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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Overview : How Artificial Intelligence Will Improve Health -- Randomization : The "Secret Sauce" -- Evaluation : The Facts Matter. Pseudo-Innovation vs Real Innovation -- Synergy : Building a Successful Clinician-Computer Collaboration -- Fairness : Addressing the Ethical, Regulatory, and Privacy Issues -- Modeling : An Overview of Predictive Modeling, Neural Networks, and Deep Learning -- EHRs : Exporting, Cleaning, Managing Datasets, and Integrating Models into the Electronic Health Record -- Resistance : Understanding and Overcoming the Resistance to AI, Randomization, and Change -- Execution : Increasing the Odds of Future Success -- Integration : Building a Learning Health Care System With Pragmatic AI Trials -- Streamlining : Reducing Waste and Lowering Costs in Health Care -- Complications : Predicting and Preventing Hospital Complications -- Prevention : Identifying Diseases With Predictive Models -- Precision Medicine : AI to Improve Health Screenings and Treatments -- Drugs

and Devices : Using AI to Improve Pharmaceutical and Medical Device Development and Applications -- Medical Literature : AI and Information Overload -- Imaging : Medical Imaging and Strategies for Assessing Patient Impact -- Pandemics : Using AI Tools to Improve Health Outcomes in a Pandemic -- Careers : How to Build a Career Around AI in Medicine by Turning This Playbook Into a Reality.

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Sommario/riassunto

"Artificial Intelligence for Improved Patient Outcomes provides new, relevant, and practical information on what AI can do in healthcare and how to assess whether AI is improving health outcomes. With clear insights and a balanced approach, this innovative book offers a one-stop guide on how to design and lead pragmatic real-world AI studies that yield rigorous scientific evidence—all in a manner that is safe and ethical. Daniel Byrne, Director of Artificial Intelligence Research at AVAIL (the Advanced Vanderbilt Artificial Intelligence Laboratory), and author of landmark pragmatic studies published in leading medical journals, shares four decades of experience as a biostatistician and AI researcher. Building on his first book, *Publishing Your Medical Research*, the author gives the reader the competitive advantage in creating reproducible AI research that will be accepted in prestigious high-impact medical journals. Provides easy-to-understand explanations of the key concepts in using and evaluating AI in medicine. Offers practical, actionable guidance on the mechanics and implementation of AI applications in medicine. Shares career guidance on a successful future in AI in medicine. Teaches the skills to evaluate AI tools and avoid being misled by the hype. For a wide audience of healthcare professionals impacted by Artificial Intelligence in medicine, including physician-scientists, AI developers, entrepreneurs, and healthcare leaders who need to evaluate AI applications designed to improve safety, quality, and value for their institutions. Enrich Your eBook Reading Experience Read directly on your preferred device(s), such as computer, tablet, or smartphone. Easily convert to audiobook, powering your content with natural language text-to-speech. "--

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