## Contents

1 **Introduction, Summary, and Options**  
   Challenges and Opportunities for Information Technologies  
   Trends in the Health Care System  
   Congressional Interest  
   Report Summary  
   Other Applications  

2 **Information Technologies for Transforming Health Care**  
   Islands of Automation  
   The Life Cycle of Health Information  
   Key Technologies for the Emerging Health Information Infrastructure  
   Sharing the Common Pool of Data  
   Policy Issues and Options  

3 **Networks for Health Information**  
   Administrative Simplification  
   Administrative Activities in Health Care  
   Provider Administrative Activities  
   Exchanging Information Between Providers and Payers  
   Linking Health Care Providers With Suppliers  
   Pharmaceutical Industry EDI  
   Community and Regional Networking  
   Costs and Cost-Effectiveness  
   Policy Implications of Electronic Health Information  
   Policy Considerations for Congress  

4 **Using Information Technology to Improve the Quality of Health Care**  
   Clinical Decision Support  
   Performance Assessment  
   Conclusions  

<table>
<thead>
<tr>
<th>Page</th>
</tr>
</thead>
</table>
5 Telemedicine: Remote Access to Health Services and Information 159
   Telemedicine’s Potential Effects 160
   Telemedicine Applications 165
   Telemedicine Issues 177
   Telemedicine Policy Options 187

APPENDICES

A Workshop Participants 193
B Reviewers and Contributors 195
C Applications of Clinical Decision Support Systems 197
D Executive Branch Telemedicine Activities 201
E Electronic Health Information Sources 207
F Boxes, Figures, and Tables 213
G Abbreviations and Glossary 215