

# BRIEF CONTENTS

*Foreword*..... xiii

*Maureen Bisognano*

*Preface* .....xv

*Maulik S. Joshi, Scott B. Ransom,  
Elizabeth R. Ransom, and David B. Nash*

## **Part I Introduction**

*Zach Goldberg and David Nash*

**Chapter 1.** Overview of Healthcare Quality..... 5

*Maulik S. Joshi and Marianthi Hatzigeorgiou*

**Chapter 2.** Quality Improvement Models and  
Frameworks for Excellence ..... 33

*Cathy E. Duquette*

**Chapter 3.** Variation in Medical Practice and  
Implications for Quality..... 65

*Briget da Graca, David Nicewander,  
Brett D. Stauffer, and David J. Ballard*

**Chapter 4.** Statistical Tools for Quality Improvement..... 95

*Davis Balestracci*

## **Part II Essential Quality Topics**

*Elizabeth R. Ransom*

**Chapter 5.** Safety Science and High Reliability Organizing..... 145

*Craig Clapper and Tami Strong*

**Chapter 6.** Health Equity and Diversity ..... 179

*Deneen Richmond*

<b>Chapter 7.</b>	Population Health .....	205
	<i>Deneen Richmond</i>	
<b>Chapter 8.</b>	Quality Measurement: Measuring What Matters .....	223
	<i>Thomas H. Lee and Deirdre E. Mylod</i>	
<b>Chapter 9.</b>	Value-Based Purchasing.....	241
	<i>Lucy Liu, Rachel Zeldin, Julia Goldner, and Scott B. Ransom</i>	
<b>Part III Leading Quality</b>		
	<i>Scott B. Ransom</i>	
<b>Chapter 10.</b>	Health System Transformation .....	275
	<i>Dan Shellenbarger, Bryce Bach, Hector Nelson, and Scott B. Ransom</i>	
<b>Chapter 11.</b>	Quality and Leadership: Utilizing Measures to Create Alignment.....	309
	<i>Michael D. Pugh</i>	
<b>Chapter 12.</b>	Governance for Quality .....	345
	<i>Kathryn C. Peisert</i>	
<b>Chapter 13.</b>	The Digitization of Healthcare .....	375
	<i>Saad Chaudhry</i>	
<b>Chapter 14.</b>	Putting It All Together: Three Quality Improvement Case Studies .....	397
	<i>Edited by Kedar Mate and Dan Schummers</i>	
<i>Index</i> .....		419
<i>About the Editors</i> .....		421
<i>About the Contributors</i> .....		425

# DETAILED CONTENTS

<i>Foreword</i> .....	xiii
<i>Maureen Bisognano</i>	
<i>Preface</i> .....	xv
<i>Maulik S. Joshi, Scott B. Ransom,</i>	
<i>Elizabeth R. Ransom, and David B. Nash</i>	

## Part I Introduction

*Zach Goldberg and David Nash*

<b>Chapter 1.</b> Overview of Healthcare Quality.....	5
<i>Maulik S. Joshi and Marianthi Hatzigeorgiou</i>	
The Focus on Quality.....	5
Frameworks, Models, and Measurement .....	10
Quality Improvement Models.....	13
Measurement .....	14
Quality Improvement Tools.....	17
Conclusion.....	18
Case Study: Mr. Roberts and the US Healthcare System .....	18
Case Study: Stopping Catheter-Related Bloodstream Line Infections at Johns Hopkins University Medical Center and Hospitals Across the United States.....	23
Study Questions .....	28
References.....	28
<b>Chapter 2.</b> Quality Improvement Models and Frameworks for Excellence .....	33
<i>Cathy E. Duquette</i>	
Quality Improvement Models.....	33
Frameworks for Excellence .....	40
Quality Improvement Tools.....	44
Conclusion.....	56

	Case Study: Using Lean Tools to Identify and Eliminate Waste .....	57
	Study Questions .....	62
	References.....	62
<b>Chapter 3.</b>	Variation in Medical Practice and Implications for Quality .....	65
	<i>Briget da Graca, David Nicewander, Brett D. Stauffer, and David J. Ballard</i>	
	Variation in Medical Practice .....	67
	Analyzing Variation .....	72
	Using Variation Data to Drive Healthcare Quality Initiatives .....	77
	Case Study: Baylor Scott & White Health .....	82
	Case Study: Opioid Prescribing in the Anne Arundel Health System .....	83
	Conclusion.....	87
	Study Questions .....	88
	References.....	88
<b>Chapter 4.</b>	Statistical Tools for Quality Improvement.....	95
	<i>Davis Balestracci</i>	
	Introduction .....	95
	Process-Oriented Thinking: The Context for Improvement Statistics.....	96
	Variation: The Framework of This Chapter .....	98
	Plotting Data over Time: The Run Chart .....	100
	Common Causes Versus Special Causes of Variation.....	102
	The Control Chart: A Very Powerful Tool.....	107
	Analysis: The I-Chart Is Your “Swiss Army Knife” .....	115
	An Important Expansion of the Concepts of “Perfectly Designed,” Common Cause, and Special Cause .....	118
	Summary .....	130
	Study Questions .....	132
	References.....	132
	Additional Resources.....	133

## Part II Essential Quality Topics

*Elizabeth R. Ransom*

This is an unedited proof.

Copying and distribution of this PDF is prohibited without written permission. For permission, please contact Copyright Clearance Center at [www.copyright.com](http://www.copyright.com).

<b>Chapter 5.</b>	Safety Science and High Reliability Organizing.....	145
	<i>Craig Clapper and Tami Strong</i>	
	Safety and Reliability .....	145
	History of the Modern Safety Movement .....	148
	Reliability as an Emergent Property .....	153
	Descriptive Theories of High Reliability	
	Organizations .....	155
	Why Should We Care? .....	158
	Creating Safety and High Reliability in Practice .....	160
	Case Study: A Journey to High Reliability .....	166
	Important Topics in Safety and High Reliability.....	167
	Sustaining Cultures of Safety and High Reliability .....	172
	Summary .....	173
	Study Questions .....	175
	References.....	175
<b>Chapter 6.</b>	Health Equity and Diversity .....	179
	<i>Deneen Richmond</i>	
	Introduction .....	179
	Health Equity and Health Disparities Defined .....	179
	The Impact of Racism and Discrimination .....	180
	Conscious and Unconscious Bias .....	181
	Equality Versus Equity.....	182
	A Look at the Data: The Persistent State of Health	
	Disparities.....	183
	Data on Disparities at the National, Local, and	
	State Levels.....	184
	The Urgency to Achieve Health Equity .....	187
	Workforce Diversity .....	189
	Taking Action .....	192
	Case Study: Reducing COVID-19 Vaccination	
	Disparities.....	196
	Case Study: Luminis Health’s Approach to	
	Achieving Health Equity.....	197
	Conclusion.....	199
	Study Questions .....	200
	References.....	200
<b>Chapter 7.</b>	Population Health.....	205
	<i>Deneen Richmond</i>	
	Population Health Defined.....	205

	Factors Influencing the Health of a Population .....	206
	The Health of Our Communities .....	208
	Improving the Health of Our Communities.....	210
	Defining the Population of Focus .....	211
	A Framework for Healthcare Organizations to Drive a Population Health Focus .....	212
	Measuring Social Determinants of Health.....	214
	Case Study: A COVID-19 Community Prevention Program.....	218
	Conclusion.....	219
	Study Questions .....	220
	References.....	220
<b>Chapter 8.</b>	Quality Measurement: Measuring What Matters .....	223
	<i>Thomas H. Lee and Deirdre E. Mylod</i>	
	Introduction .....	223
	Safe .....	224
	Timely .....	226
	Effective.....	227
	Efficient .....	229
	Equitable .....	230
	Patient Centered .....	231
	Creating a Data Strategy for Quality Metrics: The Foundation.....	235
	Data Integration.....	235
	Deep Diagnosis of Barriers and Opportunities .....	236
	Who Needs What Data? .....	237
	Conclusion.....	237
	Study Questions.....	238
	References.....	238
<b>Chapter 9.</b>	Value-based Purchasing .....	241
	<i>Lucy Liu, Rachel Zeldin, Julia Goldner, and Scott B. Ransom</i>	
	Introduction .....	241
	Overview of Value-Based Financial Models .....	244
	The Evolution of Value-Based Purchasing .....	250
	Strategies and Capabilities to Succeed in Value.....	260
	Key Learnings in the Evolution Toward Value-Based Care.....	264
	Conclusion.....	268

Study Questions .....	269
References .....	269

### Part III Leading Quality

*Scott B. Ransom*

<b>Chapter 10.</b> Health System Transformation .....	275
<i>Dan Shellenbarger, Bryce Bach, Hector Nelson, and Scott B. Ransom</i>	
A Foundation for Realizing Transformational GoalsKotter's Eight-Step Change Process .....	277
Kotter's Eight-Step Change Process .....	278
An Unconventional Leadership Approach to Transformation .....	287
Reduce Cost While Improving Patient Quality.....	292
Transforming Quality and the Consumer ExperienceActive Implementation Strategies .....	299
Active Implementation Strategies.....	300
Making Change Stick: Workforce Culture and Behaviors .....	303
Conclusion.....	306
Study Questions .....	306
References.....	307
<b>Chapter 11.</b> Quality and Leadership: Utilizing Measures to Create Alignment .....	309
<i>Michael D. Pugh</i>	
Introduction .....	309
Quality Measures and Metrics.....	309
Quality Assurance, Quality Control, and Quality Improvement.....	313
Leadership, Measurement, and Improvement .....	317
Case Study: Governance of Quality.....	334
Conclusion.....	340
Notes .....	341
Study Questions .....	342
References.....	342
<b>Chapter 12.</b> Governance for Quality .....	345
<i>Kathryn C. Peisert</i>	
Background: Why Is Quality the Board's Responsibility? .....	345

This is an unedited proof.

Copying and distribution of this PDF is prohibited without written permission.  
For permission, please contact Copyright Clearance Center at [www.copyright.com](http://www.copyright.com).

	What Are the Board's Quality Oversight Duties?.....	357
	The Board-Level Quality Committee.....	368
	Building a Culture of Quality and Safety.....	369
	Conclusion.....	371
	Notes.....	372
	Study Questions.....	372
	References.....	372
<b>Chapter 13.</b>	The Digitization of Healthcare.....	375
	<i>Saad Chaudhry</i>	
	Introduction.....	375
	Technology.....	375
	The Digital Scope.....	388
	Case Study: Digital Transformation.....	392
	Study Questions.....	396
	References.....	396
<b>Chapter 14.</b>	Putting It All Together: Three Quality Improvement	
	Case Studies.....	397
	<i>Edited by Kedar Mate and Dan Schummers</i>	
	Introduction.....	397
	Case Study 1: Value Management at Lenox Hill	
	Hospital of Northwell Health.....	397
	Case Study 2: Implementation of an Age-Friendly	
	Health System at the VA Boston Healthcare	
	System Geriatrics Clinic.....	406
	Case Study 3: Reducing Cesarean Section Rates	
	in Brazilian Hospitals.....	411
	Putting It All Together.....	415
	Study Questions.....	415
	References.....	416
	<i>Index</i> .....	419
	<i>About the Editors</i> .....	421
	<i>About the Contributors</i> .....	425