Clinicians who offer screening tests bear a heavier responsibility than those consulted by people who are, or believe themselves to be, ill. Most people who accept the offer derive no benefit because they are true negatives while the false positives and false negatives are harmed in the process. This dilemma is made clear by David Eddy in a classic introductory chapter to the American College of Physicians’ update to their 1991 bestseller “Common Screening tests.” The new book contains 5 United States Preventive Services Task Force (USPTF) reviews of screening programmes that were published in the Annals of Internal Medicine (type 2 diabetes, postmenopausal osteoporosis, breast cancer, colorectal cancer, and prostate cancer) and 2 commissioned pieces on screening for depression and hypertension. Two chapters also deal with preventive strategies (hormone therapy [HT] for cardiovascular disease, and aspirin and cardiovascular disease). The justification for the inclusion of these interventions is that primary prevention with chemoprophylaxis is important and should be considered in a similar way to other conditions where screening occurs as a prerequisite to an effective intervention.

The content of the book was commissioned by the Agency for Health Care Policy and Research in 1998. The work was conducted by several highly skilled teams using the well documented, methodologically rigorous techniques of the USPTF. It is targeted at “internists, residents and health care practitioners,” though patients and policymakers would also benefit from understanding its contents. Although the literature search is comprehensively international, that simply underscores the absence of evidence from many populations beyond Europe and North America.

Each chapter is preceded by a set of summary points and the main text follows Eddy’s advice on how to think about screening by going back to clear, basic principles and the original papers (typically 150 references per chapter). The passages dealing with screening tests will be particularly useful to policymakers and clinicians who wish to provide evidence-based guidelines on outcomes and costs. The “bottom line” number needed to screen (NNS) is provided for a variety of outcomes in each chapter where possible. Sensitivity analyses based on prevalence, age, and other relevant risk factors are presented in tables. In some conditions like prostate cancer, no benefits have been shown, only costs, so it is currently impossible to derive an NNS for specific beneficial outcomes. All studies that contribute to the meta-analyses are graded for quality, and the reasons for adopting or discarding the evidence provided by the major studies are well described. The final 2 pages contain a table summarising the current recommendations for selected preventive services for adults.

The authors argue that recommending HT and aspirin in otherwise well patients to prevent cardiovascular disease is analogous to screening for the diseases and then offering interventions. As with the tests, most of those taking the drugs would not have suffered the vascular events they seek to prevent. Similar processes are used to find, critically appraise, and present the current evidence base to those used for diagnostic tests. The nature of the intervention, the groups to be targeted, the outcomes, and costs are all considered before summarising the current state of knowledge for both.

Could the book be better? Well, an index would be nice.

FRANK SULLIVAN
University of Dundee
Dundee, UK

RATINGS:
Methods/ quality of information: *****
Clinical usefulness: *****