

# Contents

List of Contributors, xv

Introduction, xvii

1. Cost-Effectiveness Analysis as a Guide to Resource Allocation in Health:  
Roles and Limitations, 3

*What Is the Appropriate Perspective?* 5

*Defining Outcomes and Costs from the Societal Perspective*, 7

*CEA as an Aid to Decision Making*, 9

*Other Methods for Making Decisions in Health*, 12

*Results of CEA and Other Methods Compared*, 13

*Current and Potential Uses of CEA*, 18

*Conclusion*, 21

*Recommendations*, 21

2. Theoretical Foundations of Cost-Effectiveness Analysis, 25

*What is Cost-Effectiveness Analysis?* 26

*Theoretical Foundations for Valuing Individual and Social Well-Being*, 29

*Theoretical Foundations for Valuing Costs in CEA*, 36

*Applications of Theory to Methodologic Controversies*, 37

*Conclusion*, 50

3. Framing and Designing the Cost-Effectiveness Analysis, 54

*Framing the Study*, 54

*Designing the Study*, 68

*Conclusion*, 79

*Recommendations*, 79

4. Identifying and Valuing Outcomes, 82

*The Outcomes of Interest in Cost-Effectiveness Analysis*, 83

*Combining Duration of Life with Health-Related Quality of Life*, 89

*Health Status Measures*, 94

- Why Value Health Outcomes?* 96
- Whose Preferences Should Be Used in CEA?* 98
- Preference Classification Systems*, 106
- Techniques for Valuing Health States*, 110
- Toward Consistency Across Studies: A National Catalogue of Weights*, 119
- Recommendations*, 122
- Appendix 4.1: Generic Preference-Based Measures for Use in CEA*, 124
- 5. Assessing the Effectiveness of Health Interventions, 135
  - Definitions*, 137
  - Sources of Data for Probability Estimates*, 141
  - Modeling to Estimate Effectiveness in a CEA*, 151
  - Calculation of Net Effectiveness*, 163
  - Conclusion*, 167
  - Recommendations*, 168
- 6. Estimating Costs in Cost-Effectiveness Analysis, 176
  - A Graphic Illustration of Economic Consequences*, 176
  - Types of Resource Costs*, 178
  - Measurement and Valuation of Resources in Gross-Costing*, 203
  - Conclusion*, 208
  - Recommendations*, 209
- 7. Time Preference, 214
  - Discounting Costs*, 216
  - Discounting Health Consequences*, 219
  - Choosing the Discount Rate for CEA*, 230
  - Recommendations*, 233
  - Appendix 7.1: A Theoretical Model of Intertemporal Decision Making Regarding Health and Other Commodities*, 236
  - Appendix 7.2: A Two-Stage Procedure for Incorporating Individual and Societal Time Preferences*, 238
- 8. Reflecting Uncertainty in Cost-Effectiveness Analysis, 247
  - Parameter Uncertainty*, 248
  - Modeling Uncertainty*, 267
  - Recommendations*, 270
- 9. Reporting Cost-Effectiveness Studies and Results, 276
  - The Journal Report*, 277
  - The Technical Report*, 296

*Disclosure, 299*

*Conclusion, 300*

*Recommendations, 301*

Appendix A: Summary Recommendations, 304

*Worked Examples, 312*

Appendix B: Cost-Effectiveness of Strategies to Prevent Neural Tube Defects, 313

Appendix C: The Cost-Effectiveness of Dietary and Pharmacologic Therapy for  
Cholesterol Reduction in Adults, 349

Glossary, 392

Index, 413