1. Record Nr. UNINA9910558490703321 Autore Felder Stefan <1960-> Titolo Medical Decision Making: A Health Economic Primer / / by Stefan Felder, Thomas Mayrhofer Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, , 2022 **ISBN** 3-662-64654-4 Edizione [3rd ed. 2022.] Descrizione fisica 1 online resource (330 pages) Collana **Economics and Finance Series** Disciplina 610 Soggetti Medical economics Public health Health services administration **Epidemiology** Operations research Biometry **Health Economics** Public Health **Health Care Management** Operations Research and Decision Theory **Biostatistics** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Chapter 1. Introduction -- Chapter 2. Basic Tools in Medical Decision Making -- Chapter 3. Basic Tools in Economics: Preferences, Expected Utility, Risk Aversion and Prudence -- Chapter 4. Treatment Decisions -- Chapter 5. Test and Treatment Decisions -- Chapter 6. Prudence and Medical Decision Making -- Chapter 7. Optimal Strategy for Multiple Diagnostic Tests -- Chapter 8. The Optimal Cut-off of a Diagnostic Test -- Chapter 9. The Total Value of Information of a Test -- Chapter 10. The Economics of Medical Decision Making -- Chapter 11. Valuing Health and Life -- Chapter 12. Revealed Preference in Medical Decisions -- Chapter 13. Imperfect Agency and Non-Expected Utility Models.

## Sommario/riassunto

This textbook offers a comprehensive analysis of medical decisionmaking under uncertainty by combining test information theory with expected utility theory. The authors show how the parameters of Bayes' theorem can be combined with a value function of health states in order to arrive at informed test and treatment decisions in the face of diagnostic and therapeutic risks. Distinguishing between risk-neutral, risk-averse, and prudent decision-makers, they demonstrate the effects of risk preferences on medical decisions. Furthermore, they analyze individual and multiple tests as well as diagnostic models in which the decision-maker chooses the test outcome. The consequences of test and treatment decisions for the patient are encompassed by quality-adjusted life years (QALYs) and the standard economic model, which applies the willingness to pay for health approach. Lastly, non-expected utility models of choice under risk and uncertainty are presented. Although these models can explain ome of the test and treatment decisions observed, they are less suitable for normative analyses aimed at providing guidance on medical decisionmaking. This third edition provides extensively revised versions of all chapters and reflects recent innovations in medical decision-making such as decision curve analysis. New chapters focus on the health economics of and revealed preferences in medical decisions. The book is intended for students of (health) economics and medicine as well as for medical decision-makers and physicians dealing with uncertainty in their test and treatment decisions.