

# 4 ELEMENTS OF A HIGHLY EFFECTIVE SAME-DAY TOTAL JOINT PROGRAM

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When it comes to total joint replacements, one of the most challenging factors for clinicians to contend with is post-operative pain.<sup>1</sup> But new techniques and approaches make pain in total joint procedures more manageable,<sup>2</sup> thereby opening up the opportunity to perform them same-day – allowing patients to recover in the comfort of their own homes, rather than in a hospital bed.

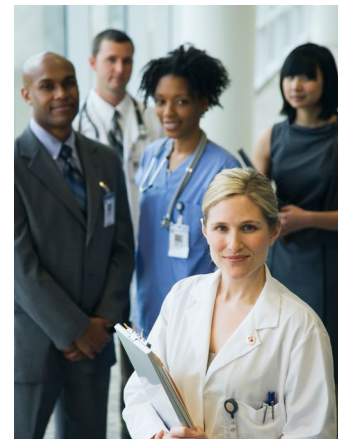
At our center, pain management is a key element of the same-day total joint program, baked into every aspect of the care sequence – from pre-op to post-op. Following are key areas medical centers should focus on to promote patient pain management, safety and recovery, when performing these procedures:

## THE PRE-OPERATIVE VISIT

Once a patient has decided to have a same-day joint replacement procedure, we book a separate pre-op visit with him or her. We find that scheduling time to meet with and educate patients well in advance of their surgery is matter-of-course but key, and how you structure it can make all the difference in patient outcomes. During this appointment, patients meet with each of the members of their care team – nurses, surgeon, anesthesiologist and physical therapist – to learn, step by step, what will happen during surgery, how pain will be managed both before and after surgery, how to control their pain and operate the pain pump that we use (the ON-Q\* Pain Relief System), exercises they can do to prehabilitate themselves, and mobility considerations following surgery. Education about pain management is an important part of overall procedure success, and allows us to hit the ground running the day of surgery as almost everything has already been covered during that initial pre-op visit.

## THE CARE TEAM

Our program is unique in that it's multidisciplinary and patient centric – our facility houses clinicians who specialize in same-day total joint replacement procedures, including nurses, orthopedic surgeons, anesthesiologists and physical therapists. The physicians' office staff and the surgical center facility staff are also in tune with our same-day joint replacement program and work closely with our clinicians. Our team is in constant communication regarding all joint replacement patients, and we are constantly evaluating and improving our protocols. We also ask all patients to identify a "coach" – a family member or friend – who can accompany them to their pre-operative visit and surgery, help them maintain their physical therapy requirements when they go home, and assist with any mobility/pain management concerns following the procedure. In addition, we arrange for home nursing and physical therapy prior to surgery – they visit the patient at home daily for a week, and then scale back services based on the patient's progress.



## THE TOOLS AND TECHNIQUES

A solid approach to pain management distinguishes one joint replacement program from another. If your aim is to facilitate faster patient recovery and assuage pain, protocols that reduce narcotic consumption are essential. We take a unique approach to anesthesiology in total joint procedures, leveraging a combination of

peripheral nerve blocks and peripheral nerve catheters. For total knee replacements, for example, the first block we perform is a selective tibial block, providing good sensory pain relief to the back of the knee while minimizing the disruption of motor movement to the foot. The second block is a single-shot femoral nerve block, which provides very dense anesthesia to the anterior part of the thigh and knee for the duration of the procedure – and the early post-operative recovery period for 12-18 hours. Finally, an adductor canal block is added. For that, we use Avanos' peripheral nerve catheter kit in conjunction with the ON-Q\* pump, which provides incredible motor-sparing, sensory anesthesia to the knee for approximately three days. In addition, patients are given a light general anesthetic which keeps them comfortable, but doesn't interfere with discharge times and our same-day plan.

### THE FOLLOW-UP

The ON-Q\* Pain Relief System is one element that has totally revolutionized our ability to do total joints on an outpatient basis. After surgery, patients get connected to ON-Q\* via their catheter, which automatically and continuously delivers a regulated flow of non-narcotic local anesthetic, providing targeted pain relief for the days following surgery. Our surround-sound approach to patient education continues during the post-op stage. The nursing team reviews how the pump works, what to expect and how to adjust the flow rate if needed. When they go home, patients get daily physical therapy visits, and we proactively check-in with them for the first three days to ensure they're progressing in their recovery. Patients are also given 24-hour access to their anesthesiologist for the first 72 hours after surgery, in

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case they have any questions about the post-operative pain management regimen.

Implementing a same-day joint replacement program can be successful if you solidify your primary goals (in our case, performing the procedure safely in the outpatient setting, creating a seamless experience for the patient, and providing effective pain management while reducing a reliance on narcotics), allowing them to truly inform and drive every part of the care process. Both large and small elements – from the block methods you leverage, to the tools and protocols you use to implement them, to members of the team that will actively be involved in patient care – will have a huge impact on overall patient outcomes. Continuously solicit patient feedback to further revise and refine your program over time. With the right tools and techniques, a strong care team, and organized pre-op and post-op plans, you can create a pain management protocol that sets your same-day joint replacement program apart.

*David Harwood, MD and Stephen Kayiaros, MD, have consulting/speaking financial relationships with Avanos Medical, Inc.*

1. Chan, E.y., F.m. Blyth, L. Nairn, and M. Fransen. "Acute Postoperative Pain following Hospital Discharge after Total Knee Arthroplasty." *Osteoarthritis and Cartilage*. 2013 Sept; 21:1257-1263.
2. "Halyard Announces New Data from Three ON-Q Studies Showing Reductions in Opioid Consumption and Length of Stay Following Spine, Major Foot and Ankle, and Mastectomy Surgeries." Halyard Announces New Data from Three ON-Q Studies Showing Reductions in Opioid... Accessed December 1, 2015. <https://avanos.investorroom.com/2015-05-14-Halyard-Announces-New-Data-from-Three-ON-Q-Studies-Showing-Reductions-in-Opioid-Consumption-and-Length-of-Stay-Following-Spine-Major-Foot-and-Ankle-and-Mastectomy-Surgeries>

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