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How to integrate shared decision-making into your practice

Despite the many benefits of shared decision-making, uptake of its practices is low. These tools and frameworks can help you to engage patients in their care decisions.

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PRACTICE RECOMMENDATIONS

› *Use shared decision-making (SDM) when evidence supports more than one reasonable strategy for treatment.* (C)

› *Improve effectiveness of patient engagement by employing an SDM framework to structure the conversation.* (C)

Strength of recommendation (SOR)

(A) Good-quality patient-oriented evidence

(B) Inconsistent or limited-quality patient-oriented evidence

(C) Consensus, usual practice, opinion, disease-oriented evidence, case series

Shared decision-making (SDM), a methodology for improving patient communication, education, and outcomes in preference-sensitive health care decisions, debuted in 1989 with the Ottawa Decision Support Framework[1] and the creation of the Foundation for Informed Medical Decision Making (now the Informed Medical Decisions Foundation).[2] SDM enhances care by actively involving patients as partners in their health care choices. This approach can not only increase patient knowledge and satisfaction with care but also has a beneficial effect on adherence and outcomes.[3-5]

Despite the significant benefits of SDM, overall uptake of SDM practices remains low—even in situations in which SDM is a requirement for reimbursement, such as in lung cancer screening.[6-8] The ever-shifting list of conditions that warrant the implementation of SDM in a family practice can be daunting. Our review seeks to highlight current best practices, review common situations in which SDM would be beneficial, and describe tools and frameworks that can facilitate effective SDM conversations in the typical primary care practice.

Preference-sensitive care

SDM is designed to enhance the role of patient preference, considering a patient's own personal values for managing clinical conditions when more than one reasonable strategy exists. Such situations are often referred to as *preference-sensitive conditions*—ie, since evidence is limited on a single "best" treatment approach, patients' values should impact decision-making.[9] Examples of common preference-sensitive situations that include preventive care, screening, and chronic disease management are outlined in **TABLE 1**.

How to engage patients

In preference-sensitive care situations, SDM endeavors to ad-

TABLE 1

Tools to help you employ shared decision-making in common preference-sensitive care dilemmas

Situation	Choices	Tools
Preventive care		
Primary prevention of atherosclerotic cardiovascular disease	Statin therapy Low-dose aspirin therapy Lifestyle modification (eg, Mediterranean diet) Nontraditional risk factor screening in intermediate-risk groups (eg, coronary artery calcium scoring, C-reactive protein) No intervention	American College of Cardiology ASCVD Risk Estimator Plus https://tools.acc.org/ASCVD-Risk-Estimator-Plus/#!/calculate/estimate/ Healthwise, from Penn Medicine: "Aspirin: Should I Take Daily Aspirin to Prevent a Heart Attack or Stroke?" www.lancastergeneralhealth.org/healthwise-library/healthwise-article?documentId=uf9825 Healthwise, from Penn Medicine: "Statins: Should I Take Them to Prevent a Heart Attack or Stroke?" www.lancastergeneralhealth.org/healthwise-library/healthwise-article?documentId=aa44406 Healthwise, from Penn Medicine: "Coronary Calcium Scan: Should I Have This Test?" www.lancastergeneralhealth.org/healthwise-library/healthwise-article?documentId=av2072 Mayo Clinic's Statin Choice Decision Aid https://statindecisionaid.mayoclinic.org/
Contraceptive management	Behavioral approaches Barriers and spermicides Hormonal contraceptives (eg, oral, transdermal, injection, intrauterine, intravaginal) Long-acting reversible contraceptives Tubal methods (sterilization) Vasectomy (sterilization) No intervention	Reproductive Health Access Project's "Your Birth Control Choices Fact Sheet" www.reproductiveaccess.org/resource/bc-fact-sheet/ Mayo Clinic's "Birth control options: Things to Consider" Decision Conversation Aid www.mayoclinic.org/healthy-lifestyle/birth-control/in-depth/birth-control-options/art-20045571
Screening		
Breast cancer	Mammogram at 1- or 2-year interval as early as age 40 years No screening prior to age 50 years No screening	DynaMed Decisions Breast Cancer Screening tool https://decisions.dynamed.com/shared-decision-making/breast-cancer-screening Healthwise: "Breast Cancer Screening and Dense Breasts: What Are My Options?" Decision Aid https://decisionaid.ohri.ca/ [a] Healthwise: "Breast Cancer Screening: When Should I Start Having Mammograms?" Decision Aid https://decisionaid.ohri.ca/ [a]

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TABLE 1

Tools to help you employ shared decision-making in common preference-sensitive care dilemmas (*cont'd*)

Situation	Choices	Tools
Screening		
Colorectal cancer	Noninvasive stool-based tests: • fecal immunochemical test (FIT) annually • fecal occult blood test annually • stool DNA test every 1 to 3 years Noninvasive imaging with computed tomography colonography every 5 years Invasive visual examination (with potential for real-time excision of polyps): • colonoscopy every 10 years • flexible sigmoidoscopy every 10 years + FIT annually • No screening	Southwestern Health Colorectal Cancer Screening SDM Brochure www.southwesternhealth.org/sites/default/files/2021-08/SWHR-2021-Colorectal-Cancer-Screening-Shared-Decision-Making-Brochure.pdf Healthwise: "Colon Cancer: Which Screening Test Should I Have?" Decision Aid https://decisionaid.ohri.ca/ [a]
Lung cancer	No screening Annual low-dose chest computed tomography	Healthwise: "Lung Cancer: Should I Have Screening?" Decision Aid https://decisionaid.ohri.ca/ [a]
Prostate cancer	No screening Digital rectal exam Prostate-specific antigen	Healthwise: "Prostate Cancer Screening: Should I Have a PSA Test?" Decision Aid https://decisionaid.ohri.ca/ [a] Mayo Clinic's "Prostate cancer screening: Should you get a PSA test?" Decision Aid www.mayoclinic.org/tests-procedures/psa-test/in-depth/prostate-cancer/art-20048087 Prostate Cancer Prevention Trial Risk Calculator (after PSA obtained) http://riskcalc.org:3838/PCPTRC/
Chronic disease management		
Hypertension	Higher (eg, 140 or 150/90 mm Hg) or lower (eg, < 130/80 mm Hg) treatment targets Lifestyle, including activity or dietary modification (eg, DASH diet) Medication options, including preferred first-line options: • Thiazides • ACE/ARB therapy • Calcium channel blockers • No intervention	Healthwise: "High Blood Pressure: Should I Take Medicine?" Decision Aid https://decisionaid.ohri.ca/ [a]

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dress uncertainty by laying out what the options are, as well as providing risk and benefit data. This helps inform patients and guides providers about individual patient preference on whether to screen (eg, for average-risk female patients, breast cancer screening between ages 40-50 years). SDM can assist with determining whether to screen and if so, at what interval (eg, at 1- or 2-year intervals), while acknowledging that no single decision would be "best" for every patient.

While there are formalized tools to pro-

TABLE 1

Tools to help you employ shared decision-making in common preference-sensitive care dilemmas (*cont'd*)

Situation	Choices	Tools
Chronic disease management		
Management of mood disorders	Behavioral modification Counseling (various styles and settings) Medication therapy Interventional methods for severe depression (eg, electroconvulsive therapy) No intervention	Mayo Clinic's Depression Medication Choice Decision Aid https://depressiondecisionaid.mayoclinic.org/index Laval University's "Depression: Options to Improve Mood in Older Adults" Decision Aid (also available in French) https://www.boitedecision.ulaval.ca/en/box-details/?tx_tmboites_tmboitesmain%5Bclear%5D=1&tx_tmboites_tmboitesmain%5Bboite%5D=58 University of Sydney's "Bipolar II Decision Aid, making treatment decisions that are right for you" https://www.bipolardecisionaid.com.au/
Peri- and postmenopausal symptom management	Lifestyle approaches Nonhormonal medication therapy Hormone replacement therapy (vaginal vs systemic) No intervention	Mayo Clinic's "Hormone Therapy: Is it right for you?" Decision Aid www.mayoclinic.org/diseases-conditions/menopause/in-depth/hormone-therapy/art-20046372
Type 2 diabetes	Higher or lower treatment targets (eg, A1C < 8%, < 7.5%, < 7%) Lifestyle modification Medication options: • Insulin (long and short-acting and combinations) • Oral antihyperglycemics • Injectable non-insulin antihyperglycemics No intervention	Healthwise: "Diabetes, Type 2: Should I Take Insulin?" Decision Aid https://decisionaid.ohri.ca/ [a] Mayo Clinic's Diabetes Medication Choice Decision Conversation Aid https://diabetesdecisionaid.mayoclinic.org/index

ACE, angiotensin-converting enzyme; ARB, angiotensin receptor blocker; DASH, Dietary Approaches to Stop Hypertension; SDM, shared decision-making.

[a] Scroll down to "How can I find decision aids?" and click on "A to Z inventory." Then type in the name of the decision aid in the search field.

vide information to patients and help them consider their values and choices,[3,10] SDM does not hinge on the use of an explicit tool.[11-18] There are many approaches to and interpretations of SDM; the Ottawa Decision Support Framework reviews and details these many considerations at length in its 2020 revision.[19] **TABLE 2**[11,15-17,20-22] highlights various SDM frameworks and the steps involved.

These 3 elements are common among SDM frameworks

In a 2019 systematic review, the following 3 elements were highlighted as the most prevalent over time across SDM frameworks and could be considered core to any meaningful SDM process[23]:

Explicit effort by 2 or more experts. The patient is an expert in their own values. The clinician, as an expert in relevant medical knowledge, clarifies that the current medical situation will benefit from incorporating the patient's preferences to arrive at an appropriate shared decision.

Effort to provide relevant, evidence-based information. The clinician provides treatment options applicable to the patient, including the risks and benefits of each (po-

TABLE 2

Shared decision-making frameworks: Taking it step by step[11,15-17,20-22]

Framework	Elements/steps of framework
Agency for Health Research and Quality SHARE approach[20]	**S**eek your patient's participation
	Help your patient explore and compare treatment options
	Assess your patient's values and preferences
	Reach a decision with your patient
	Evaluate your patient's decision
Price's 4-part activity ("IAIS" mnemonic)[15]	**I**nvite perspectives and concerns
	Acknowledge patient perspectives and concerns
	Instruct the patient about the evidence regarding a specific medical decision
	Summarize a jointly developed plan
Informed Medical Decisions Foundation "6 key steps"[16,22]	1. Invite the patient to participate
	2. Present the options
	3. Provide information on benefits and risks
	4. Assist patients in evaluating options based on their goals and concerns
	5. Facilitate deliberation and decision-making
	6. Assist patients in following through on their decisions
Stiggelbout et al's "4 steps"[17]	1. Inform the patient that a decision is to be made and that the patient's opinion is important.
	2. Explain the pros and cons of each relevant option
	3. Discuss the patient's preferences; support the patient in deliberation
	4. Discuss the patient's decisional role preference, make or defer the decision, and discuss possible follow-up
US Preventive Services Task Force 5 A's[11]	1. **A**ssess patient need/eligibility for SDM and patient's desired role in making decision
	2. **A**dvise; provide balanced information and, if warranted, a recommendation
	3. **A**gree on a course of action, in alignment with patient values and preferences
	4. **A**ssist with pursuing chosen care
	5. **A**rrange follow-up to continue to monitor condition and choice
Three-talk model[21]	Team-talk (work together to describe choices, offer support, ask about goals)
	Option-talk (discuss alternatives using risk communication principles)
	Decision-talk (make preference-based decisions based upon informed preferences)

tentially using one of the decision aids in the following section), to facilitate a values-based discussion and decision.

Patient support and assistance. The clinician assists the patient in navigating next steps based on the treatment decision and arranges necessary follow-up.

Various case studies and examples of SDM conversations have been published.[15-17,24] Video examples of optimal[25] and less than optimal[26] SDM conversations are available on the Massachusetts General Hospital Health Decision Sciences Center website (https://mghdecisionsciences.org/) under the section "Tools & Training >> Videos about Shared Decision-Making."[27]

SDM and motivational interviewing: Both can serve you well

SDM and motivational interviewing share many common elements,[28] and it's useful to take advantage of both techniques.

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Preference-sensitive care situations may require a combination of approaches.

For example, motivational interviewing may be a beneficial tool when dealing with a patient who is initially against colon cancer screening (evidence clearly favors screening in some form over no screening) and has a history of avoiding medical care. Through an SDM approach, motivational interviewing may identify an opportunity to prioritize the patient's preference to minimize medical intervention by ensuring that the patient is familiar with noninvasive colon cancer screening options. After sufficiently eliciting a patient value aligned with screening and engaging the patient's own motivations for follow-through, a more thorough SDM conversation can then help clarify the best options.

A proposed framework for identifying whether SDM or motivational interviewing is appropriate is featured in the **FIGURE.** In their paper, Elwyn et al[29] further define and discuss the distinguishing features and roles of SDM and behavioral support interventions, such as motivational interviewing.

Overall uptake of shared decision-making practices remains low, even in situations such as lung cancer screening, in which SDM is a requirement for reimbursement.

Tools to facilitate SDM conversations

Decision aids

SDM has historically been operationalized for study through the use of decision aids: formally structured materials describing, in detail, the available treatment options under consideration, including the relative risks and benefits. Frequently, such tools are framed from a patient perspective, with digestible information presented in a multimedia format (eg, visual risk representations of "1 out of 10" in an icon array vs "10%"), leveraging effective risk communication strategies (eg, absolute risk rates vs relative risks and "balanced framing"). For instance, the physician would note that 1 out of 10 patients have an outcome and 9 out of 10 do not.

Additional information on risk communication skills is available at the Agency for Healthcare Research and Quality's webpage on the SHARE approach (www.ahrq.gov/health-literacy/professional-training/shared-decision/tool/resource-5.html).[30] Decision aids have been shown to enhance health literacy, increase patient knowledge and understanding, and promote the frequency of "values-concordant" choices.[3]

Point-of-care decision support

A more recent trend in SDM is increased development and use of point-of-care decision support tools that emphasize information reflecting individual patient circumstances (eg, leveraging heart risk calculators to individualize risk conversations when considering statins for primary prevention of heart disease based on lipids and other demographic factors). An advantage to using such tools is that they provide "just-in-time" detailed and personalized evidence-based information, guiding the discussion and minimizing the need for an extensive advance review of each topic by emphasizing the "key facts." To ensure effective use of SDM tools, avoid oversaturating patients with data, maintain a focus on patient values, and engage in a 2-way discussion that considers the unique mix of preferences and circumstances.

Proprietorship of tools and decision aids

Until recently, SDM materials were compiled primarily within not-for-profit entities such as the Informed Medical Decisions Foundation, which became a division of Healthwise in 2014.[2] In recent years, there has been an increasing trend of for-profit companies acquiring or developing their own decision aids and decision-support tools, eg, EBSCO Health (Option Grid[31] and Health Decision[32]) and Wolters Kluwer (EMMI[33]). The extensive work of curating SDM and educational tools to keep up with best medical evidence is costly, and the effort to defray costs can give rise to potential conflicts of interest. Therefore, the interests of the creators of such tools—whether commercial or academic—should always be considered when evaluating the use of a given decision-support tool.

An online listing of publicly available decision aids is maintained by the Ottawa Hospital Research Institute,[34] which reviews decision-aid quality by objective criteria in addition to providing direct links to resources.[35] EBSCO health's DynaMed Decisions also maintains a list of shared decision-making tools (https://decisions.dynamed.com/).

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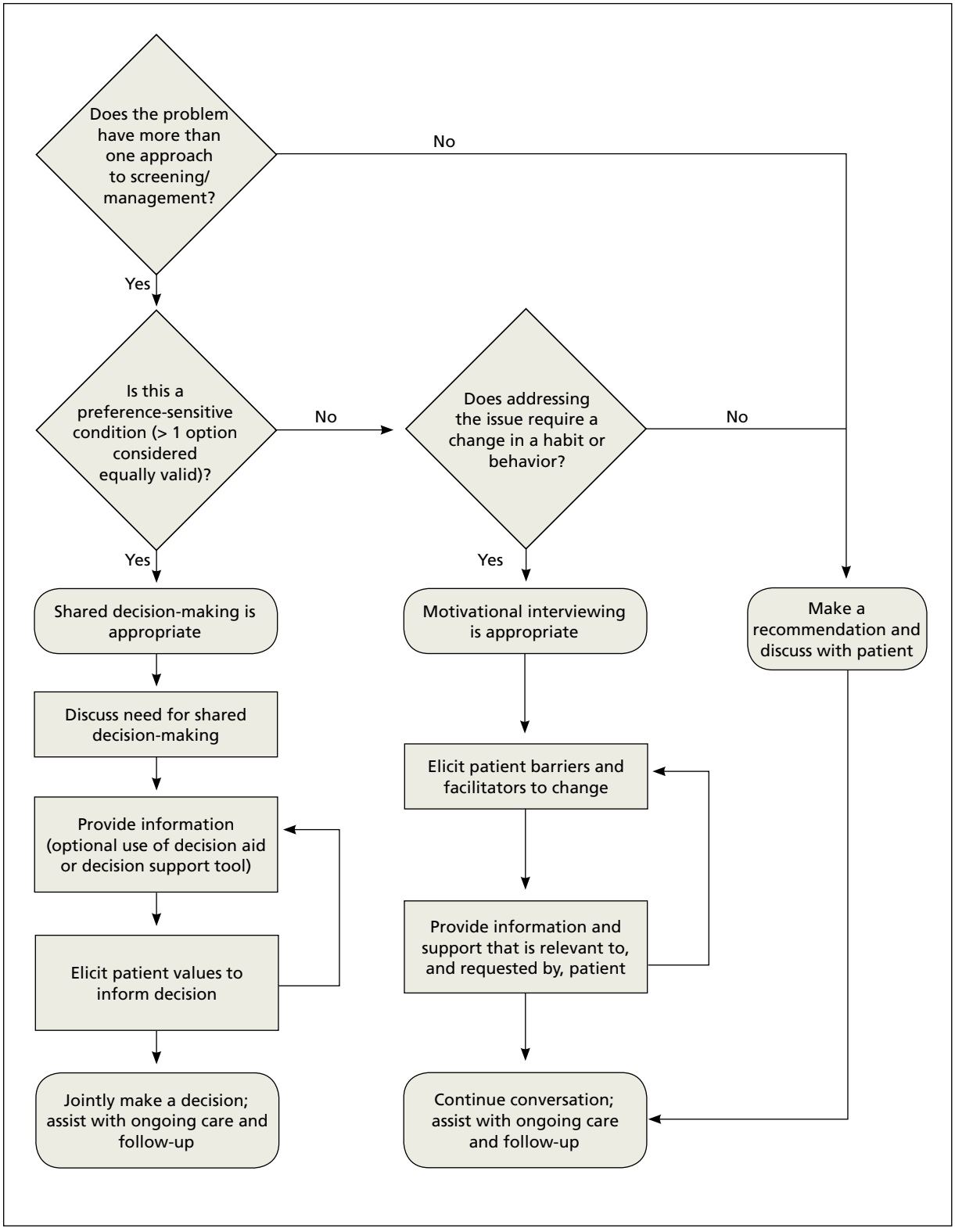
FIGURE

Is it time for shared decision-making or motivational interviewing?



Avoid oversaturating patients with data, maintain a focus on patient values, and engage in a 2-way discussion that considers the unique mix of patient preferences and circumstances.

Effectiveness of decision aids

There is a robust body of research focused on decision aids for SDM. An example is a 2017 Cochrane review that concluded SDM facilitated by decision aids significantly improved patient engagement and satisfaction and increased patient knowledge, accuracy in risk perception, and congruency in making value-aligned care choices. Beyond decision aids, studies show SDM practices increase patient knowledge, engagement, and satisfaction, particularly among low-literacy or disadvantaged groups.[4,36,37]

Barriers to implementation

Clinicians frequently cite time constraints as a barrier to successfully implementing SDM in practice, although studies that explicitly compare the time/cost of SDM to "usual care" are limited.[38] A Cochrane review of 105 studies evaluating the use of decision aids vs usual care found that only 10 studies examined the effects of decision aids on the length of the office visit.[3] Two of these studies (one evaluating decision aids for prenatal diagnostic screening and the other for atrial fibrillation) found a median increase in visit length of 2.6 minutes (24 vs 21; 7.5% increase); the other 8 studies reported no increase in visit length.[3]

Studies focusing on the time impact of using SDM in an office visit, rather than decision aids as a proxy for SDM, are few. A study by Braddock et al[39] assessed the elements of SDM, measuring the quality and the time-efficiency of 141 surgical decision-making interactions between patients and 89 orthopedic surgeons. Researchers found 57% of the discussions had elements of SDM sufficient to meet a "reasonable minimum" standard (eg, nature of the decision, patient's role, patient's preference). These conversations took 20 minutes compared to a median of 16 minutes for a more typical conversation.[39] The study used audiotaped interviews, which were coded and scored based on the presence of SDM elements; treatment choice, outcomes of the choices, and satisfaction were not reported. A separate study by Loh et al[5] looking at SDM in primary care for patients with depression sought to determine whether patient participation in the decision-making process improved treatment adherence, outcomes, and patient satisfaction without increasing consultation time. This study, which included 23 physicians and 405 patients, found improved participation and satisfaction outcomes in the intervention group and no difference in consultation time between the intervention and control groups.[5]

Care costs appear similar

The impact of SDM on cost and patient-centered clinical outcomes is not well defined. One study by Arterburn et al[40] found decision aids and SDM lowered the rates of elective surgery for hip and knee arthritis, as well as associated health system costs. However, other studies suggest this phenomenon likely varies by demographic, demonstrating that certain populations with a generally lower baseline preference for surgery on average chose surgery more often after SDM interventions.[41,42] Evidence does support patient acceptability and efficacy for SDM in longitudinal care when the approach is incorporated into decisions over multiple visits or long-term decisions for chronic conditions.[4] Studies comparing patient groups receiving decision aids to usual care have shown similar or lower overall care costs for the decision-aid group.[3]

Limitations to the evidence

Systematic reviews routinely note substantial heterogeneity in the literature on SDM use, owing to variable definitions of what steps are essential to constitute an SDM intervention and a wide variety of outcome measures used, as well as the broad range of conditions to which SDM is potentially applicable.[3,4,10,36,37,43-45] While efforts in SDM education, uptake, and study frequently adapt frameworks such as those outlined in **TABLE 2**,[11,15-17,20-22] there is as yet no one consensus on the "best" approach to SDM, and explicit study of any given approach is limited.[18,23,36,44-46] There remains a clear need to improve the uptake of existing reporting standards to ensure the future evidence base will be of high quality.[44] In the meantime, a large portion of the impetus for expanding the use of SDM remains based on principles of effective communication and championing a patient-centered philosophy of care.

Cultivating an effective approach

An oft-cited objection to the use of SDM in day-to-day clinical care is that it "takes too much time."[47] Like all excellent communication skills, SDM is best incorporated into a clinician's approach to patient care. With practice, we have found this can be accomplished during routine patient encounters—eg, when providing general counsel, giving advice, providing education, answering questions. Given the interdependent relationship between evidence-based medicine and SDM, particularly in preference-sensitive conditions, SDM skills can facilitate efficient decision-making and patient satisfaction.[48] To that end, clinician training on SDM techniques, especially those that emphasize the 3 core elements, can be particularly beneficial. These broadly applicable skills can be leveraged in an "SDM mindset," even outside traditional preference-sensitive care situations, to enhance clinician–patient rapport, relationship, and satisfaction.

The future of SDM

More than 2 decades after SDM was introduced to clinical care, there remains much to do to improve uptake in primary care settings. An important strategy to increase the successful uptake of SDM for the typical clinician and patient is to emphasize the approach to framing the topic and discussion rather than to overemphasize decision aids.[23] Continuing the trend of well-designed and accessible tools for clinical decision support at the point of care for clinicians, in addition to the sustained evolution of decision aids for patients, should help minimize the need for extensive background knowledge on a topic, increase accessibility, and enable an effective partnership with patients in their health care decisions.[46] Ongoing, well-structured study and the use of common proposed standards in developing these tools and studying SDM implementation will provide long-term quality assurance.[44]

SDM has a role to play in health equity

SDM has a clear role to play in addressing health inequities. Values vary from person to person, and individuals exist along a variety of cultural, community, and other spectra that strongly influence their perception of what is most important to them. Moreover, clinicians' assumptions typically do not correspond to a patient's actual desire to engage in SDM nor to their overall likelihood of choosing any given treatment option.[46] While many clinicians believe patients do not participate in SDM because they simply do not wish to, a systematic review and thematic synthesis by Joseph-Williams et al[46] suggested a great number of patients are instead unable to take part in SDM due to barriers such as a lack of time availability, challenges in the structure of the health care system itself, and factors specific to the clinician–patient interaction such as patients feeling as though they don't have "permission" to participate in SDM.

SDM may improve health equity, adherence, and outcomes in certain groups. For example, SDM has been suggested as a potential means to address disparities in outcomes for populations disproportionately affected by hypertension.[24] The increased implementation of SDM practices, coupled with a genuine partnership between patients and care teams, may improve patient–clinician communication, enhance understanding of patient concerns and goals, and perhaps ultimately increase patient engagement and adherence.

Being the change

Effective framing of medical decisions in the context of best medical evidence and eliciting patient values supports continued evolution in health care delivery. The traditional, physician-directed patriarchal "one-size-fits-all" approach has evolved. Through the continued development and implementation of SDM techniques, the clinician's approach to care will continue to advance.

Ultimately, patients and clinicians both benefit from the use of SDM—the patient benefits from explicit framing of the medical facts most relevant to their decision, and the physician benefits from enhanced knowledge of the patient's values and considerations. When done well, SDM increases the likelihood that patients will receive the best care possible, concordant with their values and

Shared decision-making may reduce disparities in populations disproportionately affected by certain health conditions.

preferences and within the context of their unique circumstances, leading to improved knowledge, adherence, outcomes, and satisfaction. JFP

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When done well, SDM increases the likelihood that patients will receive the best care possible.

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GUEST EDITORIAL

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One of the most critical aspects of shared decision-making is also one of the hardest. As physicians, we need to be comfortable with a patient making a choice that we might not make ourselves. Perhaps we would choose to observe an otitis media in our own afebrile 6-year-old, or maybe we would not opt for semaglutide to treat our own obesity. Patients can have a different set of values and experiences driving their decision-making. The principles of shared decision-making teach us that our training and experience are not the priority in every situation.

In my case, the radiologist may have assumed that because I had gone through all of the testing, I believed that screening did far more good than harm and that I would be back in 6 months. From my point of view, I saw the screening as more of a mixed bag; it was possibly doing good, but at the risk of doing harm with false-positives and the possibility of overdiagnosis. She also may have been pressed for time and not had any available point-of-care tools to help explain her decision-making process. I left without understanding what the evidence was for close-interval follow-up, let alone having a chance to share in the decision-making process.

Shared decision-making and evidence-based medicine are closely connected concepts; the decision rests on the evidence, and the evidence cannot be applied to patients without asking their perspectives.[5] Mackwood et al[4] point out that shared decision-making can be implemented with little to no increase in the time we spend with patients, and at no substantial increase in costs of care.

Shared decision-making is a skill. Like any skill, the more we practice, the more capable we will become with it. And frankly, it doesn't hurt to remember how we've felt when we've been the patient wearing that paper gown. JFP

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