

1. Record Nr.	UNINA9910529904503321
Titolo	Handbook of healthcare analytics : theoretical minimum for conducting 21st century research on healthcare operations // edited by Tinglong Dai, Sridhar Tayur
Pubbl/distr/stampa	Hoboken, NJ : , : Wiley, , 2018
ISBN	1-119-30095-9 1-119-30096-7 1-119-30097-5
Edizione	[1st edition]
Descrizione fisica	1 online resource (466 pages)
Collana	Wiley series in operations research and management science
Classificazione	BUS042000
Disciplina	610.285
Soggetti	Medicine - Data processing Medical care - Data processing Medical care - Information services Assistència sanitària Processament de dades Serveis d'informació Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Organizational structure / Jay Levine -- Access to healthcare / Donald R. Fischer -- Market design / Itai Ashlagi -- Competing interests / Joel Goh -- Quality of care / Hummy Song and Senthil Veeraraghavan -- Personalized medicine / Turgay Ayer and Qiushi Chen -- Global health / Karthik V. Natarajan and Jayashankar M. Swaminathan -- Healthcare supply chain / Soo-Haeng Cho and Hui Zhao -- Organ transplantation / Baris Ata, John J. Friedewald and A. Cem Randa -- Ambulatory care / Nan Liu -- Inpatient care / Van-Anh Truong -- Residential care / Nadia Lahrichi, Louis-Martin Rousseau and Willem-Jan van Hoeve -- Concierge medicine / Srinagesh Gavirneni and Vidyadhar G. Kulkarni -- Markov decision processes / Alan Scheller-Wolf -- Game theory and information economics / Tinglong Dai -- Queueing games / Mustafa Akan -- Econometric methods / Diwas KC -- Data science / Rema Padman.

Sommario/riassunto

How can analytics scholars and healthcare professionals access the most exciting and important healthcare topics and tools for the 21st century? Editors Tinglong Dai and Sridhar Tayur, aided by a team of internationally acclaimed experts, have curated this timely volume to help newcomers and seasoned researchers alike to rapidly comprehend a diverse set of thrusts and tools in this rapidly growing cross-disciplinary field. The Handbook covers a wide range of macro-, meso- and micro-level thrusts—such as market design, competing interests, global health, personalized medicine, residential care and concierge medicine, among others—and structures what has been a highly fragmented research area into a coherent scientific discipline. The handbook also provides an easy-to-comprehend introduction to five essential research tools—Markov decision process, game theory and information economics, queueing games, econometric methods, and data science—by illustrating their uses and applicability on examples from diverse healthcare settings, thus connecting tools with thrusts. The primary audience of the Handbook includes analytics scholars interested in healthcare and healthcare practitioners interested in analytics. This Handbook : Instills analytics scholars with a way of thinking that incorporates behavioral, incentive, and policy considerations in various healthcare settings. This change in perspective—a shift in gaze away from narrow, local and one-off operational improvement efforts that do not replicate, scale or remain sustainable—can lead to new knowledge and innovative solutions that healthcare has been seeking so desperately. Facilitates collaboration between healthcare experts and analytics scholar to frame and tackle their pressing concerns through appropriate modern mathematical tools designed for this very purpose. The handbook is designed to be accessible to the independent reader, and it may be used in a variety of settings, from a short lecture series on specific topics to a semester-long course.
