

Avera Surgery Center

Combining medical expertise and the latest technology with 5-star service

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BY DONNA FARRIS, AVERA MCKENNAN WRITER/EDITOR



The Avera Surgery Center, newly constructed on the Avera McKennan campus, brings surgical services to a new level of excellence. Avera's medical expertise is combined with the latest technological sophistication and 5-star patient service for the optimal patient experience.

The 34,000-square-foot same-day surgery center houses eight operating suites and 28 private patient rooms for pre-op preparation and post-op recovery. The eight surgical suites are each 650 square feet in size, the largest ORs in Sioux Falls. "The size of the room accommodates the technology we have today, and is also designed to future proof ourselves for evolving technology that we can't predict at this point," said Dr. Greg Schroeder, medical director of operative services and chief of anesthesia at Avera McKennan.

"This surgery center is by far the most technologically advanced in the region," said Dr. Luis Rojas, gynecologic surgeon with Avera McKennan.

On December 17, 1911, ceremonies were taking place to dedicate McKennan Hospital when a call came asking to accept a patient needing an emergency appendectomy—McKennan's first patient and first surgical case. Although the staff had planned to take another two weeks to get ready, they opened their doors, and the patients kept coming to Sioux Falls' newest and most modern hospital.

"Nearly 100 years later, we are opening this new state-of-the-art center for a whole range of outpatient procedures. Today, thanks to the advance of medical science, physicians are performing procedures and using techniques never dreamed of by our predecessors," said Fred Slunicka, regional president of Avera McKennan.

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- DR. LUIS ROJAS, GYNECOLOGIC SURGEON

Expansion allows for flexibility

Ambulatory and inpatient surgery were previously located in the same area of the hospital. The new center enhances the hospital's overall surgical program in at least two ways, explained Patti Jagoe, assistant vice president of Perioperative Services at Avera McKennan. One, adding eight additional operating suites to the existing 12 ORs opens up scheduling opportunities so patients can get in sooner for scheduled procedures, and allows for more flexibility in handling emergency cases.

"We are a Level II Trauma Center, and as such we need to get trauma patients to surgery immediately in order to save lives," Jagoe said. "As a tertiary care center, we're also caring for patients with complex diseases. This expansion opens up time and space in the main

OR to enhance the smooth operation of these functions."

Second, the new center separates outpatient procedures from inpatient. "There's a whole different mindset and approach behind outpatient care," Jagoe said.

"Outpatients are relatively healthy so they don't need to be part of the entire hospital experience from admission to discharge," Jagoe said. Putting outpatients in the mix with inpatient surgery cases meant sometimes delaying the schedule for an emergency or complex case.

"We were already giving outpatients great care, and our surgeons were offering the latest techniques. We needed to add the pieces of better efficiency and great customer service that are unique to outpatient surgery," Jagoe said.

A group of physicians and surgeons helped design the new surgery center, sharing their priorities and traveling to see other free-standing outpatient centers.

"Everyone involved had a plan for a first-class, state-of-the-art outpatient facility. That's certainly the direction that surgery is going," said Dr. Schroeder, who was among the physician planners.

"We involved surgeons of every specialty. I think our net result is a facility that will serve patients and surgeons very well," Dr. Schroeder said.

"We wanted to implement a one-stop shop for patients. We have everything available – even pain medications – for a complete recovery at home so they don't have to stop on the way. The design is extremely efficient, which translates into a superb experience for the patient," Dr. Rojas said.

5-star service and amenities

Five-star service at the Avera Surgery Center is designed to offer comfort and convenience that's on the level of what people might experience at a 5-star hotel.

"We're striving to provide high quality care that's extremely convenient for the patient," said Daren Smith, director of Perioperative Outpatient Service at Avera McKennan. "We want to offer our patients a 'wow' experience from the moment they step out of their car to the time when they're escorted back out to go home."

"Patients want to get in and out quickly. People have come to expect convenience," Smith said. "They want to come in and get quality care in an up-to-date environment, and get on with the rest of their day."

The Avera Surgery Center's design accomplishes this "wow factor" throughout the entire experience.

When they come to the Avera Surgery Center, patients and their families can easily park right in front, or drive to the canopy entrance and take advantage of free valet parking. They go through a separate entrance and ride an elevator directly to the fourth floor, where they immediately find the check-in desk. They are escorted to their room where they prepare for surgery. All lab tests and imaging have been completed in advance to ensure minimal waiting. After their procedure, patients go back to their own room, where they sit on a comfortable lounge chair, wear a warming gown for comfort, and enjoy a full cable lineup as well as great views of the city until they're ready to go home. Any medications they need will be prepared for them so there's no reason to have to stop on the way home.

A separate pediatrics area is child- and family-friendly, and apart from the adult area so adults in pre-op or recovery are not disturbed. Children can ride to surgery in an electric "Mustang" car if they wish, and watch a video in the OR as they go to sleep. The biggest wow factor for families is that parents are allowed to accompany their children to the OR as they are placed under anesthesia, and they can also be in the recovery room when their children wake up.



"While few patients would actually look forward to surgery, it is our goal to provide them with a superb experience that goes more smoothly than they anticipated," said Dr. Dave Kapaska, senior vice president of medical affairs at Avera McKennan.

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Changing dynamics

In 1980, over 90 percent of outpatient procedures took place at hospital-based facilities, compared to around 50 percent today. A growing percentage of same-day surgeries take place at free-standing surgical centers and physician offices.

And, more and more surgeries are done on an outpatient basis. In fact, 65 percent of all surgeries today are outpatient, compared to 20 percent only two decades ago. "Improved anesthetics, surgical techniques, and more advanced surgical equipment are just three of the reasons why more and more surgeries are outpatient," Jagoe said. "Today's patients want to be a partner in their own care and recovery, and recover at home if at all possible."

Free-standing centers can offer amenities and patient flow that are difficult to duplicate in a hospital environment.

The Avera Surgery Center offers the feel and amenities of a free-standing surgery center, yet still has the advantages of being connected by skywalk to Avera McKennan. "It's the best of both worlds," Jagoe said. If complications arise or a case presents as more complex than expected, hospital admission may be necessary in rare instances. In that case, the patient can easily be transferred to the hospital via a hallway. In comparison, when complications arise at a free-standing surgery center, patients must be transported to the hospital by ambulance.

"At the Avera Surgery Center, we can offer the experience of a free-standing surgical center, with the support of being connected to a tertiary hospital," Jagoe said. "Patients experience the best in service, convenience and amenities, with the peace of mind of knowing they're at Avera."



Surgical expertise in an array of specialties

Along with improved medical care, medical advancements are providing patients with more convenience and less pain when it comes to surgeries that can now be performed on an outpatient basis.

"In most specialties, we're moving toward less invasive procedures," said Dr. Luis Rojas, Avera gynecologic surgeon. Because they are less invasive, more of these procedures can be done as same-day or outpatient operations.

"We have learned over time that less is usually better. A large incision and an open procedure deliver more trauma to the body, which translates into more pain, bleeding and recovery time," Dr. Rojas said.

Evolving techniques and technology make it possible, such as endoscopic procedures. Some laparoscopic procedures can even be accomplished with one incision in the navel, making them scarless.

"The patient recovers quicker and becomes functional more quickly whether that's at home as a mom or on the job. They heal better and encounter fewer complications," Dr. Rojas said.

Advanced anesthesia and pain management techniques also allow more procedures to be outpatient, said Dr. Greg Schroeder, medical director of operative services and chief of anesthesia at Avera McKennan. Catheters which allow infusions of local anesthetic, primarily in the joints, allow patients who previously had to stay overnight for pain management to go home. "Patients are able to do better with less oral pain medication."

"We also have agents which provide a much quicker onset, so patients wake up quicker and recover well enough to go home the same day," Dr. Schroeder said. Nausea can still be a problem after anesthesia, but combination drug therapy now provides better relief.

The Avera Surgery Center offers a host of same-day procedures in the following specialties: ear, nose and throat procedures such as ear tubes for children and tonsillectomies; gynecologic procedures such as hysteroscopy and D&C; urogynecology; general surgery such as hernia repairs or gall bladder removal; neurological procedures such as minimally invasive spine surgeries, nerve decompression and carpal tunnel procedures; urology procedures such as bladder or cystoscopy procedures; orthopedics; certain plastic surgeries; and GI procedures.

Surgeons will have the advantage of being in close proximity to Avera McKennan for consultations with other specialists if needed. "This center has an excellent body of nursing and surgical technicians available on its own, and yet at the same time has the luxury of having all services that are offered in the hospital readily available, including pathology," Dr. Rojas said.



"AT THE AVERA SURGERY CENTER, WE CAN OFFER THE EXPERIENCE OF A FREE-STANDING SURGICAL CENTER, WITH THE SUPPORT OF BEING CONNECTED TO A TERTIARY HOSPITAL."
- PATTI JAGOE, ASSISTANT VICE PRESIDENT OF PERIOPERATIVE SERVICES

The concept behind top efficiency



Patient flow is the concept that ensures on-time scheduling and great service for patients in the Avera Surgery Center. Behind the concept is years of experience at Avera McKennan applying LEAN principles for health care which streamline efficiency and eliminate waste.

A year before the Avera Surgery Center was scheduled to open, Avera McKennan completed a LEAN project in its Central Sterile Processing Department. This project succeeded in improving processes so the department could handle the increased volume of supplying surgical instruments to both the main ORs at Avera McKennan, and the Avera Surgery Center.

A LEAN project studied which instruments are used the most, and which instruments are used the least in surgery. Instruments for surgery were regrouped, eliminating those rarely used. Surgical sets now weigh less for less heavy lifting by staff. The process also saved several thousand dollars in purchasing new surgical equipment, in addition to the savings of not having to process instruments that weren't being used in surgery. In addition, LEAN standard work processes ensure that all instruments are sterilized in one way – the best way – every time for quality and safety assurance.

LEAN principles influenced room layout, supply systems and staff processes, so from the outset, the Avera Surgery Center will operate at top efficiency.

“We have interviewed, hired and trained a team that will focus their efforts on patient flow and great service. Because it's a different approach than high-acuity patients needing hospital care, we have hand-picked a team who could bring to life our ideals for outpatient surgery and patient flow,” said Patti Jagoe, assistant vice president for Perioperative Services at Avera McKennan.

State-of-the-art technology

At 650 square feet, surgical suites are the largest ORs in Sioux Falls



From the time planning began for the new Avera Surgery Center, technological sophistication was top priority.

“We knew we wanted large ORs because we wanted to future proof them and allow ample space for any kind of surgical equipment that may be on the horizon,” said Richard Molseed, senior vice president for Environmental Services at Avera McKennan.

“Surgeons were very concerned with technology, and we wanted to provide at least state-of-the-art, if not the very cutting edge,” said Dr. Greg Schroeder, medical director of operative services and chief of anesthesia at Avera McKennan.

“Everything from lighting to very advanced arthroscopic and laparoscopic equipment is state of the art, and you won’t find better anywhere else,” Dr. Schroeder said.

All endoscopic and cautery equipment is positioned on booms, so that nothing touches the floor. This is not only safer for patients from a standpoint of sterility, it’s ergonomically superior for staff who aren’t in danger of tripping on cords, or required to wheel heavy pieces of equipment around.

Specialized green lights can be switched on in place of white lighting in order to reduce glare on the surgical monitors where surgeons view camera images during procedures such as laparoscopy or arthroscopy.

Although the rooms will be used for outpatient surgery, they are designed to inpatient standards to allow for more flexibility.

Rooms are equipped with flat-screen technology for better viewing. Technology is such that diagnostic images or even the microscopic image of a pathology slide can be brought up for the surgeon to view, and surgeons can consult interactively with the pathologist.

There is a nurses station in every OR with touch screen technology, and room cameras in each OR so that all eight ORs can be monitored at the same time on one large screen at the main OR staff desk.

Telecommunications technology will open new doors for conferencing and teaching opportunities. All suites are designed to meet inpatient standards, so if a case becomes more complex than planned, that patient need not be moved. “So it is designed not only for a great patient experience, it is an excellent place for teaching and sharing of information,” said Dr. Luis Rojas, gynecologic surgeon at Avera McKennan.

In cooperation with staff of the Avera Cancer Institute, the surgery center will provide intra-operative electron-beam radiation therapy (IORT), technology that uses a mobile device to deliver high-dose radiation to tumors during surgery. This is the only IORT available in South Dakota and can be found at only 12 other locations in the United States

The latest technology extends outside the operating suites, for example, with an electronic patient tracking system.

This system allows every staff member and even families to know exactly where the patient is at every point during the surgical

process. Patients and staff wear badges that are tracking devices corresponding to sensors throughout the surgery area.

Information is displayed in confidential and easy-to-understand terms on a screen in the family waiting room so visitors know whether a given patient is in pre-op, surgery or recovery. Staff see a more detailed tracking board, which in addition to patients also shows the location of other staff members and even pieces of equipment.

Yet families aren’t confined to the waiting room. They are issued alpha pagers, and can roam the main floor of the building and enjoy seating areas, the bistro, meditation spaces, the indoor garden or library. Their pager alerts them when the patient is back in recovery.

The tracking system has built-in assurances that patients will receive great care and service. If a nurse has not come into the vicinity of a patient in 10 minutes, a red banner will display on the staff tracking board to let them know that a patient needs attention.

Patient monitors in the pre-op/recovery rooms are electronically connected to a nurse call system. So if there is a change in vital signs, a chime above the patient room sounds to alert nurses that there is an issue in that patient room.

“Throughout the center, we have the most modern of all concepts in surgery,” Molseed said.

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- DR. GREG SCHROEDER, MEDICAL DIRECTOR OF OPERATIVE SERVICES