1. Record Nr. UNINA9910254934203321

Titolo	Operational Research for Emergency Planning in Healthcare: Volume 1 [[electronic resource] /] / edited by Navonil Mustafee
Pubbl/distr/stampa	London : , : Palgrave Macmillan UK : , : Imprint : Palgrave Macmillan, , 2016
ISBN	1-137-53569-5
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (393 p.)
Collana	OR Essentials
Disciplina	658.4038
Soggetti	Management information systems Business mathematics Production management Leadership Facility management Operations research Decision making Business Information Systems Business Mathematics Operations Management Business Strategy/Leadership Facility Management Operations Research/Decision Theory
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 and index.
Nota di contenuto	Cover; Contents; List of Figures and Tables; 1 A Synthesis of Operational Research for Emergency Planning in Healthcare through the Triple Lens of Technique-Domain-Context; Part I: OR for Locating Emergency Services; 2 Locating Emergency Services with Different Priorities: The Priority Queuing Covering Location Problem; 3 Decision Support Tools for Ambulance Dispatch and Relocation; 4 A Study of Situationally Aware Routing for Emergency Responders; Part II: OR for Operational Planning in Emergency Services 5 Multi-Criteria Approach Using Simulation-Based Balanced Scorecard

for Supporting Decisions in Health-care Facilities: An Emergency Department Case Study6 Combining Data Mining and Discrete Event Simulation for a Value-Added View of a Hospital Emergency Department; 7 Uncovering Effective Process Improvement Strategies in an Emergency Department Using Discrete Event Simulation; 8 Improving the Design and Operation of an Integrated Emergency Post via Simulation; 9 A Simulation Case Study to Improve Staffing Decisions at Mass Immunization Clinics for Pandemic Influenza
10 Modelling Treatment Effects in the HIV/AIDS EpidemicPart III: OR for Inventory Management in Emergency Services; 11 Impact of the Influenza Season on a Hospital from a Pharmaceutical Inventory Management Perspective; 12 Perishable Inventory Management System with a Minimum Volume Constraint; 13 A Bayesian Decision Model with Hurricane Forecast Updates for Emergency Supplies Inventory Management; 14 Using Simulation to Improve the Blood Supply Chain; Index

Sommario/riassunto

This book presents a collection of studies that have applied analytical methods to improve preparedness, planning, and a faster response to A&E and public health emergencies like epidemic and disease outbreak. It explores the application of quantitative Operational Research techniques such as Mathematical Modelling and Optimization, Maximum Likelihood Estimation, Multiple-Criteria Decision Analysis, Discrete-event Simulation, Data Mining, and Bayesian Decision Models. These techniques have been used for better management of emergency care, including first responders, ambulance services, A&E departments, and mass immunisation centres. This volume focuses on planning at the operational level whereas volume 2 focuses mainly on planning at the strategic level. The OR Essentials series presents a unique cross-section of high quality research work fundamental to understanding contemporary issues and research across a range of Operational Research (OR) topics. It brings together some of the best research papers from the highly respected journals of the Operational Research Society, also published by Palgrave Macmillan.