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To screen or not to screen….: A comment on Lepore et al

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The controversy about screening for prostate cancer hit a new high point with the most recent publication of the recommendation by the U.S. Preventive Services Task Force (USPSTF). In their recommendation, the USPSTF recommends against prostate-specific antigen (PSA) screening for prostate cancer based on the task force's interpretation of the available data that the benefits of PSA screening does not outweigh its harms [1]. These recommendations are contradictory to those of other professional or advocacy organizations. For example, the American Cancer Society advocates for a shared decision making approach between patients and providers [2]. They recommend that men of average risk receive information about screening at age 50, and those with a family history or who are of African American descent at age 40 to 45 [2]. The American Urological Association advocates screening of all men starting at age 40 with a life-expectancy of 10 years and more [3]. The American College of Preventive Medicine concurs with the USPSTF that the existing evidence does not support routine population screening with PSA (or digital rectal exam); however they also advocate providing information about the potential harms and benefits of screening, particularly to high risk populations [4]. Finally, the American Society of Clinical Oncology, recommends that based on expected life expectancy screening be discouraged (for those with a life expcetancy of ≤10 years), or that screening be discussed for those with a life expectancy of > 10 years) [5]. In sum, the recommendations are contradictory and confusing to patients and practitioners alike.

In light of this controversy, the Lepore et al. article could not be timelier [6]. The study addresses and emphasizes several aspects that are raised by the debate about prostate screening. First, as more organizations call for a patient-physician dialogue about the decision to be screened, the Lepore et al. study demonstrates the utility and effectivness of one such approach involving information and support via telephone. Secondly, the study also demonstrates that such interventions can be directed at high-risk minority populations. In general, such groups are harder to reach, often have larger knowledge deficits about preventive measures, and have underserved health needs. Other significant aspects of the study are the use of medical claims to record PSA testing for two years after the intervention, and to examine the congruence between personal screening values and actual screening behavior.

Results indicated that the intervention doubled patients' verified visit to discuss prostate cancer screening with their physicians, although the absolute percentages of verified visits between Control and Intervention conditions were relatively low (8.3% vs. 15.8%). Similarily, the intervention increased knowledge in the intervention group by about 10 percentage points, which translates into a gain of on average one-and-a-half questions correct (from about 7 questions correct in pretest to 8.7 correct in posttest.) As the authors point out, this is a modest effect. Congruence between testing intentions and verified PSA test was not affected by the Intervention. The results are remarkable not for their effect sizes, but for their implications for the shared decision paradigm. One of the core assumptions about a quality decision is that the decision maker is informed about the decision topic as

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well as its pros and cons. Higher levels of knowledge have been shown to translate into decisions that are more value-congruent and associated with lower levels of decisional conflict. Although the current study does not directly address the relationship among increased knowledge, decisional congruence and conflict, the pattern of results point to the need to examine other variables that could influence decision making. For example, Peters and colleagues have argued that specific affect surrounding a medical issue (rather than generic state or trait anxiety) can influence information processing and decision making. [7] Similarly, we and others have found that worry about cancer predicts screening behavior among women at elevated risk for breast cancer. [8, 9] Another set of variables that has the potential to influence decision making is cultural beliefs and expectations surrounding the disease and its treatment. Such beliefs are often particularly prominent among groups who have not been raised in the prevalent cultural milieu. Overall, there is accumulating evidence that the emphasis on knowledge as a major determinant of decision making might be overstated and the time has come to examine in more detail other factors that might influence the decisional process.

Another noteworthy result is the increase of PSA testing among men during the two year follow-up period. As the authors rightfully point out, this increase is likely due to physicians ordering routine PSA tests, without prior discussions with the patient, especially if they perceive the patient to be a member of a high risk group. The shared decision making (SDM) paradigm assumes that patients and physicians act as partners with a goal to facilitate decision making. However, the clinical realities often interfere with this goal. A recent review of barriers and facilitators to implementation of SDM in the practice setting points to a different reality. The top two barriers to the implementation of SDM were time constraints and the lack of applicability due to patient characteristics and clinical situations. [10] Time constraints are hard clinical realities that can only be overcome with substantial organizational and financial support. Barriers due to patient characteristics suggest that physicians tend to evaluate the patient during the clinical encounter for suitability for shared decision making. This is potentially worrisome as physicians might underestimate a patient's willingness and capacity to engage in this process. The top facilitators to implementing SDM in the clinical practice were physicians' motivation to engage in SDM and their conviction that a shared decision approach will lead to better health outcomes [10]. The results of this review demonstrate the importance of the clinical provider for a successful implementation a shared-decision paradigm. If the provider is motivated and believes that an SDM approach leads to improved patient outcomes, then it is more likely to be implemented. If, on the other hand, there is the perception that there is not enough time or that the patient is not receptive to such an approach, it will not be implemented.

The contribution of the study by Lepore and colleagues clearly shows the successes but also the limitations of a patient-focused SDM approach. It is possible to implement interventions to enhance decision making in high risk and hard-to-reach patient populations, and to achieve gains in knowledge and reductions in decisional conflict. Yet, looking beyond the patient-focused approach, it will be necessary to increase research efforts to find the best methods to overcome clinical and provider barriers to SDM. Recent technological advancements including the use of electronic medical records might be a way in the right direction.

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