Zimmer Biomet recently acquired RespondWell, developer of a telerehabilitation technology designed to provide personalized, clinician-supervised physical therapy for post-surgery patients in their own homes. It’s the latest addition to the company’s Zimmer Biomet Signature Solutions offering, a multifaceted expansion of its long-standing hospital consulting business. Going forward, says Joe Tomaro, who leads the go-to-market strategy for Signature Solutions, Zimmer Biomet will be well-positioned to serve the demands placed on its hospital customers by bundled payment models, which require them to assume responsibility for patient outcomes well beyond the surgical procedure and through their period of rehabilitation.

Whether or not current government-sponsored bundled care initiatives are nixed when the incoming Republican administration has its say, there’s a certain logic to the efficiencies and cost savings that can be reaped by paying for the coordinated care of a patient undergoing surgery—including the periods before and after the procedure, when preparation and compliance might make the difference between rapid healing or readmission to a hospital. That’s a thesis that the Comprehensive Care for Joint Replacement (CCJR) program was set up to test. CCJR, a five-year program that began in April 2016 and that is mandatory for Medicare patients in 67 metropolitan areas, pays hospitals a set price that includes the initial hospitalization, all post-acute care (including hospital readmissions), and outpatient care, for a period of 90 days following the surgery. If hospitals are able to deliver care at a cost that’s within the target payment, they make money, but they’re on the hook for costs of care that are in excess of the Medicare target payments.
The future of CCJR and Medicare’s other bundled payment models, such as the voluntary BPCI (Bundled Payments for Care Initiative) is uncertain, given that the incoming administration has made it a top priority to repeal and replace the Affordable Care Act. CCJR is currently slated to continue for five years, although the expansion of that model into other high-volume and costly areas of surgery, such as hip fractures and cardiovascular procedures, might be put on hold. (See “What’s in Store for Hospitals and Their Suppliers if ACA is Repealed,” in this issue, and also see “First Take: The Orthopedics Industry Faces CMS’ New Bundled Payment Program,” The MedTech Strategist, December 18, 2015; “CMS Issues New Plan for Cardiovascular Procedure Bundling,” The MedTech Strategist, July 29, 2016; and “US Hospitals Shift Cost-Control Priorities as Bundled-Payment Programs Ramp Up,” The MedTech Strategist, June 30, 2016.)

Nevertheless, the private sector appears to be taking up the charge. According to a survey conducted by PricewaterhouseCoopers, 31% of providers and 20% of employers have adopted bundled-care models (“Strategy & Annual Bundles Survey, 2015/2016,” which surveyed 277 employers, 261 hospitals and 1000 consumers). Indeed, UnitedHealthcare, a division of the largest private insurer in the US, notes that reimbursements to providers based on value-based arrangements have just about tripled in the last three years to nearly $50 billion annually, and will rise to $65 billion by the end of 2018.

Most notably, UnitedHealthcare’s new bundled-care initiative, “The Spine and Joint Solution,” announced in early December, is a vote of confidence for value-based care models. The program is targeted to employers with self-funded health plans. Covering hip, knee, and back surgeries, in January, the new program will be rolled out in 28 geographic areas encompassing 40 hospitals and 2.2 million patients employed by 55 companies. In its pilot program for the spine and joint initiative, participating employers saved, on average, at least $10,000 per operation, the insurer says.

Value-based payment models are most advanced in orthopedics for several reasons, not the least of which is the economic burden of expensive procedures—such as knee, hip, and spine surgeries—that increase as the population ages. The volume of knee replacement surgeries in the US is expected to grow 500% by 2030, according to a study from the Healthcare Cost and Utilization project, sponsored by the US Agency for Healthcare Research and Quality.

Joint replacement surgeries are also elective surgeries, which provides an opportunity to test models for pre- and post-op care. And, says Zimmer Biomet’s Joe Tomaro, episode-of-care management makes sense in orthopedics because “it has been known for years that 36% of the costs of joint replacements are incurred after a patient leaves the hospital.”

**Using Digital Health to Expand a Hospital’s Reach**

Zimmer Biomet’s hospital consulting business has for years generated revenues from consulting on a wide range of hospital problems, from helping hospitals reduce readmission rates to instituting a new joint replacement or hip fracture program. It’s a fee-for-service business, not locked in to serving only customers of the Zimmer Biomet implant businesses. “Our purpose isn’t to pull-through revenue [on the implants], it’s to deliver more value to hospitals,” Tomaro explains.

To that core offering, Zimmer Biomet recently added three new technologies: an app for patient engagement, gained through a partnership with HealthLoop Inc.; ORControl, a solution for the automation and coordination of surgical workflow, on which the company partnered with HealthCare Control Systems Inc.; and the recently acquired RespondWell platform, which provides the connection to home-based physical therapy. The additions are in response to what Tomaro characterizes as three things going on in healthcare: “Simple value-based healthcare, delivering the best care at the lowest cost, and working on outcomes and readmissions.”

Tomaro notes that orthopedic care is being institutionalized less and less. “The length of stay for total joint replacement has dropped from five days to two to one day, and in many cases surgeries are performed in outpatient settings,” he says. The home has become the preferred discharge destination, because it’s the most cost-effective care setting (see “It has been known for years that 36% of the costs of joint replacements are incurred after a patient leaves the hospital.”)

—Joe Tomaro
“Because of that, you need technologies to connect with patients.” (See “The ‘Smart Healthcare’ Revolution: Can Digital Tools, Advanced Biosensors, and Data Analytics Transform Healthcare as We Know It?” The MedTech Strategist, December 6, 2016.)

Changing payment models also require hospitals to stay in touch with patients. “As different payors began to look at bundled-payment and other episode-of-care payment models, hospitals and surgeons became responsible for managing patient outcomes and costs throughout the entire episode of care. You have to have ways to connect with those patients, and that’s one of the greatest strengths of Zimmer Biomet’s Signature Solutions.”

The need for patient engagement arises at many points in the continuum of care, starting with pre-surgery. “When patients are scheduled for an elective surgery, a total joint replacement, for example, they need education before the surgery,” Tomaro explains. Today, they might be asked to attend a class or read a 40-page booklet. “With our patient engagement app, we can break that down into bite-sized chunks—what you should be concerned about ten, eight, six, four, two days before surgery, and two, four, six, eight, ten days after surgery—and feed that to patients through an interactive, accessible digital interface on their mobile phones. This can be customized and personalized, and if they have questions, they now have a way to engage with the surgeon and hospital to get quicker, better care.” The patient engagement component is also useful in helping hospitals collect outcomes data, over a broader time period. “Patients receive messages and fill out outcomes forms. This gives the hospital a broad platform for managing the episode of care and adjusting processes and protocols as needed, to improve outcomes.”

Increasing Patient Compliance

Tomaro notes that the RespondWell app also increases patient compliance with physical therapy. With RespondWell, physical therapy is still managed by a physical therapist, but every day patients log on to Therapy@Home on their computer. Maya, an on-screen virtual therapist, guides them through their daily exercises and they also receive messages from their (human) therapists and clinical care teams. “We want to make sure patients are doing their at-home exercises and doing them well. We ultimately believe that this home therapy will help patients get better quicker and reduce some of the costs of post-discharge care.”

In the past, at least one orthopedic company has tried to wrap its arms around the rehabilitation phase of therapy as an adjacent growth opportunity. Stryker Corp., for example, acquired Physiotherapy Associates, but eventually divested it to private equity firm Water Street. Tomaro notes that not only does its RespondWell platform leverage information technology to cut down on service costs, “Our goal is to help hospitals do this on their own, at the local level, with our technology.” As was the case for the former consulting business, he continues, the focus of Zimmer Biomet Signature Solutions is on helping hospital customers find and implement solutions to solve their own problems.

Where Do We Go from Here?

Future plans for Zimmer Biomet Signature Solutions include a look into pre-habilitation, the notion of having patients do exercises before, as well as after, surgery. “We will be working with some academic institutions to define the best level of care,” said Tomaro. Pre-habilitation before knee or hip surgery is an emerging applica-
tion of digital health. Start-Up PeerWell, the developer of a prehab mobile platform, raised $2.1 million in a seed funding in early November, led by XSeed Capital.

Zimmer Biomet plans next to move its model into hip fractures, another big-budget item for healthcare, and one that was slated by CMS for the next bundled payment initiative. “We will be looking at how we can apply this same platform and concept to that patient population and care for them post-surgery,” which will test the model on a non-elective surgery, Tomaro notes.

Because of the company’s ability to engage directly with patients, Tomaro sees additional possibilities opening up. “We have an opportunity to look at population health management. As a company, we don’t just want to help joint replacement patients, we want to help manage arthritis. Think about the number of patients that have back pain or joint pain who need to exercise on a consistent basis. Now we have a mechanism for them to do that,” he says. And, although Tomaro doesn’t say so, that might give Zimmer Biomet early access to future joint replacement candidates, people who already use and like the RespondWell platform.

Looking to the future, Tomaro notes that it’s all the more important for providers responsible for patient outcomes to have the right tools for engaging and tracking patients, because the definition of outcomes themselves are shifting. “Years ago, for a total joint, people were just concerned about the complication and readmission rates.” But now, he notes, a focus on patient-related outcomes considers the quality of life of patients six months, twelve months, even two years after surgery. “What’s your improved ability to go up and down stairs, to engage in daily activities? The definition of outcomes has really expanded.”

Payors ask for this type of information now as part of their payment reviews. “It’s only a matter of time before payors go from just asking for this information to rewarding providers for having better patient-related outcomes. That is where this is going, and Zimmer Biomet Signature Solutions enables them to collect that data.”