

THE EXECUTIVE'S GUIDE TO

CONTROLLING  
HEALTH CARE

AND

DISABILITY  
COSTS

STRATEGY-BASED SOLUTIONS

BRUCE N. BARGE ♦ JOHN G. CARLSON

# THE EXECUTIVE'S GUIDE TO CONTROLLING HEALTH CARE AND DISABILITY COSTS

---

**Strategy-Based Solutions**

**Bruce N. Barge  
John G. Carlson**

JOHN WILEY & SONS, INC.

NEW YORK • CHICHESTER • BRISBANE • TORONTO • SINGAPORE

*To our wives and our children  
for their support*

This text is printed on acid-free paper.

Copyright © 1993 by Bruce N. Barge and John G. Carlson  
Published by John Wiley & Sons, Inc.

All rights reserved. Published simultaneously in Canada.

Reproduction or translation of any part of this work beyond that permitted by Section 107 or 108 of the 1976 United States Copyright Act without the permission of the copyright owner is unlawful. Requests for permission or further information should be addressed to the Permissions Department, John Wiley & Sons, Inc., 605 Third Avenue, New York, NY 10158-0012.

This publication is designed to provide accurate and authoritative information in regard to the subject matter covered. It is sold with the understanding that the publisher is not engaged in rendering legal, accounting, or other professional services. If legal advice or other expert assistance is required, the services of a competent professional person should be sought. *From a Declaration of Principles jointly adopted by a Committee of the American Bar Association and a Committee of Publishers.*

***Library of Congress Cataloging-in-Publication Data***

Barge, Bruce N., 1956-

The executive's guide to controlling health care and disability costs : strategy-based solutions / Bruce N. Barge, John G. Carlson.  
p. cm.

Published simultaneously in Canada.

Includes bibliographical references and index.

ISBN 0-471-58497-5 (alk. paper)

1. Insurance, Disability—United States. 2. Workers' compensation—United States. 3. Insurance, Health—United States. 4. Managed care plans (Medical care)—United States. 5. Industrial hygiene—United States. 6. Industrial safety—United States.

I. Carlson, John G. II. Title.

HD7105.25.U6B37 1993

658.3'82—dc20

93-14655

Printed in the United States of America

10 9 8 7 6 5 4 3 2 1

“Not only have Barge and Carlson done something that badly needed to be done, but they have done it with great thoroughness. So there is now detailed guidance for anyone who wishes to follow their lead—controlling health care costs based on modern ideas of quality management.”

*Harry V. Roberts*  
Sigmund E. Edelstone Professor of  
Statistics and Quality  
Graduate School of Business, University  
of Chicago

“Management of their own employee health plan ranks among the most significant challenges facing the 1990s executive. The authors explain managed care and outline all the critical associated issues in an uncommonly insightful, nonjargonistic manner. The chapter on the new importance of health care information systems is essential reading.”

*Brian S. Gould, MD*  
Senior Vice President  
United Health Care Corporation

“*The Executive’s Guide to Controlling Health Care and Disability Costs* speaks compellingly about a major national problem in a language that corporate executives and public policymakers will understand. It offers linkage between the total quality philosophies, systems thinking and improvements in employee health.”

*Joseph F. Kasper, ScD, MBA*  
President, Foundation for Informed  
Medical Decision Making

“Business executives can no longer blame the health and disability cost issue solely on external factors. Just as organizations have improved quality by concentrating on their own management practices, Barge and Carlson clearly present the opportunity to control these costs through active management efforts.”

*John M. Burns, MD*  
Vice President, Health Management  
Honeywell, Inc.

“Integrated care delivery systems as part of health care reform require a connection with the consumer. Barge and Carlson’s systematic approach to proactive employer/employee management of health and disability is the breakthrough needed for creating true health systems in partnership with providers.”

*Stephen J. Hegarty*  
President  
Massachusetts Hospital Association

“Read this book! It represents a synthesis; bringing together issues that have been apart for too long. The approach employed is a new paradigm—the one needed for creating lasting solutions.”

*Leland Kaiser*  
Kaiser & Associates  
Health Care Futurist

“This book is an action plan for competitive advantage. It defines the next generation of activity for TQM-driven organizations, shaping the potential for a wide range of higher value-added transactions between buyers of health care services and the professional and institutional providers.”

*David R. Ott*  
Vice President—Ambulatory Care  
Mt. Sinai Medical Center, New York

“*The Executive’s Guide to Controlling Health Care and Disability Costs* applies systems thinking to probably the two most difficult business challenges—health care and workers’ compensation. A quantum leap forward for those executives seeking employer-driven solutions to health care and disability costs.”

*Ray C. Mulry, PhD*  
Consultant, CEO of American Network  
Services

“This book makes health and its improvement everybody’s business for business. By unifying language in a systems framework, it provides a sound approach for organizations and their employees to improve both cost and quality for their mutual benefit and health.”

*Robert W. Hungate*  
Principal—Physician Patient Partnerships for  
Health  
Former Manager Government Affairs/  
Health Care—Hewlett Packard Co.

“This book’s approach is unique because it is both definitive and systematic. The management tools presented allow for continuous improvement in health outcomes without major new investment; ideal for a public agency. Most importantly, measurable results can be achieved within a structure that integrates a large body of data.”

*Jeffrey W. Ritter*  
Commissioner, Medical Security  
Commonwealth of Massachusetts

“Important and sophisticated, an invaluable guide for executives, managers, and policy analysts. This book shifts the paradigm from short-term cost containment to maximizing value and return on investment, providing a comprehensive guide for organizations who wish to achieve the next generation of health and disability excellence.”

*Donald E. Galvin, PhD*  
Director, Institute for Rehabilitation  
and Disability Management  
Washington Business Group on Health

# About the Authors

BRUCE N. BARGE is an organizational psychologist specializing in health and disability risk management and quality improvement. He has published numerous articles and papers and is a frequent speaker on topics linking organizational management, quality improvement, and risk management. Currently, he is an internal quality improvement consultant for St. Paul Fire & Marine Insurance Company, as well as the company's Director of Human Factors Loss Control, a policyholder risk consulting service.\*

Mr. Barge has extensive practical experience working with employers to develop and implement management strategies to reduce health and disability costs. He has consulted with a wide range of companies and industries and has provided training and implementation assistance to executives, managers, and employees. He is a member of several health and management-related professional associations, a reviewer for several health and business journals and publications, and holds a Ph.D. in industrial/organizational psychology from the University of Minnesota.

JOHN G. CARLSON is president of RHM Systems, Inc., Marlboro, MA, a management consulting, information services, and training organization addressing organizational cost and productivity issues related to health and disability. He developed the company's systems technology over the prior two years. He has published numerous articles and has spoken at conferences and seminars on application of a systems approach and Total Quality Management principles to health, health care, and disability.

Mr. Carlson has a diverse management background with experience in finance, operations, and general management. He has held senior management positions in the electronics and health care industries, principally with General Instrument Corporation and Learning Services Corporation. His management roles have included vice president, finance and controller of a worldwide operating division, chief financial officer of two developing organizations, and president of a national multilocation organization. These

\* Mr. Barge co-authored this book on his own time, outside of employment with St. Paul Fire & Marine Insurance Company; the ideas and positions in the book are independent of St. Paul Fire & Marine's positions and policy.

environments have included small and large companies, both domestic and international.

Mr. Carlson graduated from Bucknell University with a degree in political science and received his M.B.A. in finance from the University of Chicago. While involved in a career in management, he developed an interest in writing, contributing to various regional and national publications. An area of personal concern is disability, particularly brain injury. Mr. Carlson has contributed his management insights to survivor and family issues through public speaking and articles written for advocacy groups.

# Preface

Organizations have been struggling with the costs of health care and workers' compensation for at least the past 10 years. Despite repeated attempts at cost containment most organizations have continued to experience double digit annual cost increases. This situation places employers at odds with their employees because health care and workers' compensation are seen as a zero-sum game in which one or both parties must lose.

This book was written because our practical experience convinced us that lasting cost solutions can be obtained without sacrificing human values. Leading organizations of all sizes and in all industries have demonstrated such solutions. These organizations maximize their leverage by focusing—not outward on physicians, attorneys, and legislatures—but rather inward on management practices under their direct control. Apart from having well designed and effectively managed programs, employers need to involve employees in being part of the solution. Executives, line managers, and employees can now take ownership and become more personally involved. Senior managers can also extend the successes achieved by leading organizations into broader strategy-based solutions, thereby integrating internal and external management and controlling a previously uncontrollable segment of their cost structure.

Our combined experience has included management and consultative assignments in the employer, provider, and insurer/third party worlds. These experiences have crossed industries and have been at line and staff levels, including senior management. A common thread has been the significant ability of organizations to influence health and disability results. When management focuses directly on health and disability, employers find they can exert considerable leverage over health care and workers' compensation costs within their own operations. Organizations adopting a systems view of health and disability, with supporting comprehensive measurement, can proactively address a wide range of issues affecting costs and ultimately organizational quality.

Health and disability is a business issue. Management strategies and practices applied with success in other parts of the business can and should be transferred to this critical area. This book forms a bridge between the interests of employer line and financial management and the interests of internal and external specialists involved in risk, health, safety, and disability. Solutions from many disciplines are integrated into a coherent, practical,



and focused approach for managing health and disability costs. The management mechanisms applied include:

- Systems thinking to interconnect organizational approaches and strategies.
- Quality management strategies and techniques, including continuous improvement, re-engineering, and empowerment.
- Proactive risk management.
- Management of organizational culture to integrate employer programs and performance.
- Financial management strategies and techniques including activity-based costing, return on investment, and portfolio concepts.

Controlling and reducing costs will be most successful when these mechanisms are employed as part of a total systems framework. Organizations can consider a wide range of situations and potential results and then tailor their internal and external management to best meet these cost exposures and employee needs. This is the essence of leverage—focus and flexibility combined with maximum return in terms of both cost and quality. Cost uncertainty and litigation exposure will be similarly reduced.

Employers tailoring and applying these approaches to their situation will significantly lower the direct costs for health care and workers' compensation as well as the indirect and hidden health and disability costs in operations. These include the costs of poor health in reduced productivity and quality, costs of replacement and temporary workers, and administrative and management costs that add little value to the organization. Improving the effectiveness of health and disability management is therefore an important contributor to organizational competitiveness.

This book is organized as follows: Chapter 1 frames the opportunity for employers and should be read by all. Part One (Chapters 2–7) presents executives and the management team with an integrated, strategy-based, management system to address costs comprehensively while managing organizational issues. Utilizing limited, but highly focused information in a systematic manner is the key to such management. The Overview of Part One, “Optimizing Managed Care,” provides essential background for understanding the interrelationship of the six chapters.

Part Two presents concrete examples and practical guidance for reducing costs through functional and operational management of health and disability. The overview, “Managing Organizational Culture,” identifies the operational framework underlying Chapters 8 through 13. Chapter 14, the conclusion, further develops the systems and culture framework employed throughout this book, with an emphasis on continuous learning as well as continuous improvement. Some readers may choose to read Chapter 14 after Chapter 1 to get a broad view before reading the remaining chapters.

Strategy, systems, and culture are the essence of this book, but what positions the strategy-based solutions so differently is the emphasis on management action. This proactive approach identifies the risk in *not* taking action, rather than in committing to an involved and focused effort. These actions must also maximize return on investment rather than cost containment alone. The book describes prescriptive solutions throughout for deriving the benefit of this management action.

Those organizations managing for health can have it all—lower health care, workers' compensation, and disability costs; lower indirect and hidden health and disability costs; improved health-related productivity and quality levels; the best employment profile; and employees motivated to strive for excellence in personal and organizational goals. This is the competitive advantage inherent in strategy-based solutions. Managing for health can build national health care and regional workers' compensation success, one employee and one employer at a time simultaneously throughout our nation.

## Acknowledgments

One of the benefits of writing this book is the feeling of contributing to people, organizations, and a country that have contributed much to us. We would like to thank and acknowledge the executives, managers, and employees in organizations with whom we have worked as fellow employees and as consultants. In particular, we wish to recognize the many dedicated professionals in health, health care, risk management, disability, and safety who have generously shared their ideas and insights in publications, conferences, and conversations over the years.

Bruce Barge would like to acknowledge teachers, mentors, and peers—Mike Billings, John Campbell, Marv Dunnette, Tom Gag, John Kamp, the Michigan Workers' Compensation Advisory Panel, Shelly Wolff, and co-workers at St. Paul Companies and Personnel Decisions Research Institute—who provided insight and opportunity for learning the organizational dynamics affecting health and disability management. Their support of training, management, and consulting experiences helped crystalize the role of an organization's strategy and culture in determining its health and disability performance. Bruce would also like to thank his parents and family and friends for their support, especially that of Carol, Rachel, and Matthew, for their understanding and love.

John Carlson would like to acknowledge the insight into management gained during his career at General Instrument Corporation. Hands-on experience in Total Quality Management was an important early developmental milestone. Much learning about organizational strategy and management systems was gained from a number of senior managers, some of whom acted in mentoring roles. Integration of such business strategies and management practices to health and disability was benefitted by the knowledge

gained from managing staff and organizations, from interacting with health care and disability professionals and, most importantly, from listening to the interests and concerns of survivors of brain injury and their families. John would especially like to thank his wife, Nuala, and his children, Sean and Tara, in supporting his total commitment to writing this book.

We would like to thank Nancy Marcus Land and Charlotte Saikia of Publications Development Company of Texas for their enthusiasm, skill, and professionalism during the production of the book. Special thanks to John Mahaney, our editor at John Wiley & Sons, for supporting our vision of the book and helping bring it to fruition.

We hope this book will extend the knowledge and insight of the many with whom we have been associated into a broader organizational context. When employed in this more integrated way, the management of health, health care, and disability can benefit employers and employees alike. Moreover, America can bring a new financial and human impetus to improving its global competitiveness by truly solving our nation's health care and workers' compensation crises.

# Contents

1. Employer Control over Health and Disability Costs 1

## **PART ONE**

### **Optimizing Managed Care: Linkage with Health and Productivity**

2. Integrating Risk Management into a Health and Disability Strategy 33
3. Developing a Quality-Based Health System: Employer-Directed Management 51
4. Managing Health: An Intervention Approach 71
5. Managing Care: A Systematic Approach to Obtaining Value 95
6. Managing Productivity: Integrating Workplace Health and Disability 119
7. Operationalizing Strategy-Based Management through Information: Control, Performance, Investment 145

## **PART TWO**

### **Managing Organizational Culture**

8. Addressing High-Risk Behavior 177
9. Supervision for the New Health Issues 197
10. An Integrated Approach to Employee Wellness 216
11. Fighting the War on Substance Abuse 244
12. Managing Stress and Employee Mental Health 267
13. Innovative Strategies for Workplace Safety 290

## **Conclusion**

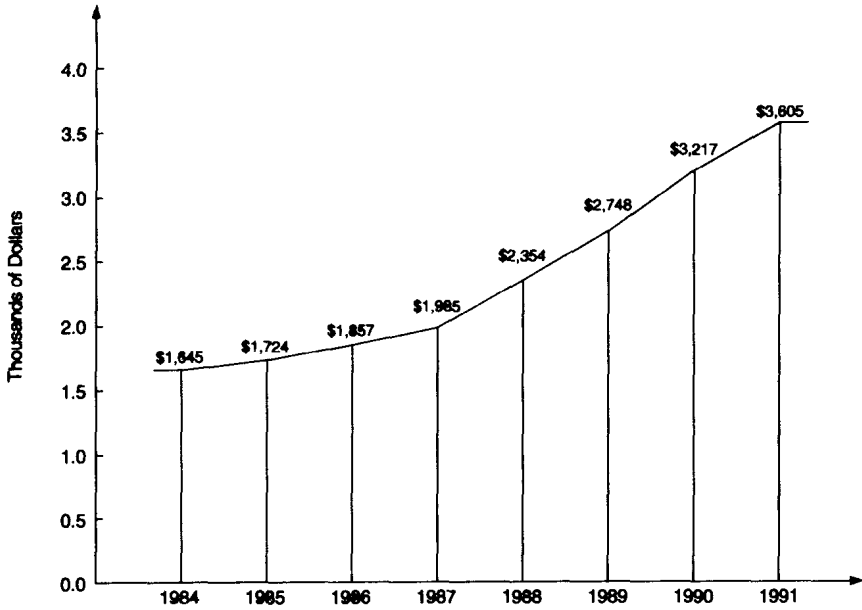
14. Conclusion: Achieving the Full Promise of Strategy-Based Solutions 311
- Index 335

## Employer Control over Health and Disability Costs

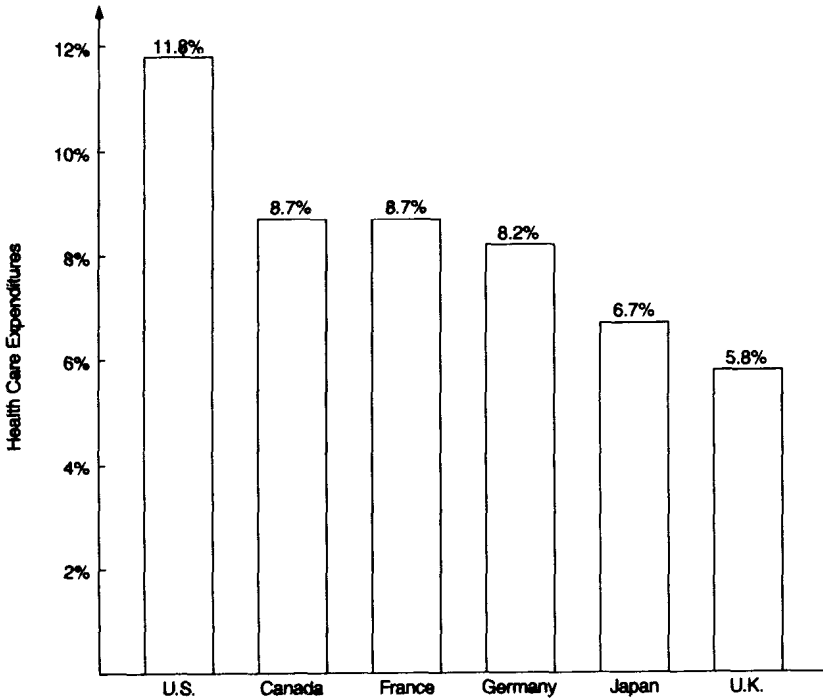
Right now, from twenty-five cents to fifty cents of every dollar of net profit earned by American corporations pays for employee health, workers' compensation and disability costs. Health care costs alone accounted for 26 percent of corporate net earnings in 1989 and rose to 45 percent in 1990, against the backdrop of the recession.<sup>1</sup> These costs have increased so much faster than inflation over the past decade that they have become a key issue in both global competitiveness and national social policy.

Figures 1.1 and 1.2 show how dramatically the rate of increase has affected U.S. competitiveness. Double-digit annual increases have pushed employee health care costs more than twice as high in 1991 as in 1984. As a result, health care costs in the United States represent a far more significant percentage of gross national product than they do in any other major industrialized country.<sup>2</sup> A Congressional Budget office study projects that health care costs will double again by the year 2000, to an estimated \$1.68 trillion and approximately 18 percent of gross domestic product.<sup>3</sup>

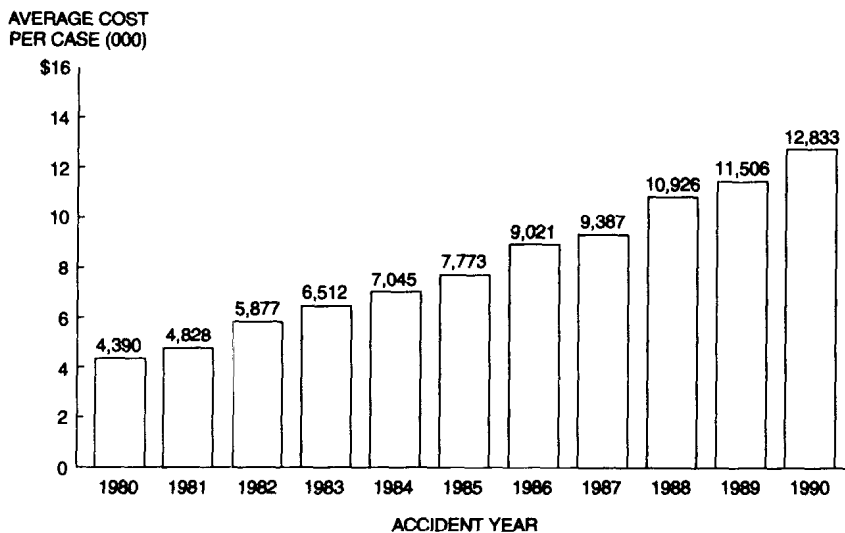
These rapid increases have not been limited only to health care costs. As shown in Figures 1.3 and 1.4, workers' compensation costs have followed a similar meteoric rise in both the average medical cost and average indemnity (wage replacement) cost per case. Workers' compensation cost the average employer about 0.5 percent of payroll in the 1950s, 1 percent by 1975, 2 percent by 1988, and an estimated 3 percent in 1993.<sup>4</sup> Countrywide costs for workers' compensation are currently about \$60 billion annually and could reach \$150 billion by the year 2000 if current trends persist.<sup>5</sup>



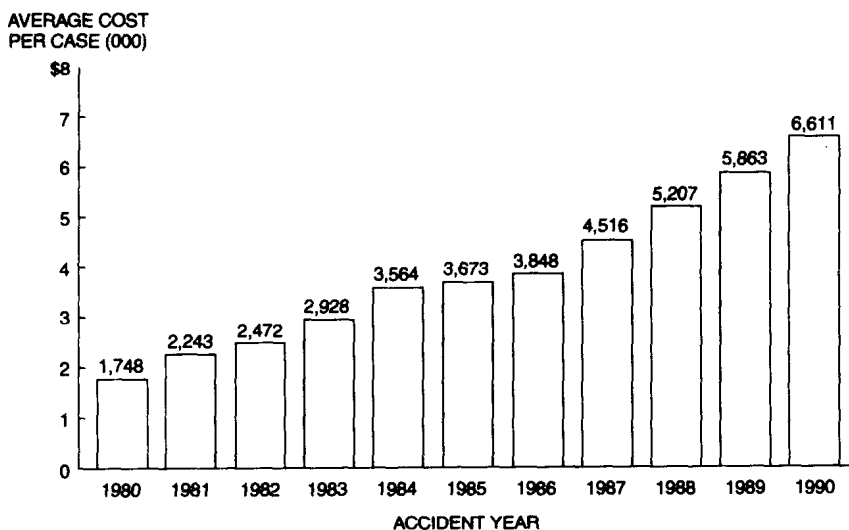
**Figure 1.1** Average Annual Health Care Cost per Employee, 1984–1991  
 (Source: Foster Higgins. Used with permission.)



**Figure 1.2** American Health Care Costs Compared to Other Industrialized Countries



**Figure 1.3** Average Workers' Compensation Cost per Case (Indemnity Cost) (Copyright 1993 National Council on Compensation Insurance, Boca Raton, Florida. All rights reserved. Reprinted with permission.)



**Figure 1.4** Average Workers' Compensation Cost per Case (Medical Cost) (Copyright 1993 National Council on Compensation Insurance, Boca Raton, Florida. All rights reserved. Reprinted with permission.)

Finally, this pattern has also been repeated for short- and long-term disability costs. Costs for long-term disability increased nearly 80 percent from 1980 to 1988, while short-term disability benefits increased 50 percent during this period. The number of American adults drawing disability payments has increased from 4.1 million in 1962 to over 10 million in 1989. Direct costs to American business exceed \$10 billion annually.<sup>6</sup>

Health and disability costs—including costs for health care, workers' compensation, and short and long-term disability—have increased so rapidly that they are now one of the nation's most significant economic problems. American organizations' ability to survive and compete require an increased ability to significantly reduce these costs.

### The Parallel to Quality

Whereas the explosion of health and disability costs has been getting most of the attention, an equally interesting aspect of the current situation is its resemblance to the state of American manufacturing 10 years ago. As with health and disability costs today, the inferior quality of U.S. products had become a problem that could no longer be ignored. Motorola, for example, found that its manufacturing defect rate was up to 100 times greater than for comparable Japanese products. Xerox found that Japanese competitors were able to sell copiers retail for less money than Xerox's manufacturing cost.

American manufacturers at that time frequently blamed their problems on external groups or macrolevel causes such as unfair foreign trading practices or the incompetence of American workers. In health and disability today, the blame is often directed toward greedy doctors and lawyers or the inefficiency of payment and delivery systems. The manufacturers were no doubt right in some of their criticisms of the competitive environment 10 years ago, just as criticisms of the health and disability system today are also justified. Nevertheless, the quality of American-made products improved only when manufacturers concentrated on their own management practices.

Industry executives, by focusing on the areas over which they had control, discovered major opportunities for improvement. In analyzing their business processes more carefully, they found many operations they had not fully understood or managed effectively. American managers began to realize they had significantly more leverage over product quality and related costs than they had previously believed.

The payoff was significant for the firms that chose to control their own destiny in this way. Motorola reduced its defect rate 100-fold in just four years, with an estimated savings of \$1.5 billion during that period. Xerox went from rapid loss of market share to the actual winning back of markets from foreign competitors. Although not all firms have been equally successful, hundreds, perhaps thousands, of companies achieved significant results through greater management efforts to improve quality. One study showed that firms implementing effective quality improvement initiatives have



experienced a net advantage of 8 percent gain in market share, 9 percent gain in sales, and 11 percent gain in return on sales compared with firms not taking such actions.<sup>7</sup>

Like manufacturers 10 years ago, employers today possess considerably more leverage over health and disability costs than they typically use. Quality improvement, however, is just *one of several management solutions* that can be applied to these costs. Executives and managers are also increasingly aware that waiting for the perfect legislative solution to the health and disability problem is not a viable alternative. To control—even reduce—health and disability costs, organizations must begin to manage their own destiny by carefully studying the root causes of the costs; enlisting the cooperation of line managers, employees, dependents, and third-party managers; and finally, *integrating management solutions* so all parties work in concert.

The world of manufacturing has been changed forever through innovation, technology, and the demands of the marketplace as well as the work force. Some companies, by recognizing these changes and adapting their management practices, have dramatically improved their performance. Similarly, the world of employee health and disability is fundamentally different today from in the past, and it too requires new thinking and revised management approaches. Organizations that identify and capitalize on these changes will likewise gain a significant competitive advantage.

### Evidence That It Can Be Done

Throughout the United States, many organizations—from both the private and public sectors, and from large, medium, and small organizations—are successfully controlling their health and disability costs. For all these organizations, the savings have been significant, producing results noticeably better than the national average. Some organizations actually have held costs flat over a period of years and even have reduced certain costs significantly. These organizations demonstrate that managers can regain control over an area that too often is considered uncontrollable.

Table 1.1 describes 10 employers that have successfully controlled health and disability costs while using varying approaches based on their size, goals, and situation. The common thread, however, is an active management effort to tackle the root causes of cost. These 10 organizations are representative of hundreds of firms that are using a wide variety of strategic and management approaches to control health and disability costs. The snapshot summary in Table 1.1 merely introduces the richness of these organizations' efforts and the resulting opportunities for curbing runaway costs. Still, the table does suggest four key conclusions:

1. Health and disability costs can be significantly reduced and controlled.
2. This opportunity exists in organizations of all types and sizes.
3. Many different approaches can be of value in reducing these costs.
4. All successful programs have active management support.