

A woman with long brown hair, wearing a black beanie, a blue puffy jacket, and grey pants, is hiking up a snowy trail. She is carrying a large blue and black backpack and is smiling as she looks up. The background shows a forest of evergreen trees under a blue sky with some clouds. The ground is covered in snow and dry grass.

# Colorado Joint Replacement

Setting new standards  
of care worldwide.

AdventHealth Medical Group  
Colorado Joint Replacement  
Quality & Outcomes Report 2025

  
**AdventHealth**



# Unparalleled Focus

Rocky Mountain's leading knee and hip replacement program.

AdventHealth Medical Group Colorado Joint Replacement at Porter (CJR) is a national leader in helping set the standard of care for knee and hip problems, from primary diagnoses and first-line noninvasive treatments to complex joint arthroplasty. As the only orthopedic surgery practice in Colorado with specialized focus on knee and hip replacement, **its five fellowship-trained and board-certified surgeons rank among the top in the country in volume of procedures performed annually.** The practice also outperforms the national average in outcomes measures. Here are key factors that distinguish CJR from its peers:

## 2,500

CJR surgeons collectively perform approximately **2,500 joint replacements annually** at AdventHealth Porter. Each CJR surgeon individually performs more joint replacement surgeries than the threshold needed to achieve optimal patient outcomes. At a time when 90% of joint replacement surgeons perform suboptimal volumes, this singular focus is more important than ever.<sup>1</sup>



## 500

CJR surgeons have published more than **500 medical research studies**, and they conduct or participate in approximately 20 research studies annually.

## 30,000

CJR maintains a **database of more than 30,000 patients**, which it uses to conduct “retrospective” studies to identify trends and improve care. The data also provides patients and their referring providers with information rarely available for most surgeons, including patient satisfaction, infection rates and revision rates.



## 14

CJR's renowned provider team includes **five fellowship-trained and board-certified surgeons and nine physician assistants** specially trained in hip and knee treatments. We offer fast access to appointments, often within five days!



## <1%

**Fewer than 1 in 100** CJR patients require revision surgery, compared to 4-5 per 100 nationally.

Honored by

<sup>1</sup> Pappas MA, Spindler KP, Hu B, Higuera-Rueda CA, Rothberg MB. Volume and Outcomes of Joint Arthroplasty. J Arthroplasty. 2022 Nov;37(11):2128-2133. doi: 10.1016/j.arth.2022.05.011. Epub 2022 May 11. PMID: 35568138; PMCID: PMC10448867.



96%

of patients say  
they are likely to  
recommend Colorado  
Joint Replacement

## CJR INFECTION RATES

Infection rates **10x better**  
than national averages!

## CJR REVISION RATES

Revision rates more than **4x better**  
than national averages!

## CJR COSTS

Average cost per case **40% lower**  
than Colorado average!





# Shaping the Future

Clinical research focuses on improving the lives of local patients today and tomorrow.

Despite superb outcomes and patient satisfaction, the surgeons at Colorado Joint Replacement aren't satisfied with the status quo. They are perpetually interested in finding even the smallest ways to improve the lives of their patients.

It's this curiosity that drives them to conduct research into whatever area they think will make the most difference: better pain relief, faster recovery, improved mobility or even the fastest way to get back on a mountain bike.

"If we have questions, we can do the research to help find the answers," says Jason Jennings, MD, DPT, one of the top 1% of joint replacement researchers in the country. "As a surgeon, you may sense what is and isn't working. But we have the framework to measure what is and isn't working and then adjust our practice."

CJR's research is 95% funded by AdventHealth rather than pharmaceutical companies or medical manufacturers. This allows the practice to research what directly impacts the unique characteristics of their patients.

This research also benefits patients around the world. A CJR study published in 2020 led to perioperative fluid being given orally rather than through an IV to reduce swelling. Dr. Jennings, the principal investigator, was awarded the James Rand Young Investigator's Award by the American Association of Hip and Knee Surgeons for the study.

"We're often the surgeons writing the textbooks and papers or presenting research at major conferences that influence how joint replacement surgery is being practiced," says Douglas Dennis, MD, who Avant-garde Health recognized as a 2024 Research All-Star for being among the top 3% of hip and knee researchers in the country publishing leading-edge research.

## RECENTLY PUBLISHED STUDIES:

- Upcoming: Pre-operative Surgical Prep Is Not Effective at Eliminating *C. Acnes* Prior to Total Hip Arthroplasty (*Journal of Arthroplasty*)
- A Handheld UV-C Light-Emitting Diode Decreases Environmental Contamination Near The Operative Field (*Antimicrobial Stewardship & Healthcare Epidemiology*, Jan. 2025)
- Comparison of Outcomes in High Versus Low Activity Level Patients After Total Joint Arthroplasty (*Journal of Arthroplasty*, Jan. 2024)
- Depressive Symptoms May Be a Modifiable Factor to Improve Surgical Outcomes (*Healio*, Feb. 2024)

Winner of  
Hip Society's  
2025 Frank  
Stinchfield  
Award



## CURRENT RESEARCH

Mindfulness meditation  
in treating post-operative  
sleep issues

Customized compression  
garments' impact on swelling

Ability to return to biking  
following total joint  
replacement

3D guidance in total hip  
replacements

Cannabinoid use impact on  
post-surgical narcotic dosages

C. Acnes infection impact  
on surgical infection rate



## Hiking Strong

Conifer woman hikes the world after  
double hip replacement.

When Barb Fox turned 50, she set out to hike as much of the world as possible. She visited dozens of countries, racking up hundreds of miles on hiking trails in countries as far flung as Norway, India, Ecuador and Australia.

Until she was stopped in her tracks by severe hip pain.

“Dr. Miner told me I was going to need both hips replaced because they were bone-on-bone,” says Fox, now 65, who lives in Conifer. “I could no longer hike. So, to me, that was devastating.”

Fox quickly moved forward with surgeon Todd Miner, MD, at Colorado Joint Replacement to replace both hips.

“While it may sound extreme to some people, replacing both hips was a safe and effective option to keep Barb doing what she loves,” says Dr. Miner.

Indeed, just five months after her second surgery in December 2018, Fox completed the 500-mile Portuguese Way, also referred to as the Camino de Santiago. Since then, she has traveled to eight countries and multiple sites in the U.S. and logged thousands of miles, including completing treks to the top of Mount Kilimanjaro and the bottom of the Grand Canyon. Her most recent conquest was the 100-mile Tour du Mont Blanc, where she logged nearly 33,000 feet of elevation gain over the course of 11 mountain passes.

“It’s been great because I’ve done some of my most difficult hikes post hip replacement,” Fox says. “It wouldn’t have been possible for me to do these without the help of CJR and AdventHealth Porter.”



To read the latest news and patient testimonials,  
go to [bit.ly/colorado-joint-replacement](https://bit.ly/colorado-joint-replacement).



## Shared Expertise

A core value of Colorado Joint Replacement is to continually advance the field of adult knee and hip reconstruction. In addition to conducting research, CJR contributes to training other joint replacement surgeons. The practice offers two, one-year orthopedic fellowships annually and also is a host site for distinguished joint replacement surgeons worldwide.

CJR is one of approximately 100 fellowship programs across the country that provides specialized training through its adult knee and hip reconstruction fellowship. Each year, nearly 150 newly graduated orthopedic residents apply for the two CJR fellowship spots.



*“It’s a highly sought-after fellowship because they not only do more joint replacement surgeries than in most other programs, but they also can participate in research and Operation Walk, two experiences that are unusual for physicians so early in their careers,”* says Jason Jennings, MD, DPT.

CJR is also one of the top 12 joint replacement surgery centers in the country selected to host John N. Insall Traveling Fellows. Each year, four distinguished joint replacement surgeons from the U.S. and abroad are selected as Insall Fellows to spend a month visiting the 12 sites to share research and learn about best practices. In addition to CJR, sites include the Mayo Clinic, Duke University and New York University.

“To be chosen as one of these 12 centers, you have to be one of the leading academic centers in the country for total knee replacements,” says Douglas Dennis, MD. “The Insall Fellows want to go to the sites that are the most accomplished, so it’s certainly an honor for Colorado Joint Replacement to participate in this program.”

## Technological Advancements

Colorado Joint Replacement is committed to staying on the leading edge of advancements in hip and knee orthopedics. CJR surgeons are often the first in the state to perform the latest procedures or use advanced devices to give their patients the best outcomes possible.

“We look at each patient individually, understand their goals, then choose the best treatments and technology to achieve the best outcome possible,” says Charlie Yang, MD.

**CJR surgeons use a wide range of advanced technology, including:**

- Robotic-assisted total knee replacement
- Computer navigation-assisted total knee and hip replacement
- Customized implant positioning and templating for total hip replacement
- Biomechanical analysis for revision in total hip replacement





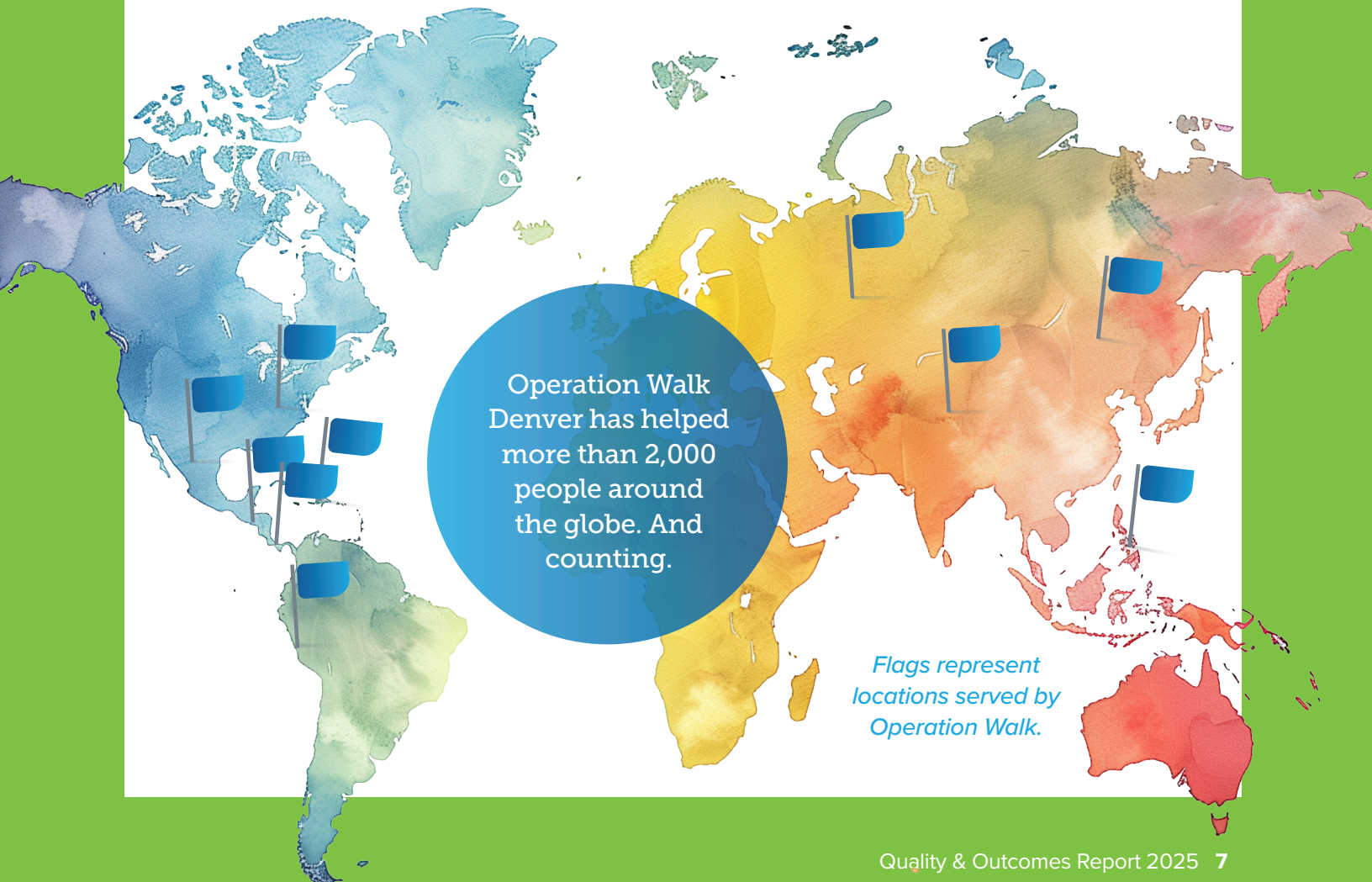
## Restoring Mobility Worldwide

In the United States, more than 2 million knee and hip replacement surgeries are performed annually. But in many countries, what has become a common procedure in the U.S., is not routinely available. Without it, many people in developing countries are confined to wheelchairs, crutches or even pulling themselves across the ground. Many experience devastating pain.

In 2003, Douglas Dennis, MD, of Colorado Joint Replacement, decided to tackle this inequity. He founded Operation Walk Denver, which now sponsors two medical trips annually to provide free knee and hip replacement surgeries around the globe.

Surgeons, anesthesiologists, physical therapists, medical technicians, nurses, hospital staff and community members treat about 50 patients on each trip while also providing medical education to local health care workers.

“The people we care for live under terrible conditions, with severe pain, and they have not walked normally without pain, often for periods of 15 or 20 years,” Dr. Dennis says. “They are so grateful for the care we give.”





## Fifth Surgeon Joins Practice

In 2024, Colorado Joint Replacement added to its prestigious reputation by recruiting Joseph Assini, MD, one of the developers of the AnteriorPATH technique for total hip arthroplasty. This technique

is a novel procedure to enhance the recovery of patients undergoing total hip arthroplasty.



“Joining a nationally recognized Center of Excellence affords me and my team the opportunity to continue performing the most complex cases and conducting research that will play a significant role in advancing joint replacement surgery techniques worldwide,” Dr. Assini says.

Dr. Assini is a fellowship-trained orthopedic surgeon highly experienced in hip replacement, knee replacement, complex joint reconstruction and general orthopedic trauma. He has a strong interest in rapid recovery total joint protocols as well as outpatient-based joint replacements. He is Colorado’s highest volume user of the Medial Pivot Total Knee Arthroplasty, a unique implant specifically designed to replicate the normal kinematics of the patient’s knee.

## Setting the standard. Again.

When Colorado Joint Replacement opened its practice at AdventHealth Porter, it set the standard for inpatient surgery and recovery units. CJR will once again set a new standard when it opens its new ambulatory surgery center for same-day joint replacements currently under construction.

### Colorado Joint Replacement

2535 S. Downing Street, Suite 100  
**Denver**

4028 Laramie Street  
**Cheyenne**

9695 S. Yosemite Street, Suite 255C  
**Lone Tree**

9670 W. Coal Mine Avenue, Suite 200  
**Littleton**



Lakewood  
Clinic Opening  
Fall 2025

  
**AdventHealth**

**720-222-5033**

[bit.ly/colorado-joint-replacement](https://bit.ly/colorado-joint-replacement)

## Our Surgeons

**Douglas Dennis, MD, FAAOS**, is a member of the prestigious Hip Society, The Knee Society and past president of the American Association of Hip and Knee Surgeons. He has authored more than 400 research studies and book chapters. Dr. Dennis was named one of the top 22 knee surgeons in North America by *Orthopedics This Week*.



**Todd Miner, MD, FAAOS**, regularly trains U.S. and international surgeons in joint replacement techniques, publishes research in leading journals and is a speaker at national orthopedic conferences. He was named a top-performing surgeon in the Healthgrades Honor Roll.



**Charlie Yang, MD, FAAOS**, completed his joint replacement fellowship with CJR before joining its ranks. He is a board examiner for the American Board of Orthopedic Surgeons. Fluent in Mandarin Chinese, he frequently travels to China to train orthopedic surgeons there.



**Jason Jennings, MD, DPT, FAAOS**, has authored more than 100 research studies. He is a member of The Knee Society and has been recognized with many prestigious awards in the field of hip and knee replacement.

