

1. Record Nr.	UNINA9910696199403321
Autore	Brady Amie M. G (Amie Melissa Gifford), <1975->
Titolo	Rapid method for escherichia coli in the Cuyahoga River [[electronic resource] /] / by Amie M.G. Brady ; in cooperation with Cuyahoga Valley National Park and the Lake Erie Protection Fund
Pubbl/distr/stampa	Reston, Va. : , : U.S. Geological Survey, , 2007
Descrizione fisica	iv, 5 pages : digital, PDF file
Collana	Open-file report ; ; 2007-1210
Soggetti	Water - Pollution - Measurement Escherichia coli - Environmental aspects - Measurement Escherichia coli - Environmental aspects - Ohio - Cuyahoga River Water quality - Ohio - Cuyahoga River - Measurement
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Title from PDF title screen (viewed on Aug. 6, 2007). At head of title on HTML title screen: USGS Ohio Water Science Center.
Nota di bibliografia	Includes bibliographical references (page 5).

2. Record Nr.	UNINA9910437863703321
Titolo	Systems analysis tools for better health care delivery // Panos M. Pardalos ... [et al.], editors
Pubbl/distr/stampa	New York, : Springer, 2013
ISBN	1-283-94502-9 1-4614-5094-2
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (187 p.)
Collana	Springer optimization and its applications, , 1931-6828 ; ; v. 74
Altri autori (Persone)	PardalosP. M <1954-> (Panos M.)
Disciplina	362.1068
Soggetti	Health services administration - Statistical methods Health facilities - Administration - Statistical methods System analysis
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Systems Analysis Tools for Better Health Care Delivery; Preface; Contents; Optimization Methods for Large-Scale Radiotherapy Problems; 1 Introduction; 2 Total Marrow Irradiation; 2.1 Beam Orientation Optimization; 2.2 Fluence Map Optimization; 2.2.1 Alternate Line Search Techniques; 2.2.2 Warm Start Approaches; 2.3 Results; 3 Gamma Knife® PerfexionTM; 3.1 Relation to IMRT Optimization; 3.2 Sector Duration Optimization; 3.3 Results; 4 Conclusions; References; Portable Asset Management in Hospitals; 1 Introduction; 2 Common Portable Asset Management Models; 2.1 Centralized Systems 2.2 Semi-Centralized Systems2.3 Decentralized Systems; 3 RFID and Portable Asset Management; 4 Portable Asset Management Systems Analysis; 5 Summary; References; Stochastic Integer Programming in Healthcare Delivery; 1 Introduction; 2 Stochastic Integer Programming; 3 Healthcare Resource Allocation Problems; 3.1 Allocating Ambulances Using Stochastic Integer Programming; 3.2 Medical Facility Location; 4 Healthcare Operations Management; 4.1 Operating Room Optimization; 4.2 Operating Room Planning; 4.3 Operational Decisions in ORs; 4.4 Downstream Constraints; 4.5 Nurse Assignment 5 Open Challenges6 Conclusions; References; An Expository Discourse of E-Health; 1 Introduction; 2 Background; 3 Telemedicine; 4

Personalized E-Health; 5 Service-Oriented Computing, Grid Computing, and Cloud Computing; 6 Quality Linkages of E-Health; 7 Patient Centered Care Linkages of E-Health; 8 Educational Linkages of E-Health; 9 Issues, Controversies, and Problems; 10 Solutions and Recommendations; 11 Conclusion; References; Nurse Scheduling Problem: An Integer Programming Model with a Practical Application; 1 Introduction; 2 The Problem Description: Goals and Requirements 2.1 Two Stages of Nurse Scheduling Problem 2.2 Data of Nurse Scheduling Problem; 2.3 The Requirements of NSP: Hard and Soft Constraints; 3 Binary Integer Programming Formulation; 3.1 Notations; 3.1.1 Index; 3.1.2 Hard Constraints Parameters; 3.1.3 Soft Constraints Parameters; 3.2 Decision Variables; 3.3 Constraints; 3.4 Objective Functions; 4 Implementations and a Practical Example; 5 Conclusion; 6 Appendix 1: Results of Nurse Scheduling with One Preference Shift in a Week 7 Appendix 2: Results of Assignments with Respect to Each Day with One Preference Shift in a Week (Employees Who Do Not Appear in this Table Mean They Do Not Need to Work in that Corresponding Week) 8 Appendix 3: Results of Nurse Scheduling with Two Preferences Shift (One for Weekdays and One for Weekends); 9 Appendix 4: Results of Assignments with Respect to Each Day with Two Preferences for Weekdays and Weekends (Employees Who Do Not Appear in this Table Mean They Do Not Need to Work in that Corresponding Week); References; Clinical Data Mining to Discover Optimal Treatment Patterns

1 Introduction

Sommario/riassunto

This book presents some recent systems engineering and mathematical tools for health care along with their real-world applications by health care practitioners and engineers. Advanced approaches, tools, and algorithms used in operating room scheduling and patient flow are covered. State-of-the-art results from applications of data mining, business process modeling, and simulation in healthcare, together with optimization methods, form the core of the volume. Systems Analysis Tools for Better Health Care Delivery illustrates the increased need of partnership between engineers and health care professionals. This book will benefit researchers and practitioners in health care delivery institutions, staff members and professionals of specialized hospital units, and lecturers and graduate students in engineering, applied mathematics, business administration and health care.