Shared Decision Making: Skill Acquisition for Year III Medical Students

Cathleen E. Morrow, MD; Virginia A. Reed, PhD; M. Scottie Eliassen, MS; Inger Imset

BACKGROUND: A foundation of care within a Patient-centered Medical Home (PCMH) is respect for patients’ values and preferences. Shared decision making (SDM) involves a set of principles and approaches to working with patients that integrates medical information and data with the preferences, values, and support systems of individual patients facing medical decisions. The value of SDM is increasingly evidenced by the incorporation of principles of SDM into the definitions of patient-centered care and PCMHs, accountable care organizations, and the language of the Health Reform Act of 2010.

METHODS: We developed and integrated a curriculum on SDM in the third-year Family Medicine Clerkship at Dartmouth Medical School. The curriculum consisted of a mix of experiential, classroom, and online experiences designed to provide students with opportunities to learn content, practice skills, and share observations from their preceptorships.

RESULTS: Student feedback was an important component of evaluating the SDM curriculum. Themes identified from students’ reflections on their own behavior in a Simulated Patient Encounter included an increase in confidence and competence in their ability to use SDM, while noting the disconnect that may exist between what is taught in the clerkship and what they experience in their preceptorships.

CONCLUSIONS: As this curriculum has developed, we have acquired a deep appreciation of the benefits and challenges of attempting to teach sophisticated communication and decision-making precepts to medical students who are working to master fundamentals of clinical work and who may or may not see such precepts reinforced in practice.

(Fam Med 2011;43(10):721-5.)

Patients are at the center of a Patient-centered Medical Home (PCMH). Key to this focus are respect for patients’ values and preferences and care that engages them as partners. Shared decision making (SDM) involves a set of principles and approaches to working with patients that integrates medical information and data with the preferences, values, and support systems of individuals facing medical decisions. While early work in SDM focused on screening or complex surgical decisions, the value of SDM in primary care practices is increasingly evidenced by the incorporation of principles of SDM into the definitions of patient-centered care and PCMHs, accountable care organizations, and the language of the Health Reform Act of 2010.

As the practice of medicine evolves from a traditionally paternalistic model to one of genuine patient engagement, we are challenged to help medical students develop skills that may not be congruent with the clinical behaviors they regularly witness. Teaching patient-centered SDM skills as an integral component of the core curriculum in the third-year clinical clerkship has not, to our knowledge, been previously undertaken. We believe that doing so enhances developing physicians’ patient-centeredness, advanced communication skills, and the capacity to begin to grasp the complexities of categories of medical care. Central to these qualities is the ability to identify preference-sensitive decisions: those involving treatments that might include tradeoffs affecting a patient’s quality of life—and thus for which the appropriate course of treatment must depend substantially on the patient’s values and preferences.

Methods

In the summer of 2008, through a Health Resources and Services Administration grant, we began development and integration of an SDM curriculum in the third-year Family Medicine Clerkship at Dartmouth Medical School. Students spend the first and last 3 days of the 7-week clerkship on site and the middle 6 weeks in clinical preceptorships throughout the United States. Guided by three family medicine faculty, the SDM curriculum consists of 7.5 hours of experiential, small-group, and online experiences designed to provide students with opportunities to learn content, practice skills, and share observations from their preceptorships.

From the Department of Community and Family Medicine, Dartmouth Medical School (all) and Department of Psychological and Brain Sciences, Dartmouth College (Dr Reed).
Results
Student feedback was an important component of evaluating the SDM curriculum. (The Dartmouth Committee for the Protection of Human Subjects notes that “Activities that do not involve human subjects research, such as quality improvement, program evaluation, and public health activities without a research component,” do not require review.) We collected de-identified student feedback (using questions noted in Table 1) in our Web-based course management software following each discrete learning module. This feedback was used to modify the curriculum each block of the study year.

Students identified the most useful aspects of the pre-preceptorship SDM seminars: (1) defining SDM, (2) learning about use of a specific tool, the Ottawa Personal Decision Guide (OPDG),13 and (3) viewing selected segments of their own and other students’ Simulated Patient Experience (SPE) videos. Students noted that the original SDM seminar was too long and that the role-play used was not as helpful as it might have been, so they were modified accordingly.

Following the SPE, students reviewed their individual videos, reflected on what they had done well, what they would do differently, and what they learned from the SPE and from the video review. Themes identified from these self-evaluations included:

**Students’ use of language indicated both understanding of the concepts of SDM and a change in their own perspectives.**

To share decision making with a patient is to go beyond just giving the information about each option and then leaving it to the patient to decide. I realized how helpful it can be to discuss what the patient likes and dislikes about each option, who else needs to be involved in the decision, and how important each factor is to the patient. This is what the patient would have benefited much more from in this case, and this is the area I would have focused on more. (Student 1)

You can never go wrong with SDM—you leave with a certain confidence that the patient understands the choices he/she made, rather than the ones you impose. (Student 2)

**Students identified the ability to “step outside of themselves” to observe their own behavior.**

I learned how to objectively take a look at my participation in an important junction in a patient’s life. It’s hard to judge myself when I take part in a patient interview, because patients seldom leave with a complaint or feedback. But the SPE really helped me to step back and take a look at the concept of a doctor interviewing a patient about something important to that patient. It helps me to see if I’m respecting that process in the moment and if I’m making the patient feel like he/she is being listened to, and their problems are being addressed.” (Student 3)

**Students gained confidence and competence in the ability to use SDM.**

Helped reinforce the utility of SDM. I thought it also showed me that after 6 weeks in the rotation I was far more confident and competent in engaging a patient in an SDM conversation. I also felt empowered with the necessary medical knowledge to help the patient come to a decision best suited for them. (Student 4)

**Students noted the disconnect that may exist between what is taught in the clerkship and what they experience in their preceptorships.**

More support should be advocated if the department is aware that many practicing docs are indeed not using this model daily. It is difficult for the student to advocate when he/she is being evaluated by the same doctor. (Student 5)

Students identified the most useful elements of the SDM-related SPE experiences as: (1) supporting patient choice, (2) connecting with or achieving rapport with the patient, (3) recognizing their need for more knowledge, skills, and direction, (4) learning about and being “on board” with SDM, and (5) exploring patients’ preferences. Elements of the SPE experience identified as less helpful were not associated with SDM itself.

Assessing students’ SDM skills in a valid and reliable way is an ongoing goal. While we considered assessing student performance on the SPE using a version of the OPTION scale,14-16 a tool found to have acceptable psychometric properties for assessing clinicians’ skills based on multiple encounters, the circumstances under which this tool is useful were not congruent with those of the clerkship. A number of valid and reliable measures of medical student communication exist,17 yet recent work finds that communication skills do not correlate well with SDM skills.18 Given our goal of providing individual students with formative feedback on a single encounter, we created a qualitative tool based on the OPDG13 that provided students with written feedback from trained faculty observers on six individual SDM skills (see Figure 1).

Discussion
Anticipating that the evolution of PCMHs will require physicians well-versed in both the recognition of preference-sensitive decisions and SDM, we have developed and implemented a curriculum to teach the practical application of these skills to third-year clinical clerkship students.
As this curriculum has developed, we have acquired a deep appreciation of the benefits and challenges of attempting to teach sophisticated communication and decision-making precepts to medical students who are working to master fundamentals of clinical work and who may or may not see such precepts reinforced in practice. Learning alongside our students, we are convinced that they are not only capable of such mastery but that the demands of our evolving medical system compel us to teach patient-centered skills throughout

Table 1: Shared Decision Making Curriculum in the Third-year Family Medicine Clerkship

<table>
<thead>
<tr>
<th>Content</th>
<th>Activity</th>
<th>Description</th>
<th>Time</th>
<th>Student Role</th>
<th>Evaluation of Student</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assess SDM knowledge and skills prior to training (attention-focusing strategy)</td>
<td>Pre-training Simulated Patient Experience (SPE). Student enters SPE knowing that encounter is about helping an informed patient with decision making</td>
<td>Students participate in a case: a woman needs to make a decision about which contraceptive method to use. The encounter is video-recorded.</td>
<td>15–20 minutes at start of block</td>
<td>To perceive this is not a contraception knowledge test; review video; complete reflective self-evaluation form; review faculty feedback form</td>
<td>Reflective self-evaluation by student: What did you do well? What could you have done differently? What did you learn? from SPE? From video review? Written feedback by trained faculty (Figure 1)</td>
</tr>
<tr>
<td>Provide information regarding SDM knowledge and skills</td>
<td>Seminar presentation: Introduction to SDM: history, reasoning, SDM components, role of decision aids, role and future of SDM</td>
<td>Interactive session guided by course director and Center for SDM faculty (includes Ottawa Personal Decision Guide)</td>
<td>1.5 hours at start of block</td>
<td>Complete the Ottawa Personal Decision Guide; participate in discussion; complete written evaluation of session</td>
<td>N/A</td>
</tr>
<tr>
<td>Review SDM knowledge and skills</td>
<td>Discussion and review of SPE and implications. One day after each SPE, faculty and students review portions of each student’s SPE video clip for SDM components</td>
<td>Faculty-facilitated review of portions (1–2 minute clips) of SPE videos; faculty unscripted</td>
<td>1.5 hours twice per block, in weeks 1, 7</td>
<td>To perceive this is not a knowledge test; actively participate in discussion and reflecting; complete written evaluation of session</td>
<td>Faculty and peer observation/group discussion and feedback</td>
</tr>
<tr>
<td>Practice applying SDM knowledge and skills</td>
<td>Role play: students receive scenario and role as “physician” or “patient.” Both parties receive related decision aids and “physician” attempts to use SDM knowledge and skills to assist patient in decision-making process</td>
<td>Topics: knee osteoarthritis, infant feeding, colon cancer screening, breast cancer screening</td>
<td>30 minutes twice per block, in weeks 1, 7</td>
<td>Play “physician” and “patient” roles in pairs utilizing decision aids; complete written evaluation of session</td>
<td>Student reflection/group discussion/peer feedback</td>
</tr>
<tr>
<td>Integrate SDM knowledge and learned skills in preceptorship</td>
<td>Videoconferences: Students are dispersed at clerkship sites; they report their actual experiences related to SDM and other topics</td>
<td>Case presentations by students with reference to SDM issues</td>
<td>Discussion in 2-hour videoconference three times per block in weeks 2, 3, 5</td>
<td>Discuss SDM related to case and SDM experiences in preceptorships; complete written evaluation of session</td>
<td>N/A</td>
</tr>
</tbody>
</table>
clinical training. The work of learning SDM skills invariably leads students to important questions about diverse yet critical topics such as patient autonomy, physician responsibility, power balance in doctor-patient relationships, and patient adherence. These “ripples” of the work resonate for students and faculty substantially beyond the basics of learning SDM skills into areas that are crucial in the evolution of our medical care system and our PCMHs.

**ACKNOWLEDGMENTS:** The authors receive financial support from the Health Resources and Services Administration of the US Department of Health and Human Services Pre-Doc toral Training in Primary Care, 2008-2011, # D56HP10311, Department of Health and Human Services, Health Resources and Services Administration. Reports of this work have been presented at: Workshop presented at the 2010 Society of Teachers of Family Medicine (STFM) Predoctoral Education Conference, Jacksonville, FL; seminar presented at the 2010 STFM Annual Spring Conference, Vancouver, BC; workshop presented at the 2010 American Academy of Communication in Healthcare Research and Teaching Forum, Scottsdale, AZ; workshop presented at the 2011 STFM Conference on Medical Student Education, Houston, TX; and seminar presented at the 2011 STFM Annual Spring Conference, New Orleans. We thank Katherine Clay, MA, RN, and staff of the Center for Shared Decision Making at Dartmouth-Hitchcock Medical Center for teaching seminars and observing simulated patient experiences, The Patient Safety Training Center at Dartmouth-Hitchcock Medical Center for hosting and staffing simulated patient experiences, and Nan Cochran, MD, for advice and educational materials.

**CORRESPONDING AUTHOR:** Address correspondence to Dr Reed, HB 7016, 46 Centerra Parkway, Suite 330, Lebanon, NH 03755. 603-653-3449. Fax: 603-653-3452. virginia.a.reed@dartmouth.edu.

**References**


**Table 1: Continued**

<table>
<thead>
<tr>
<th>Content</th>
<th>Activity</th>
<th>Description</th>
<th>Time</th>
<th>Student Role</th>
<th>Evaluation of Student</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrate SDM knowledge and skills in safe learning environment</td>
<td>Online discussion forums: Students and faculty interact in a non-scripted written discussion about a fictional case involving a family and respond to the patient issues.</td>
<td>Faculty-facilitated online discussions of complex family and medical cases that include SDM</td>
<td>Five days of intermittent interaction in discussion forum, twice a block, in weeks 2, 4</td>
<td>Engage in electronic discussion that includes ideas for application of SDM in patient management; complete written evaluation of session</td>
<td>Faculty feedback within discussion forum</td>
</tr>
<tr>
<td>Post-training assessment of SDM knowledge and skills</td>
<td>Post-training Simulated Patient Experience (SPE): Student enters SPE knowing the encounter is about helping an informed patient with decision making</td>
<td>Students participate in a case: a patient with borderline hyperlipidemia needs to make a decision about treatment. The encounter is video-recorded.</td>
<td>35–40 minutes at end of block</td>
<td>To perceive this is a preference-sensitive decision; review video; complete reflective self-evaluation form; review faculty feedback form</td>
<td>Reflective self-evaluation by student: What did you do well? What could you have done differently? What did you learn? From SPE? From video review? Written feedback by trained faculty (Figure 1)</td>
</tr>
</tbody>
</table>
Figure 1: Simulated Patient Experience Feedback

Dartmouth Medical School – Family Medicine Clerkship
Simulated Patient Experience Feedback

Student: __________________________ Observer: _______ SP: _____ Date: ________

**IDENTIFY DECISIONAL CONFLICT**
- [ ] not done
- [ ] needs major practice
- [ ] needs practice
- [ ] done well

Comments: __________________________

**PROBE FOR RELATED DEFICITS IN KNOWLEDGE**
- [ ] not done
- [ ] needs major practice
- [ ] needs practice
- [ ] done well

Comments: __________________________

**PROBE FOR RELATED DEFICITS IN VALUES CLARITY**
- [ ] not done
- [ ] needs major practice
- [ ] needs practice
- [ ] done well

Comments: __________________________

**PROBE FOR RELATED DEFICITS IN SUPPORT/RESOURCES**
- [ ] not done
- [ ] needs major practice
- [ ] needs practice
- [ ] done well

Comments: __________________________

**EVALUATION/IMPLEMENTATION OF DECISION**
- [ ] not done
- [ ] needs major practice
- [ ] needs practice
- [ ] done well

Comments: __________________________

**USE OF SHARED DECISION MAKING TOOL**
- [ ] n/a
- [ ] not done
- [ ] needs major practice
- [ ] needs practice
- [ ] done well

Comments: __________________________

**ADDITIONAL COMMENTS**

Comments: __________________________

---
