

# Dr. Bozic: Giving Surgeons a Say in Health Policy Decisions

## OREF-supported studies focused on influencing health care economics reap real rewards for hospitals, clinicians, patients, and payers

### Research Summary

**Kevin J. Bozic, M.D., M.B.A.**

2006 Clinical Research Award recipient



**Kevin J. Bozic, M.D. stands next to an X-ray of an arthritic knee before knee replacement.**

### Topic:

Using clinical and economic outcome data to influence U.S. health policy.

### Result:

New, more descriptive ICD-9 diagnosis and procedure codes have been adopted and DRG code 209 has been split into two separate codes for primary and revision total joint surgeries.

### Potential Patient Care Application of Results:

More effective public health initiatives aimed at quality care improvements and reduced revision rates. Reduced financial losses for hospitals performing substantial numbers of revision procedures, leading to greater access to care, higher quality of care, and improved clinical outcomes for patients who require revision knee and hip replacements.

Every day, public policy decisions handed down by health policy-makers affect the treatment choices that orthopaedic surgeons make. But how many clinicians have been consulted?

Since 2003, **Kevin J. Bozic, M.D., M.B.A.**, assistant professor in residence, department of orthopaedic surgery and the Institute for Health Policy Studies at the University of California, San Francisco (UCSF), has been leading an investigation of the relationship between economics, health policy, and the practice of orthopaedic surgery. The results show there is much to be gained when orthopaedic surgeons bring their knowledge and clinical experience to bear on the policy-making process.

"I wanted to create a dialogue between orthopaedic surgeons and government payers, like Medicare, regarding the costs associated with total joint replacement procedures," Dr. Bozic said. "Discrepancies between resource use and reimbursement discourage some hospitals and surgeons from doing these procedures, affecting both the quality of care delivered and patient access to care."

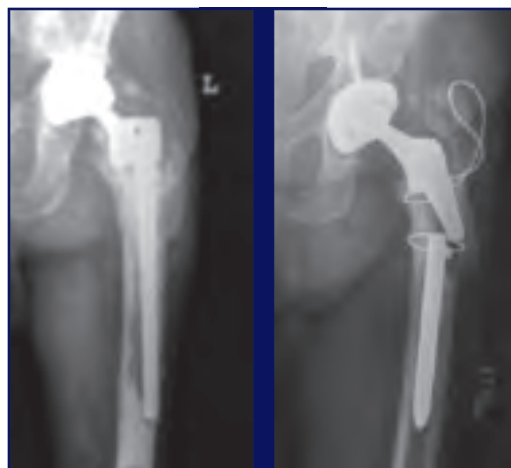
Dr. Bozic gathered detailed clinical and financial data at the patient level from three high-volume institutions: Massachusetts General, Mayo Clinic, and UCSF. An analysis of the data led to a better understanding of the actual costs associated with joint replacement procedures, the first step in opening lines of communication between orthopaedic surgeons and government payers. "This was data that Medicare and other large payers didn't have," Dr. Bozic said.

Building a case was one thing. Getting heard by the Center for Medicare and Medicaid Services (CMS) was another.

"A lot of people come to CMS with a hidden agenda. We came to them and said, 'We're interested in quality and access to care for our patients,' and they said, 'Yeah, we've heard that

story before from a lot of doctors and it always leads to some discussion about physician reimbursement.' Once they understood that we really had good intentions — and once they looked at some of the data — they were very receptive. In fact, they are starving for input from clinicians but few want to take an active role. It's easy to feel disempowered in such a large bureaucratic organization. I just continued in my very idealistic way to think that eventually they would listen to us."

In October 2004, Dr. Bozic presented data to CMS and the National Center for Healthcare Statistics at the ICD-9 Care and Coordination meeting in support of a recommendation for more descriptive ICD-9-CM diagnosis and procedure codes — codes that allow doctors and hospitals to report medical services and



**Under the previous ICD-9-CM coding system, both of these failed total hip replacement procedures would have been coded the same (mechanical failure of an internal orthopaedic device). Under the revised coding system, these two cases would have distinct codes to indicate the type and cause of failure. The new codes related to revision Total Joint Replacement (TJR) will allow policy-makers and researchers to evaluate the type and cause of TJR failure using administrative claims data.**



**Members of the AAOS/AHKS leadership team, led by Dr. Bozic, who presented to the CMS DRG Advisory Committee in Feb. 2005. (from left): Brian S. Parsley, M.D., Baylor College of Medicine; David G. Lewallen, M.D., Mayo Clinic; Robert Fine, J.D., director, AAOS Department of Socioeconomic and State Society Affairs; Kevin J. Bozic, M.D., M.B.A., University of California, San Francisco (UCSF); William J. Maloney, M.D., Stanford University; James M. Naessens, M.P.H., Mayo Clinic; James H. Herndon, M.D., M.B.A., Harvard Medical School; William L. Healy, M.D., Lahey Clinic; and Richard F. Santore, M.D., UCSF.**

procedures in uniform language that provides accurate information to government and private payers.

In February 2005, Dr. Bozic and his research team were asked to share the data with the Medicare Diagnosis-related Group (DRG) Advisory Committee, the organization within the U.S. Department of Health and Human Services that is involved in reimbursement decisions. In that meeting Dr. Bozic recommended splitting diagnosis-related group (DRG) code 209, major arthroplasty procedures of the lower extremity, into two separate codes, one for primary joint replacement procedures, and another for the more resource intensive revision joint replacement procedures. This would help accomplish a primary goal of the Medicare Inpatient Prospective Payment System,

which is to more closely match hospital reimbursement to the actual resources required to treat patients. Given the significant increase in lower extremity joint replacement procedures that has occurred in the Medicare population over the past two decades, DRG 209 is currently the largest dollar volume DRG in the Medicare system.

Much to his delight, both the ICD-9 and DRG code changes that Dr. Bozic and his team recommended were accepted and implemented by CMS in October 2005.

"I had a 5-year plan. I hoped to bring some data forward to develop a model that would be helpful in public policy-making. I had no idea that within two to three years there would be a major public policy decision made based on this work that would benefit

a significant portion of the hospitals and surgeons performing these procedures around the country. The project was successful beyond my wildest dreams."

However, much remains to be done. With support from the **OREF 2006 Career Development Award**, funded by the **Dr. Dane and Mrs. Mary Louise Miller Endowment Fund**, Dr. Bozic is pressing on.

"We are now using data from the more detailed, descriptive administrative claims codes to evaluate the resource intensity and overall cost-effectiveness of orthopaedic technologies and procedures. Our goal is to give surgeons, patients, hospitals, and policy-makers more objective data on which to base their decisions about the use of new technologies in clinical practice."

Dr. Bozic says there is an urgent need for this type of research, and the funding to make it possible.

"Health care delivery in the United States is really in a crisis. We now have far better interventions and better technology than we can afford. It's very important for the future of our profession that we understand which technologies we should be investing in, and how specific procedures influence patients' quality of life from a clinical perspective."

The alternative, Dr. Bozic says, is for orthopaedic surgeons to live by decisions made for them.

**"Decisions that have a major impact on the practice of orthopaedics are often made by policy-makers behind closed doors, without input or involvement from orthopaedic surgeons. We need more research that brings relevant clinical knowledge, objective data, and hard science to inform those decisions. It's very important for the orthopaedic community, our patients, and the future of health care delivery." ■**