mission is to be achieved, it must be:

- Articulated in a mission statement
- Understood by all members of the organization
- Valued
- Visible
- Used consistently to guide all plans, goals and actions

The organization's mission must guide both short- and long-range efforts.

McCabe (1992) suggests that the process of vertical alignment will assist individuals and departments in understanding and working toward the organization's mission. Vertical alignment threads mission-focused goals, plans, and efforts through all organi-

zational levels, from the individual employee to the governing board. Measurable quality goals, linked to the mission, must be identified in job descriptions, performance plans, and department expectations. This alignment of people and efforts will move the organization in a consistent and positive direction. As decentralization proceeds or key processes change, it is the mission that keeps the organization moving in a planned and consistent direction.

Continuous Improvement

Quality improvement (or continuous quality improvement) is grounded in the premise that every plan, every effort, every process, can always be made better. Rather than striving to achieve an arbitrary endpoint or threshold, or attempting to only solve a problem, organizations must make efforts to get better constantly.

Continuous improvement requires deep valuing of the consumer (both internal and external) and a commitment to critical thinking and innovation. It also creates a different organization, replacing the tradi-