

# Using Cold Therapy to Improve Patient Satisfaction and Reduce Opioid Use Post Surgery

By Dr. Bradley Reeves  
Director of Sports Medicine  
Sanford Health Systems

Patient experience and satisfaction are both important factors in assessing a hospital or clinic's level of care. Now leadership in the orthopedic industry is taking notice and applying that same premise to improve surgical outcomes and the patient experience. Motorized cold therapy devices, such as Breg cold therapy products, are often used to help reduce patient post-operative site discomfort and inflammation. An additional benefit of motorized cold therapy not often talked about is how it can affect the amount of opioids taken by patients after surgery.

Sanford is unique in that it has led the way in being an integrated system. The administrative force here is to expand and grow. That drive to expand has led Sanford to develop an enterprise-wide approach to orthopedics, bringing a standardization to the department of orthopedics. We share and develop protocols, not just for rehab, but for research. We also discuss surgical standards and level of care.

One of our priorities regarding post-op protocols for patients includes working directly with the sports physical therapist. These are all patient-centered protocols brought forth from a lot of research and reading to determine what the most state-of-the-art, best practices are in terms of protocols. All that research has led to Sanford offering its first class of an orthopedic residency next year. And from a patient perspective, that research has led to use of cold therapy, and specifically, Breg Polar Care® cold therapy.

I always provide patients with cold therapy because it's better: the benefits are plentiful. There is a tremendous decrease in post-operative swelling and pain, as well as decreased use of narcotics—namely opioids. People have the ability to cool their extremity for an extended period of time. Capillary permeability and swelling, much of which goes on in the perioperative period, are dramatically affected in a positive way by the use of cold therapy.

We are working toward that standardization: to put cold therapy on every patient. Simply put, it gives the patient the ability to control pain in a lot of ways, and the patient realizes how easy it is to get through perioperative pain and swelling by using cold therapy. Giving patients some level of control is a great modulator of pain. They just have to sit there on the couch thinking about and feeling every throb of their knee or their shoulder after surgery, and they have nothing to address it with other than narcotics. Cold therapy can help solve that helpless feeling for patients, without having to rely solely on opioids. In my own experience over 25 years, we've performed thousands of ACLS (anterior cruciate ligament surgeries); people who have cold therapy just do better, and they take less opioids.

With the current political climate toward a mandated opioid reduction program, this is a great opportunity for hospitals to take advantage of cold therapy and come in with a comprehensive plan. With national trends and Centers for Medicare and Medicaid Services (CMS), there is potential for hospitals to see a cut in reimbursements without an opioid reduction plan in place.

From my experience and perspective, cold therapy and cold compression in general provide a myriad of benefits, including:

*Opioid Drug Use, Misuse and Abuse According to the U.S. Department of Health and Human Services:*

- *In 2017, HHS declared a public health emergency and announced a 5-Point Strategy to combat the opioid crisis.*
  1. *Better addiction prevention, treatment and recovery services*
  2. *Better targeting of overdose reversing drugs*
  3. *Better data*
  4. *Better pain management*
  5. *Better research*
- *Opioid overdoses accounted for more than 42,000 deaths in 2016, more than any previous year on record.*
- *An estimated 40% of opioid overdose deaths involved a prescription opioid.*
- *On an average day in the U.S., 116 people die from opioid-related drug overdoses.*

**"About the U.S. Opioid Epidemic," HHS Website, accessed 4/26/18**

- Cold decreases the swelling and desensitizes the pain
- Compression pushes that fluid back up against gravity and helps get that third space fluid out of the extremity, causing less pain
- The patient's psychological benefit of having control and responsibility for their own care
- Removes the pain and limitations that a patient would normally see with a traditional ice pack
- Creates a positive post-op experience, a direct reflection on doctors and hospitals alike
- Better patient experiences can provide a higher reimbursement

The numbers regarding patient satisfaction bear out. If you look at the overall results and trends on patient pain scales for my patients, they are significantly lower than those patients in other health systems. Why? Because every one of my patients gets Polar Care cold therapy. Other health systems may only offer cold therapy selectively. Patients without cold therapy get surveyed, and not surprisingly at all, they have higher pain scales.

To summarize, patients at Sanford have lower pain scales because every post-op patient at Sanford receives a cold therapy unit which is the standard of care.

In my experience, providing Polar Care cold therapy pays for itself. Within value-based care, you are going to get reimbursed on patient satisfaction. For the minor cost of cold therapy, your patients are going to get more than a standard deviation below the Global Pain Scale, and you're going to get better satisfaction ratings, and hence, more money. When you look at it from that perspective, providing Polar Care cold therapy is going to prove to be a great investment.