

Shared Medical Decision Making

A New Tool for Preventive Medicine

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The development of methods for shared medical decision-making is recognized by many groups as an important priority.¹⁻⁷ A search of PUBMED under the heading of "shared decision" now produces about 100 hits per year. This issue of the *Journal* includes two important reports evaluating the potential of shared decision-making in preventive medicine. Sheridan et al.⁸ offer a commentary on the relationship between shared decision-making and recommendations offered by the United States Preventive Services Task Force (USPSTF). Briss et al.,⁹ representing the Task Force on Community Preventive Services, reviewed shared decision-making and informed decision-making in relation to cancer screening. Both papers provide excellent reviews of the issues, the barriers to use of shared and informed decision-making, and proposals for future research. The Briss article also offers a systematic review of completed studies on informed or shared decision-making relevant to cancer screening.

How might we place these excellent reviews in context? First, we must recognize that important cost and quality concerns have resulted from the substantial variability in healthcare decision-making.^{10,11} We would expect the average healthcare costs to be similar in regions that serve equal numbers of people. Yet per capita costs in Chicago are nearly twice as high as in San Diego, and per capita expenditures in Boston are at least 60% higher than they are in New Haven.¹² Different providers are making different decisions for their patients. Yet we have no evidence that patients live longer in areas where more care is given, have better quality of life, or are more satisfied with their care.¹¹ The care that patients receive is largely driven by provider decisions. Shared decision-making advances the medical paradigm by making patients more active participants in the decision process.¹³ One of the most important observations is that, despite the enthusiasm for shared decision-making, we still struggle with several conceptual issues.

Sheridan et al.⁸ note that at least ten different terms have been used to describe decision-making within the patient-clinician partnership. Among these, shared decision-making and informed decision-making are the most popular. USPSTF defines informed decision-making as "an individual's overall process of gathering relevant information from both his or her clinician and from other clinical and nonclinical sources, with or without independent clarification of values." This is distinct from shared decision-making, which is defined as, "a particular process of decision-making by the patient and clinician in which the patient: (1) understands the risk or seriousness of the disease or condition to be prevented; (2) understands the preventive service, including the risk, benefits, alternatives, and uncertainties; (3) has weighed his or her values regarding the potential benefits and harms associated with the service; and (4) has engaged in decision-making at a level at which he or she desires and feels comfortable." Thus, shared decision-making goes beyond informed decision-making by emphasizing that the decision process is joint and shared between the patient and provider. Clarifying these terms is a significant accomplishment because the literature is quite confused. For example, several studies described as shared decision-making never actually involved interaction between patients and clinicians.¹⁴

These two reports also clarify the thinness of the current research base for shared decision-making. Despite a growing literature, we have surprisingly few systematic studies that evaluate the key issues. We still know remarkably little about the influence of literacy levels, numeracy, framing of information, and several other variables. These cognitive issues offer remarkable opportunities for new investigation.

As a new field, shared medical decision-making faces major challenges. One of the biggest challenges is in measuring whether a provider and a patient actually shared in the decision process. Investigators do not agree on what metric, when applied to an audio or video recording of a patient-provider interaction, would be a meaningful indicator of whether or not the interaction occurred. Perhaps an even greater challenge is in determining how shared decision-making might actually be deployed in clinical practice. Today the average primary care visit is limited to 15 minutes. During this time, a clinician must engage the patient,

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take a history, perform a physical examination, make a diagnosis, review concerns, and write prescriptions. Within this crowded encounter, when and how will shared decision-making be introduced and completed? A variety of models have been proposed. One alternative is to refer patients to a decision-making laboratory, and have them return once they have acquired basic information required to make these complex decisions.¹⁵ Another alternative is to engage patients in shared decision-making during group visits. A third option is to deliver the interventions via the Internet.¹⁶

Informed decision-making may be easier to execute, but it is presumably less effective. Wide-scale demonstrations of the feasibility of shared decision-making are currently unavailable.

Cancer screening in preventive medicine provides wonderful opportunities for shared medical decision-making. Uncertainty surrounds the benefit of many screening tests, and the value of early intervention is debated for several conditions. One of the surprising findings in the Briss review⁹ was that only 15 high-quality evaluations of shared or informed decision-making in cancer screening have been reported. Remarkably, 10 of the 15 studies addressed prostate cancer screening. In other words, the opportunities to evaluate interventions relevant to other aspects of cancer screening are wide open.

One of the challenges in the assessment of shared decision-making is that we will need to assess whether these exercises are a good use of patient and provider time. For example, shared decision-making is best applied when there is uncertainty as to the benefit of screening or intervention. When uncertainty exists, it is likely that the marginal benefits of screening are small. For example, whether or not a 45-year-old male is screened for prostate cancer or a 45-year-old woman is screened for breast cancer has, on average, very small average effects on life expectancy or quality of life. Given that most adults in this age range see their physicians rarely, is shared decision-making a good use of clinician time? Clinical encounter time is a precious resource and might be better used to address other problems. For example, we know that remarkably little effort is devoted to discussions about tobacco use, unsafe sex, seatbelt use, and other important issues.

The Briss review⁹ summarizes several arguments against informed and shared decision-making. Although the Task Force on Community Preventive Services did not endorse these arguments, they are worthy of review. Although somewhat persuasive, some of these arguments are contradicted by the evidence. For example, it was suggested that many clinicians and policymakers are uncomfortable admitting uncertainty. Controversies, such as those surrounding hormone replacement therapy, are well known to patients because they are aired daily in the public media. Clinicians who are uncomfortable with uncertainty had

better get used to it. The public knows about scientific uncertainty, and this has led to confusion and even disillusionment with epidemiology.¹⁷ Is promoting patient uncertainty the same thing as patient abandonment? Studies in the shared decision-making literature show that exposure to shared decision-making interventions increases patient uncertainty. However, corresponding to increases in uncertainty are increases in patient satisfaction.¹⁴ If patients feel abandoned, why would their satisfaction increase? Clinicians should be more, rather than less, comfortable with shared decision-making because fully informing patients reduces provider liability. The best defense against malpractice is clear evidence that the provider fully informed the patient about the risks and benefits of intervention, and offered the patient an opportunity to make an informed choice. Negative evaluations of providers result from failure to disclose risks and when medicine promises more than it can deliver.¹⁸

How about the argument that informed or shared decision-making will increase patient demand for unproven, expensive, or harmful treatments? Indeed, the evidence suggests that patients are now receiving many unnecessary services.^{10,11,19,20} Several evaluations of shared decision-making suggest that utilization rates go down, rather than up, for well-informed patients.^{21,22} For example, one study compared information alone versus information plus structured preference elicitation for women with uncomplicated menorrhagia. Hysterectomy rates and costs were lower for women who participated in the preference elicitation.²³ Despite lower costs in all of these studies, health outcomes were unaffected.

In summary, shared medical decision-making is an important new paradigm in clinical health care. Recognition of these approaches by the USPSTF and the Task Force on Community Preventive Services is an important advance. Despite the appeal of shared decision-making, we have a long way to go before it can be deployed in routine clinical practice. First, we must establish the efficacy of the interventions in terms of patient satisfaction, patient outcome, and healthcare costs. To date, there have been few systematic evaluations. Studies are also necessary to address difficult problems relevant to patient readiness and the cognitive capabilities of patient participants. Finally, we need feasibility studies to determine whether and how shared decision-making can find a place in routine clinical care.

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