



Shared Decisionmaking To Improve Patient Safety, Education, and Empowerment

Executive Summary

James Madison University (JMU) in Harrisonburg, Virginia, has more than 5,000 student visits each year for uncomplicated acute respiratory tract infections (RTIs). Therefore, the leadership at the Student Health Center wanted to better support students and clinicians in sharing decisions about using antibiotics to treat this condition. Their goal was to provide better, safer, and more effective health care to the student population by further integrating evidence-based practice on antibiotic prescribing for RTIs.¹

To achieve their goal, a nursing leader and practice champion examined the literature to explore best practices in reducing antibiotic use through shared decisionmaking. The search led to the comparison of multiple models of shared decisionmaking. They selected the SHARE Approach from the Agency for Healthcare Research and Quality as their shared decisionmaking model.²

The pilot study of their initial implementation was completed in May 2016. The clinic demonstrated a decrease in patient decisional conflict with the appropriate use of antibiotics, maintenance of their already low prescribing rates, and enhanced patient engagement on antibiotic use.

Evidence Rating

Strong: The evidence linking approaches for shared decisionmaking to improved patient outcomes and patient safety consists of systematic reviews, randomized clinical control studies, and well-designed multicentered quasi-experimental evaluations.^{1,3-7} Health care quality and patient safety are enhanced with shared decisionmaking.

Use by Other Organizations

To date, almost 800 people from across the United States have received training in the SHARE Approach. These individuals represent organizations that include medical schools, academic medical centers, nursing homes, hospitals, and primary care practices, as well as practice facilitators.

The SHARE Approach has been embedded into the medical school curriculum of the University of Central Florida and has been integrated as part of the Rhode Island Primary Care Transformation Collaborative.

SHARE Approach resources are available on the AHRQ Web site (<http://www.ahrq.gov/professionals/education/curriculum-tools/shareddecisionmaking/index.html>).

Date First Implemented

JMU program development began in 2014, and the official pilot was initiated in August 2015.

Case Study

Problem Addressed

In many health care situations, there is not necessarily a “correct” decision. Often, multiple options are available, such as testing or treatment, where risks and expected outcomes must be balanced with patient values and preferences. However, patients do not always understand

their options or even realize they have options, which can lead to confusion about the care plan or to selection of a suboptimal care plan.

- **Lack of patient engagement affects patient outcomes.** Engaging patients in their care is the cornerstone of health reform. Patients who do not understand or accept that they have an important role working with their provider to maximize their health



are less prepared for provider visits than patients who are engaged.⁸ Lack of active partnership between patients and providers may lead to less than ideal health outcomes, unmet medical needs, and delayed medical care.⁸ Low patient engagement is also linked with increased medical costs and fewer preventive behaviors compared with patients with high levels of activation and engagement.⁹

- **Communication breakdowns are a leading source of medical error.** Ineffective communication between patients and providers leads to poor patient outcomes due to poor adherence and overuse or underuse of important treatments. It also may reduce patient safety.^{10–12}
- **Limited understanding of diagnosis and treatment affects care.** Limited understanding of the health condition for which the patient is treated may lead to less than optimal outcomes. Conversely, when patients understand their condition and treatment, they are more likely to comply with the care plan.^{13–16}

Description of the Innovative Activity

The James Madison University (JMU) Student Health Center has more than 30,000 visits per year, and more than 5,000 of those visits are for uncomplicated acute respiratory tract infections (RTIs). While the JMU health center already had low antibiotic prescribing rates for uncomplicated RTIs, the clinical teams were routinely challenged by patients (and sometimes by their parents) to prescribe antibiotics. When antibiotics were not prescribed, students often went directly from the Student Health Center to a local urgent care facility to get antibiotics.

Shared decisionmaking is one approach that has been demonstrated to be effective in engaging patients in their own care and making care safer. In shared decisionmaking, the patient and the clinician share information, participate in the decisionmaking process, and agree on the best strategy for treatment.¹⁷ The JMU Student Health Center embarked on a program to implement shared decisionmaking within the practice. Their goals were to increase decisional comfort with the appropriate use of antibiotics, maintain or decrease currently low prescribing rates, and better inform their patients about the risks and potentially limited benefits. According to JMU's Associate

Director of Clinical Operations, “*We knew that if we could increase the students’ understanding and then decrease their use of antibiotics, they would be safer.*”

After evaluating several tools for shared decisionmaking, the JMU Student Health Center decided to implement the SHARE Approach from the Agency of Healthcare Research and Quality (AHRQ). The SHARE Approach is a process for shared decisionmaking that includes exploring and comparing the benefits and risks of each option within a clinical decision through meaningful conversations about what matters most to the patient.² This includes careful attention to the patient and his or her family members’ values, beliefs, and preferences, as well as contextual factors that may influence a patient’s ability to follow through with the care plan.

At JMU, the focus was on:

- **Use of shared decisionmaking and a decision aid on antibiotic use with respiratory tract infections.** Patient decision aids are tools that help patients and their family members become more involved in health decisions. Decision aids provide information about risks and benefits of alternative treatments (including the decision not to treat), take into account personal values and preferences, and encourage dialogue between the patient and clinician.¹⁶ JMU chose to use a decision aid for antibiotic prescribing for RTIs, *Taking an Antibiotic or Not? Acute Respiratory Tract Infections (ARIs): A Diagnostic Decision Support Tool*, to support clinicians in their adoption of shared decisionmaking.⁵
- **Use of teach-back.** Teach-back is an evidence-based health literacy tool that promotes patient engagement, patient safety, adherence, and quality. The goal of teach-back is to ensure that medical information is explained clearly so that patients and their families understand what has been communicated to them. In teach-back, the provider asks patients or family members to explain in their own words what they need to know or do. It is more than repeating what they heard—they teach it back. The associate director of the health center explained how critical this is for JMU’s patient population. “*Our patients go straight to their phones to call their parents when they leave our office. Teach-back helps us confirm that they really did understand what we told them, and they can explain it to their parents.*”

Context of the Innovation

The Student Health Center at James Madison University in Harrisonburg, Virginia, serves a student population of more than 21,000 undergraduate and graduate students. The health center's four full time physicians, three nurse practitioners, and one physician assistant handle more than 30,000 clinic visits annually. They are supported by several part-time physician and nurse providers as well as specialists in nutrition, pharmacy, radiology, and educational outreach.

Impact

The team at JMU's Student Health Center is currently conducting a mixed-methods research study examining the impact of the SHARE Approach implementation on antibiotic prescribing. While preliminary, the findings suggest that adoption of the SHARE Approach has resulted in a reduction in antibiotic prescribing for uncomplicated RTIs. (The study is currently in the analysis phase prior to publication.)

The team reported outcomes that include:

- **Reduced rate of antibiotic prescribing for RTIs.** The Student Health Center reported a reduction in their already low rate of antibiotic prescribing after implementing teach-back and a comprehensive decision aid on antibiotic prescribing for RTIs (personal correspondence, K. Blyer; publication pending).
- **Reduced decisional conflict.** The JMU team was able to reduce patients' decisional conflict with the decision not to use antibiotics for RTIs.
- **Improved patient engagement in decisionmaking.** JMU's team reports that students and providers engage together in decisionmaking. The associate director of the health center emphasized the importance of this practice. *"We are an academic campus. We want to prepare our students to be educated citizens—people who know how to interact with the health care system and who understand appropriate use of health care resources."*
- **Improved patient-provider communication through use of decision aids.** The Student Health Center found that students and providers agreed that the decision aid on antibiotic use for RTIs supported their decisionmaking. Clinicians within the practice are seeking an electronic version of the decision aid to facilitate engagement of this patient population.

- **Importance of teach-back as a component of the shared decisionmaking process.** JMU trained all Student Health Center staff and clinicians on teach-back as part of their SHARE Approach implementation.
- **No need for additional time to use SHARE Approach during a visit.** The implementation of the SHARE Approach at JMU did not add time to the appointment, and no significant scheduling changes were needed. This finding was due largely to preparation and willingness of staff to modify their standard approach to appointments. This finding is similar to other published research studies.¹⁶

The use of the SHARE Approach has been very well received by both the practice and the students. The now retired medical director of the practice stated, *"I wish I had another 20 years to practice this way."*

Evidence Rating

Strong: The evidence linking approaches for shared decisionmaking to improved patient outcomes and patient safety consists of systematic reviews, randomized clinical control studies, and well-designed multicentered quasi-experimental evaluations.^{1,3-7} Health care quality and patient safety are enhanced with shared decisionmaking.

Planning and Development Process

AHRQ provides guidance and tools for implementing the SHARE Approach (<http://www.ahrq.gov/professionals/education/curriculum-tools/shareddecisionmaking/index.html>). At the JMU health center, important decisions in the planning and development process included:

- **Selecting a common problem as a pilot.** JMU decided to explore ways of reducing their already low antibiotic prescribing rate for RTIs through shared decisionmaking. This clinical problem was selected because it is a high-volume clinical indication (approximately 17% of all visits annually). Providers were concerned that they would end up providing more antibiotics if they engaged patients in the decisionmaking. This, however, was not the case.
- **Selecting the shared decisionmaking model.** The JMU team led by Kristina Blyer conducted an exhaustive search of the literature to identify optimal approaches to shared decisionmaking for antibiotic

stewardship in college students.⁴ This process resulted in the identification and selection of the SHARE Approach.

- **Selecting a decision aid.** The team reviewed decision aids from the Ottawa Hospital Research Institute (<https://decisionaid.ohri.ca/decguide.html>) and other organizations to support antibiotic stewardship. They selected To Take Antibiotics or Not? Acute Respiratory Tract Infections (ARIs): A Diagnostic Decision Support Tool (<https://decisionaid.ohri.ca/AZsumm.php?ID=1618>) and made slight modifications to customize to their patients and providers.⁵ (Additional decision aids may be found at: <http://effectivehealthcare.ahrq.gov/index.cfm/tools-and-resources/patient-decision-aids/>.)
- **Deciding how to train team members.** JMU decided to develop training videos that could be viewed by team members asynchronously. More than 30 team members participated in training, and JMU believes the high participation was due to the availability of the videos. In addition, JMU recruited student volunteers to play the role of a sick patient to give team members an opportunity to practice shared decisionmaking and teach-back skills.

Resources Used and Skills Needed

- **Staffing:** No additional staffing resources were needed to adopt the SHARE Approach.
- **Costs:** The costs incurred included time for one staff member to attend a SHARE Approach 1-day train-the-trainer workshop, time to develop and plan the implementation, support to develop additional locally relevant training materials (e.g., training videos), time for providers to train in and practice the new skills, and modest costs associated with printing materials.
- **Infrastructure:** Electronic tablets were purchased to support the shared decisionmaking process. No other infrastructure changes were required.

Funding Sources

The implementation of the SHARE Approach was supported by the JMU Student Health Center. The practice also received a grant of \$7,000 from the university to support implementation. Funds were used to provide

electronic tablets for the patient rooms so that providers could use 3D images and videos to support shared decisionmaking activities. The tablets also helped to engage providers and support buy-in. Remaining funds were used to support instructional materials (e.g., creation of a series of training videos) and printing of decision aids in color.

Getting Started With This Innovation

- **Identify your approach and make a plan.** Before adopting shared decisionmaking, do your homework. Many models of shared decisionmaking exist, and many are publicly available.
- **Make the case to your team.** With increasing demands on the time of primary care clinicians and practice staff, it is important to obtain support from institutional stakeholders. Make sure stakeholders understand the benefits of shared decisionmaking and the resulting increased patient engagement and safety. In addition, collaborate with team members on implementation planning to increase acceptance by providers and frontline staff.
- **Choose one or two target problems to focus on.** Identify one or two clinical problems that are most prevalent among the patients you serve (e.g., respiratory tract infections). Build the initial implementation and evaluation planning around these clinical problems. This will allow you to select one or two decision aids to support your conversations with patients and family members, become comfortable with them, and observe changes over time. When the first decision aids are commonly and comfortably being used, you can address additional clinical problems with additional decision aids.
- **Train the team.** Train the team in shared decisionmaking, teach-back, and specific decision aids being used. Include practice sessions and role playing to help team members acquire this new skill.

Once the decision to use the SHARE Approach was made at the JMU Student Health Center, the selection of a specific decision aid, development, and training took approximately 12 months.

Sustaining This Innovation

The JMU Student Health Center is currently planning to adopt additional decision aids to sustain the work. In addition, they are creating a self-care program for students using some of the tools and tactics of the SHARE Approach to help students take ownership of their health. The providers have also requested an electronic version of the antibiotic decision aid that they can use on their electronic tablet to further support patient engagement. This request is under consideration.

Use by Other Organizations

To date, almost 800 people from across the United States have received training in the SHARE Approach. These individuals represent organizations that include medical schools, academic medical centers, nursing homes, hospitals, and primary care practices, as well as practice facilitators. The SHARE Approach has been embedded into the medical school curriculum of the University of Central Florida and has been integrated as part of the Rhode Island Primary Care Transformation Collaborative. SHARE Approach resources are available on the AHRQ Web site (<http://www.ahrq.gov/professionals/education/curriculum-tools/shareddecisionmaking/index.html>).

Contact the Innovator

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