



The surgical team performs a knee replacement surgery at the Center for Orthopedic Specialties at Benedictine Hospital.

WITH MINIMALLY INVASIVE PROCEDURES, STATE-OF-THE-ART OPERATING SUITES, INDIVIDUALIZED CARE AND PATIENT EDUCATION, THE CENTER FOR ORTHOPEDIC SPECIALTIES AT BENEDICTINE HOSPITAL IS AN ALL-INCLUSIVE DESTINATION FOR MUSCULOSKELETAL CARE IN THE HUDSON VALLEY.

Specialties addresses musculo-skeletal conditions that range in severity from debilitating joint infections, broken bones and torn ligaments to painful stiffness and overuse injuries. For any condition, the center operates with a high standard of care, focusing on minimally invasive surgery and advanced pain management. All physicians at the center perform trauma surgery, covering the full spectrum of orthopedic subspecialties — hand, upper extremity, sports medicine, spine and joint replacement.

Two new operating suites incorporate

equipment with the latest arthroscopic video technology. The center offers minimally invasive knee, hip and shoulder surgery, as well as traditional surgery. When it comes to joint replacement, patients can benefit from less invasive procedures, which are associated with shorter hospital stays and greater potential for a wide range of motion postoperatively. Range-of-motion equipment in the center's recovery rooms also speeds healing.

The Center for Orthopedic Specialties strives to make patients feel at home with private rooms and concierge-like services. Through myriad patient-support programs, board-certified, fellowship-trained surgeons — along with a compassionate and skilled team of nurses, therapists and technicians - work to get patients back to their daily activities, whether work or leisure, at the most robust levels possible. The nursing staff has hundreds of years of collective nursing experience and creates an exceptional environment with personalized touches for each patient and their family members. They closely work together by communicating, sharing and assembling information and ideas to deliver specialty care, with available services like aromatherapy and

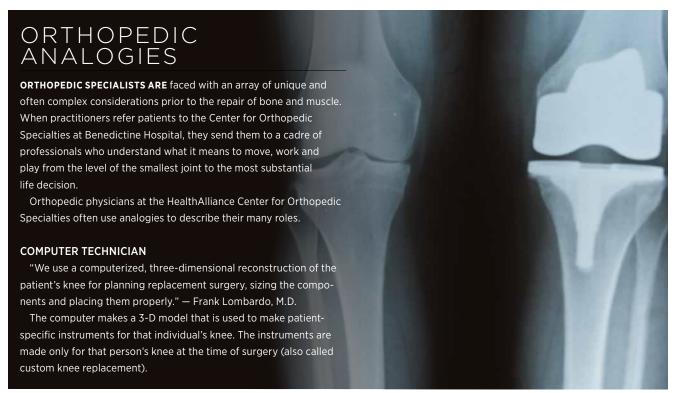


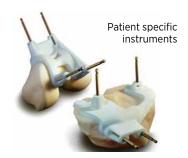
Image of a normal knee and a knee replacement

healing therapeutic touch therapy.

"We offer a patient-based experience. Every patient is an individual for us," says Frank Lombardo, M.D., Director of the Center for Orthopedic Specialties, who specializes in arthritic conditions of the hip and knee, including primary and revision joint surgery. "We tailor the hospital experience, physical therapy and pain control to each individual."

A Guiding Hand

For patients undergoing joint-replacement surgery, an orthopedic coordinator and physical therapist hold a weekly Total Joint Replacement Class at Benedictine Hospital. The sessions cover what to expect before, during and after joint replacement. The center also works with the Physical Medicine and Rehabilitation Center at Benedictine Hospital to



provide physical therapy for those who have undergone joint replacement.

After surgery, practitioners at the center work with patients to help them find the best recovery options. Rehabilitation time is variable. Some patients prefer to exercise and recover on their own with minimal instruction, whereas others prefer a 24-hour recovery setting for several days. If a patient's home life is not conducive to recovery, Benedictine Hospital's Rehabilitation Unit offers compassionate care and state-of-theart facilities.

"It's pleasant for them to come out of their rooms into a well-lit facility in the company of other patients and their physical therapists," Dr. Lombardo says. "They do more than they typically would have on their own. Most other facilities in the area do not have a specialized gym that is dedicated solely to joint-replacement rehabilitation." The specialized therapy gym includes many features to help patients in the rehabilitation process. Various types of adaptive equipment are used — such as training stairs, a high-low table for exercises, dressing and bathing equipment, and tub-transfer seats along with many other devices.

Vision and Goals

Increased Precision

Technological advances are constantly impacting the field of orthopedics, and the Center for Orthopedic Specialties embraces the concomitant quest for excellence. Dr. Lombardo hopes the center will become recognized as a destination for individuals with joint pain.

"We use the advanced patient-specific instrumentation or custom total knee replacement technology to aid us primarily in reconstruction of the knee," reports Dr. Lombardo. "Computerized, three-dimensional reconstruction of the knees helps us plan for knee replacement surgery, appropriate placement of components in the knee and sizing of those components. It's new technology that has only been out a year or so, but we are actively using it.

"A typical knee replacement surgery combines these types of advanced engineering with the human skills that are so vital in orthopedic medicine. Additionally, educating patients is imperative for comfort and, ultimately, their success after surgery."

"First, we demonstrate the procedure with models, because patients may

not know the anatomy very well," says Richard Moscowitz, M.D., orthopedic surgeon. "They see an anatomic model with the knee replacement in it and then compare that model to the patient's knee."



Partial knee replacement

He offers a familiar analogy to illustrate the procedure to his patients.

"When we say 'replacement,' it's not a matter of taking out a knee or a chunk of bone, it's just the cartilage covering of the joint that's removed. Total knee replacement is like capping a tooth, where they may alter the tooth a little bit to accept the cap and then they glue the cap on. We alter the configuration of the joint, place a 'cap' on it and cement it down. The actual joint replacement is then shown and actually handled by the patient."

Depending on the patient's weight, the incision may range from 13 to 16 centimeters in length. While traditional knee replacement surgery involves cutting the quadriceps, Dr. Moscowitz employs less invasive techniques to work around the quadriceps muscle and tendon.

"This makes it a little more difficult for the surgeon, but this way, the muscle power is not altered," he says. "Other doctors may cut muscle, but I think taking the extra time to preserve the muscle is absolutely worth it." Because the muscle has not been damaged, the patient is able to raise his or her leg immediately

following surgery.

Dr. Moscowitz and his team then place a guide on the femur and use a cutting block to mark cuts exactly. A matching alignment guide determines cut locations for the tibia. Again, cutting guides are applied. After verifying that the cuts match, the team prepares the kneecap in a similar manner.

The surgical team uses a trial prosthesis to test the balance and range of motion in the joint. If the test prosthesis performs to the desired standard, the team mixes a compound of bone cement and antibiotics, which is used to cement the prosthetic components to the joint.

It takes about 10 minutes for the cement to harden, after which the team closes the wound. From there, the joint can heal itself. Because the muscle has not been damaged, it does not need to be replaced or repaired.

John Vincent Ioia, M.D., Ph.D., a general orthopedic surgeon who specializes

mbarda M.D. with assistance from Charlene



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Frank Lombardo,
 M.D., Director of the
 Center for Orthopedic
 Specialties

in total hips, total knees and shoulders, has witnessed the drastic improvements in implant procedures over the years and their lasting effects on patient outcomes.

"About 10 years ago, we started doing computerized instrumentation for joint replacement, which minimized incision size. The incision for a total knee replacement went from 18 inches long to 4 inches long," he says. "It's less traumatic — less abuse on the body. Patients who had joint replacement 20 years ago and are having it redone now are amazed by the speed to discharge and recovery. No more weeks spent on bed rest. Now, we have them do range-of-motion exercises within hours of surgery."

Commitment to a Continuum of Care

According to Dr. Moscowitz, the center guides patients through a thoughtful decision-making process before and after treatment. By helping patients

MINIMALLY INVASIVE VERSUS TRADITIONAL KNEE REPLACEMENT

when referring patients to the Center for Orthopedic Specialties at Benedictine Hospital for knee replacement surgery, physicians should consider the indications for traditional knee replacement as compared to minimally invasive knee replacement and partial knee replacement.

TRADITIONAL KNEE SURGERY

- + Involves a roughly 8-inch-long incision, three to five days in the hospital and extended inpatient rehabilitation
- + Indicated for patients with severe damage to the knee due to arthritis, injury or surgery

MINIMALLY INVASIVE TOTAL KNEE REPLACEMENT

+ Involves a roughly 4-inch-long incision and

shorter rehabilitation time

- + Indicated for patients who have arthritic damage to knee
- + Quadriceps muscle is not cut, allowing return to more vigorous activity

PARTIAL KNEE REPLACEMENT

- Features very small incisions, decreased postoperative pain and a short recovery period
- Indicated for patients older than age 40 who have osteoarthritis limited to one compartment of the knee
- to the knee due to arthritis, injury or surgery + Not recommended for patients with inflammatory conditions such as rheumatoid

 NIMALLY INVASIVE TOTAL KNEE arthritis or lupus
 - + Indicated for isolated, unicompartmental disease



Left to right: Charlene Cohen, R.N.; Elana Singleton, R.N.; Kelly O'Connor, R.N.; Diane Williams, PTX; (seated) Estela Aquino, R.N.; (background) Charles Alsdorf, R.N.



Frank Lombardo, M.D., Medical Director, Center for Orthopedic Specialties

understand the full spectrum of treatment options — both surgical and nonsurgical — specialists at the center help ensure the best possible outcomes.

Quality Control

HealthGrades' "Patient Safety in American Hospitals Study 2011" recognized Benedictine Hospital as a Patient Safety Excellence Award Recipient for the New York area. Blood loss during joint-replacement surgery has been minimized, and the overall infection rate for the orthopedic center is less than 1%.

"Our goal at the center is to have the lowest infection rate in the Hudson Valley, and we have been extremely successful. We are very concerned about infections at our site," says Dr. Lombardo. "We do extensive testing preoperatively to determine who is at elevated risk for infections. A specialized treatment program removes all bacteria from the skin before surgery, and we use special cleaning agents in the operating room to decrease our infection rate."

Knowing the Community

The unique nature of orthopedic medicine requires practitioners at every level to understand how their patients move every day, whether at work, at home or on the playing field. Staying abreast of individual and community life patterns helps providers serve their patients in specific, measurable ways.

Dr. Ioia, a black belt master in Tang Soo Do, has provided orthopedic treatment to martial arts practitioners and often sees patients from the martial arts community. The understanding of individual and community lifestyles helps physicians make the correct diagnostic and therapeutic choices so patients can get back to doing what they love.

Dr. Moscowitz helps patients analyze their needs, desires and abilities in context of what orthopedic medicine can offer them. By combining sports medicine with slight changes in what they do on the playing field, they can get the same pleasure, yet demand less of their bodies.

"For instance, if you play baseball or softball as a shortstop, you have to move and bend very quickly," he says. "As you get older, you might say, 'I can't cover the ground that fast,' so you switch to first or second base or the outfield, which doesn't require that much bending, and you still get the joy of the sport."

There has been a misconception in the Kingston area that quality orthopedic surgery is only available in New York City. However, the Center for Orthopedic Specialties at Benedictine Hospital offers quality care combined with the convenience of being close to home.

Dr. Lombardo sums up, saying, "Patients do not need to go to New York City anymore for the best possible care for joint replacement and orthopedic surgery. Benedictine Hospital offers comprehensive care, a quality patient experience and cutting-edge technology right here in the Hudson Valley."

For more information about the Center for Orthopedic Specialties, visit www.hahv.org.