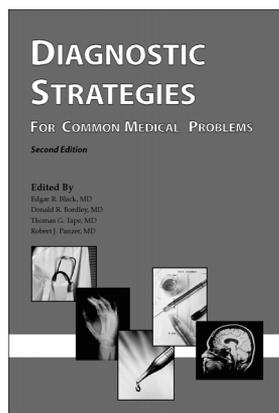


Black ER, Bordley DR, Tape TG, Panzer RJ. *Diagnostic Strategies for Common Medical Problems*. 2d ed. Philadelphia: American College of Physicians; 1999.



At last, the second edition of *Diagnostic Strategies for Common Medical Problems* has arrived to replace the well-used first edition, published in 1991. Evidence about the precision and accuracy of diagnostic tests is not always readily available, and this resource attempts to overcome the problem. Its aim is to help clinicians with both critical appraisal of diagnostic tests and quantitative decision making about diagnostic strategies. It provides information about the operating characteristics of diagnostic tests and procedures that are commonly used in clinical practice, particularly in internal medicine.

Unfortunately, this book does not provide any information on whether the literature was systematically reviewed and critically appraised for each topic. References are provided in each chapter, but no mention is made of the methodologic rigor of the referenced studies. The authors provide quantification of the results of the diagnostic studies and present them as sensitivities, specificities, and likelihood ratios, although no confidence intervals are included.

An electronic version of *Diagnostic Strategies* will be published with the year 2000 issue of Best Evidence. No information, however, is provided on how often it will be updated. The editors suggest that users go to the literature to retrieve the most up-to-date evidence, and indeed, they provide a chapter on searching and appraising evidence about diagnostic tests.

The chapters on searching, critical appraisal of the literature, and the interpretation of diagnostic tests serve as a great introduction. 51 common medical problems are discussed in 9 sections covering cardiovascular, gastrointestinal, infectious disease, respiratory, musculoskeletal and immunologic, endocrinologic, genitourinary, hematologic, and neurologic problems. Each chapter focuses on a presenting problem rather than on a specific disease and begins with a box of key points that include statements about pretest probability and diagnostic strategies. Discussion is organized under the headings of background, estimating pretest probability, diagnostic tests, diagnostic strategies, and clinical problems. The subsection "Clinical Problems" describes a common clinical problem, a testing strategy and rationale, and a clinical example that applies the evidence to an individual patient. For example, in the chapter on myocardial infarction (MI), a patient with chest pain suggestive of myocardial ischemia is described. His electrocardiographic result shows a 2-mm ST segment elevation in leads V1 to V4. It is suggested that because the pretest probability of MI is high (80%) and the onset of pain is recent, such interventions as thrombolysis or percutaneous transluminal coronary angioplasty should be considered. It recommends that serial enzyme testing for either troponin I or creatine kinase-MB levels should be done and that a positive test result increases the likelihood of MI to 99%, thus confirming the diagnosis. In contrast, if the test result is negative, the probability of MI is reduced to 10%.

I used *Diagnostic Strategies* for 1 week while attending on an inpatient clinical service. There I found its information on pretest probability and test characteristics to be particularly useful because these data are often difficult to find quickly. Further, the clinical problems served as good examples for teaching about quantitative decision making in the diagnostic process. One of the highest compliments paid to this book is how frequently it was borrowed by the housestaff. They found the information useful and easy to access, although the book is heavy to carry around. The information in some of the chapters was scant, probably reflecting the paucity of evidence in some areas, but one citation we were surprised to see missing in the deep venous thrombosis chapter was the high-quality study by Wells and colleagues (1), which describes a brief clinical exam for assessing the probability of deep venous thrombosis.

This book is the single best resource available for information on operating characteristics of diagnostic tests, and I hope that its editors and publishers are able to produce future editions more frequently.

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Diagnostic Strategies for Common Medical Problems can be purchased online at http://www.acponline.org/catalog/books/diagnostic_strategies.htm for U.S.\$45; the contents of the book can also be viewed on this site.

Reference

1. Wells PS, Anderson DR, Bormanis J, et al. Value of assessment of pretest probability of deep-vein thrombosis in clinical management. *Lancet*. 1997;350:1795-8.

Ratings for this resource:

Methods/Quality of information: ★★☆☆☆

Clinical usefulness: ★★★★★