

# Orthopaedic Healthcare Worldwide

## Orthopaedic Healthcare Worldwide: Shared Medical Decision Making in Orthopaedics

Kevin J. Bozic MD, MBA

**D**uring a recent lecture on the implications of healthcare reform for the field of

*Note from Editor-in-Chief: We are pleased to present to readers of Clinical Orthopaedics and Related Research® the latest Orthopaedic Healthcare Worldwide column. This section explores the political, social, and economic issues associated with delivering musculoskeletal care in the many environments in which our specialty is practiced, both in the US and around the world. We welcome reader feedback on all of our columns and articles; please send your comments to eic@clinOrthop.org.*

The author certifies that he, or a member of his immediate family, has no funding or commercial associations (eg, consultancies, stock ownership, equity interest, patent/licensing arrangements, etc) that might pose a conflict of interest in connection with the submitted article.

All ICMJE Conflict of Interest Forms for authors and *Clinical Orthopaedics and Related Research* editors and board members are on file with the publication and can be viewed on request.

The opinions expressed are those of the writers, and do not reflect the opinion or policy of *CORR*® or the Association of Bone and Joint Surgeons®.

K. J. Bozic MD, MBA (✉)

Department of Orthopaedic Surgery,  
Harvard Business School, Philip R.  
Lee Institute for Health Policy Studies,  
University of California, San Francisco,  
500 Parnassus Avenue, MU320W,  
San Francisco, CA 94143, USA  
e-mail: bozick@orthosurg.ucsf.edu

orthopaedic surgery, I asked a group of surgeons how many of them currently engage in shared medical decision making (SDM) with their patients. Nearly 100% of hands went up. While this is certainly an admirable goal, most physicians have a limited understanding of the principles and goals of true shared medical decision making, and many of us lack the training and expertise required to regularly incorporate patient preferences and values into our clinical decision making.

The Informed Medical Decisions Foundation (IMDF) defines SDM as “a collaborative process that allows patients and their providers to make health care decisions together, taking into account the best scientific evidence available, as well as the patient’s values and preferences” [4]. The IMDF goes on to explain, “SDM honors both the provider’s expert knowledge and the patient’s right to be fully informed of all care options and the potential harms and benefits. This process provides patients with the support they need to make the best individualized care decisions, while allowing providers to feel confident in the care they prescribe.”

SDM is particularly relevant in the management of “preference-sensitive conditions.” These are conditions where no single treatment option clearly

dominates from the standpoint of safety and efficacy, and therefore treatment decisions require a deeper understanding of a patient’s values, needs, desires, and lifestyle. By definition, many musculoskeletal disorders are preference-sensitive conditions. The Dartmouth Atlas [6] has documented wide geographic variation in practice patterns for the treatment of certain preference-sensitive musculoskeletal conditions, such as low back pain, spinal stenosis, and osteoarthritis of the hip or knee. Although some of this variation may be appropriate, much of the variation cannot be explained by differences in disease prevalence or patient characteristics alone. Geographic variation in practice patterns is expected in the management of preference-sensitive conditions, since no single treatment option is most appropriate for any given condition. However, when variability does exist, it should be driven by patient, not provider preferences.

Many tools are available for practitioners to facilitate shared medical decision making. These tools can be broadly categorized into decision aids and communication aids. Decision aids (DAs) are print, video, or web-based tools that inform patients about their treatment options and lead them through critical reflection that will help them express their values and preferences. An important feature of DAs is

# Orthopaedic Healthcare Worldwide

that unlike many of the patient education materials that are distributed and posted on websites by orthopaedic practices, DAs provide a thorough and balanced overview of the pros, cons, risks, and benefits of operative and nonoperative treatment options. DAs have been shown to be associated with increased patient knowledge about their disease and reduced patient uncertainty about which treatment option best meets their needs [5]. Numerous very useful DAs related to musculoskeletal conditions are available from organizations such as IMDF, Healthwise and Health Dialog, and the International Patient Decision Aid Standards Collaboration (IPDAS), among others.

Communication aids (CAs) include question lists and audio recordings and summaries of patient-physician interactions. Question lists can be developed using online and mobile app tools [1, 3], or with the assistance of a health coach. Developing a list of relevant questions and concerns before meeting with their physician gives patients the opportunity to contemplate the impact of their condition on their overall health, and has been shown to be associated with a better overall experience from the perspectives of the patient and the physician. Audio recordings and summaries enhance information recall and allow patients to debrief and consider their treatment options and medical decisions with family members and

caretakers in a less time-pressured environment, outside the office setting.

Despite the widely reported benefits of SDM tools, there are few examples where they have been routinely incorporated into orthopaedic practice. There are numerous reasons for this, including a lack of training and expertise, time and resource limitations, the fee-for-service payment system (which strongly incentivizes surgical interventions over nonoperative management), and the misconception among many physicians that “we already do this”. As a result, healthcare insurers and large, self-insured employers have experimented with offering SDM tools to their patients, in some cases as a precondition for seeing a specialist, such as an orthopaedic surgeon. The presumption is that specialists are biased toward more invasive treatment options, and that providing patients with objective, balanced information about the pros and cons of operative and nonoperative treatment options will somehow offset those biases. However, it is widely known that patients trust their physician far more than they trust their insurer or their employer. Therefore, for SDM tools to achieve their maximum benefit, they must be embraced by the physician community and incorporated into routine clinical practice.

Although some authors have shown that patients who participate in SDM are more likely to choose less-invasive

(eg, nonsurgical) treatment options [5], this is not always the case. In fact, in a large study by the Group Health Cooperative of Washington, investigators found that among patients with “prevalent osteoarthritis” of the hip or knee who were considered “better surgical candidates,” the patients who received decision aids were much more likely to choose operative treatment than those who did not [2]. Therefore, SDM tools are likely to sway marginal surgical candidates (who are less likely to benefit from surgery) toward nonoperative management and appropriate surgical candidates toward surgical treatment, which benefits all healthcare stakeholders, including insurers, providers, and most importantly, patients.

With a better understanding of the principles, goals, and benefits of SDM, and simpler, more convenient and effective implementation tools, it is my hope that SDM will become the standard of care rather than the exception in orthopaedic practice.

## References

1. Agency for Healthcare Research and Quality (AHRQ). Question Builder. 2012. Available at: <http://www.ahrq.gov/questions/qb/>. Accessed January 10, 2013.
2. Arterburn D, Wellman R, Westbrook E, Rutter C, Ross T, McCulloch D,

# Orthopaedic Healthcare Worldwide

- Handley M, Jung C. Introducing decision aids at Group Health was linked to sharply lower hip and knee surgery rates and costs. *Health Aff (Millwood)*. 2012;31:2094–2104.
3. Avva. Avvahealth. 2012. Available at: <http://www.avvahealth.com/?m=t>. Accessed January 10, 2013.
  4. Informed Medical Decisions Foundation. Informed Medical Decisions. Available at: <http://www.informedmedicaldecisions.org/>. Accessed July 6, 2009.
  5. Stacey D, Bennett CL, Barry MJ, Col NF, Eden KB, Holmes-Rovner M, Llewellyn-Thomas H, Lyddiatt A, Legare F, Thomson R. Decision aids for people facing health treatment or screening decisions. *Cochrane Database Syst Rev*. 2011:CD001431.
  6. The Dartmouth Institute for Health Policy & Clinical Practice. The Dartmouth Atlas of Health Care. Available at: <http://www.dartmouthatlas.org/>. Accessed January 10, 2013.