

Rehab helps patients make the most of recovery

Avera McKennan's interdisciplinary rehab team helps patients regain skills for living

MAY 2010

BY DONNA FARRIS, AVERA MCKENNAN WRITER/EDITOR

When a stroke, brain injury or other traumatic event requires that patients spend time in rehabilitation, Avera McKennan Hospital & University Health Center's accredited program provides care that's on the same level as other regional and national centers – right here at home.

“For the majority of rehab needs, we provide the evidence-based, personalized care that patients require in near their home community,” said Julie Benz, assistant vice president for Orthopedics, Neurosciences and Rehabilitation at Avera McKennan.

Avera McKennan's rehab program opened its doors over 25 years ago in 1984. Since 1988, aspects of the rehab program have been accredited by CARF, the Commission on Accreditation of Rehabilitation Facilities. Currently, the rehab program is accredited for comprehensive inpatient rehab care for children through adulthood; brain injury rehab for children, adolescents and adults; and stroke rehab.

Rehab patients are often those who have been affected by strokes, spinal cord injuries, brain injuries, amputations, fractures, burns or major multiple trauma.

The majority of rehab patients have suffered a stroke, followed by other top diagnoses including brain injury, spinal cord injury, and orthopedic conditions.

High quality, excellent care

Rehab is part of a continuum of care at Avera McKennan. That continuum often begins in Avera McKennan's

state-of-the-art Emergency Department, especially for conditions like stroke or critical injuries. Avera McKennan is recognized as a certified Stroke Center by the Joint Commission,

and is designated as a Level II Trauma Center, based on its capability to care for critically-injured patients. This means that critical teams such as trauma surgeons, neurologists, anesthesia and

A specialized medical team



Physiatry is the medical specialty of rehabilitation medicine, and three board-certified physiatrists lead the Avera McKennan rehab team.

Dr. Thomas Ripperda with Avera Rehabilitation Associates said physiatrists oversee medical care for rehab patients to regain day-to-day function after stroke, spinal cord injury or trauma.

There's also a physical medicine component to regain function and control pain after injuries, for example, to the back, neck, leg or shoulder.

“Physiatrists work closely with the multidisciplinary rehab team to help patients improve their independence, determine whether or not patients are medically able to participate in therapy, identify any barriers to recovery and guide therapists in medically appropriate treatments,” Dr. Ripperda said. In addition to prescribing therapy, physiatrists may prescribe medications to help control symptoms.

The specialty of physiatry grew out of post World War II in the treatment of war injuries, and has since grown to encompass a wide range of cases.

A team approach combined with evidence-based practices, excellent facilities and state-of-the-art equipment make the Avera McKennan rehab unit on a par with regional or national rehab centers, Dr. Ripperda said.

Hospital rehab care comprises most of the physiatrists' practice, although they also see patients in a clinic setting for physical medicine diagnoses such as neck and low back pain, or the need of orthotics and prosthetics. The vast majority of patients are referred to a physiatrist from a primary care physician or other specialist.

Perhaps in physiatry more than other specialties, the patient is a driving force in successful outcomes. “We encourage all of our patients to participate in goal setting. We're not treating them for our goals to be met – but their goals. Specific aspects of treatment are steered toward what patients want to accomplish. Much of rehab is based on patients' expectations and their internal drive for recovery,” Dr. Ripperda said.

“MUCH OF REHAB IS BASED ON PATIENTS' EXPECTATIONS AND THEIR INTERNAL DRIVE FOR RECOVERY.”
DR. THOMAS RIPPERDA, PHYSIATRIST

diagnostic imaging are at the ready. Stroke patients receive acute hospital care in Avera McKennan's specialized Neuroscience unit. Or, patients might be transferred from a regional hospital. After acute hospital care, rehab is often the next step in the continuum of care to help the patient regain as much mobility, speech, life skills and independence as possible. Some patients recover fully; others need to learn to adapt to a new lifestyle after stroke or an injury.

Quality of care is verified by CARF accreditation, as well as benchmarking with other regional and national rehab facilities. "We compare ourselves regionally and nationally through the Uniform Data System, and are very much in line with other programs. Keeping an eye on benchmarks and CARF standards helps us provide a program that is top notch," said Deb Paauw, rehab unit manager.

Patients themselves give the program high marks, consistently rating it above the 90th percentile in Press Ganey patient satisfaction surveys.



A team approach

Benz credits the interdisciplinary team for excellence in quality care and service. Leading clinical rehab care is a team of three physiatrists, medical specialists in the field of rehabilitation medicine.

"We have a very supportive, committed group of physicians who manage the overall care of the patient," Benz said. "Our physicians are very engaged and constantly working with the entire

A day in the life on the rehab unit

Inpatient rehab is an intense therapeutic time. Patients must be able to participate in at least three hours of therapy per day, and need at least two types of therapy, either physical, occupational or speech. In the best interest of their health, rehab patients must be medically stable.

Instead of a hospital gown, patients wear their own clothes, and incorporate taking care of themselves as a part of the rehab experience.

The amount and types of therapy are prescribed by one of three physiatrists on the rehab unit, who oversee the medical aspects of care. Because there are so many members of the rehab interdisciplinary team, a Patient Care Coordinator brings all the pieces together in carrying out the patient's plan of care. "We create an individual schedule each day for each patient," said Deb Paauw, rehab unit manager.

A patient's typical day starts early in the morning when the nursing and occupational therapy staff help patients dress and get ready for the day.



Patients can choose to eat in their room, or the unit's own dining room. This benefits them socially, and also has therapeutic aspects if patients are relearning the mechanics of eating.

Therapy may take place in a variety of settings, including the patient's room, the therapy department, Easy Street and the Johnson Aquatic Center.

"After an injury or stroke, a patient's nervous system may have to relearn things the person learned as a child," said Jeanine Horner, physical therapist and therapy supervisor in the rehab unit. "It can be hard work and it can be frustrating. But the nervous system is very pliable and can relearn lost function to help patients get back toward where they were previously."

Physical therapists use a wide variety of exercises to help patients strengthen weakened muscles and improve coordination and balance. Physical therapists may also help patients learn to use assistive devices such as canes, walkers or wheelchairs, or manage architectural barriers such as curbs, stairs, sidewalks and doorways.

team. A team focus puts everyone on the same plan of care, with the patient at the center.”

Other team members include patient care coordinators, rehab nurses, physical therapists, occupational therapists, speech and language pathologists, dietitians, pharmacists, audiologists, and representatives from pastoral care and social services. In total, nearly 60 people are involved in rehab care.

Therapy is a major component of rehab. An evaluation by a physiatrist determines how much therapy patients need, and what types of therapy, whether physical, occupational or speech therapy. “Using the most advanced techniques and methods, we help patients set goals to get them back toward the same level of function they had before their stroke or injury,” said Jeanine Horner, physical therapist and therapy supervisor in the rehab unit.

Therapy involves therapeutic activities that are designed to help patients make progress toward the functional level they previously had, Horner said. When appropriate, a community reintegration specialist takes people outside of the hospital to practice skills such as going shopping or ordering dinner in a restaurant.

Weekly conferences and daily “huddles” help the rehab team adjust and modify the patient’s therapy program as needed.

“We look at the patient holistically, and work to put all the pieces together through an interdisciplinary team,” Horner said.

“It all starts with the patient and family, who we consider to be not only part of the team, but really the core of our team,” Paauw said.

Patients have an average length of stay of approximately two weeks, giving staff time to really get to know and understand them, and help them to set goals on how to recover or live a fulfilling and productive life with whatever injury or condition they have.

High touch, high tech

The rehab department is located on the second floor of Avera McKennan in the east wing. The 37-bed unit includes group dining and therapy areas. “Easy Street” is a therapeutic area designed to simulate activities and barriers in the community.

“It’s really a large doll house that brings outside

A day in the life on the rehab unit (cont.)

Occupational therapists help patients with life skills such as personal grooming, meal preparation, house cleaning, kitchen safety and laundry.

Speech and language pathologists help diagnose, evaluate and treat any speech and language difficulties, as well as swallowing problems. Audiologists evaluate hearing loss and recommend any needed treatment.

A community reintegration specialist assists in identifying resources and supportive community agencies. Patients may also work with social workers to help with adjustment following a disabling illness or injury, as well as pastoral care chaplains.

Aside from therapy, patients may be engaged in educational classes, support groups, social events and holiday celebrations. Family members are encouraged to be involved in those activities as well as therapy. In their free time, patients are encouraged to practice activities that they learned in therapy that day. “We try to create an environment that is more like the outside community than a sterile hospital environment,” Paauw said.

The patient and his or her family are at the center of planning rehab care, and they also play a big role in the success of the program. “A patient’s mindset and motivation is huge, as well as family support,” Horner said.



environments inside the hospital,” Horner said. It includes a greenhouse, laundromat, staircase, bank, café, theater and grocery store.

For example, in the theater section, patients can practice getting in and out of a theater seat. There are curb cutouts to navigate and an ATM to operate. Grocery store items are weighted to represent the “real thing.” “On Easy Street, patients

“USING THE MOST ADVANCED TECHNIQUES AND METHODS, WE HELP PATIENTS SET GOALS TO GET THEM BACK TOWARD THE SAME LEVEL OF FUNCTION THEY HAD BEFORE THEIR STROKE OR INJURY.” JEANINE HORNER, REHAB THERAPY SUPERVISOR

can practice doing a lot of different things that they'll experience in the community in a safe environment," Paauw said. Also in the rehab department is a car for patients to practice getting in and out of, and an apartment where patients can stay for a short time, perhaps with a spouse, in order to simulate life at home.

Rehab is "high touch" rather than "high tech," although the unit is equipped with technologically-advanced equipment if it helps patients, Benz said. For example, there's a partial weight-supporting treadmill, which helps people walk by bearing only partial weight on the legs, and an electrical stimulation bike, which sends electrical impulses to nerves in the legs for people who have lost voluntary muscle movement due to stroke or spinal cord injury. This therapy keeps muscle tone and works the heart and lungs as well.

"Our goals are to help patients achieve their maximum functional potential, and address their specific needs so that patients and their families can be self-sufficient when they leave here – and doing all this without any medical complications," Paauw said.



Rachel's goal: to walk again



Rehab begins with goal-setting, and Rachel Johnson had a simple, but ambitious one: to walk again.

Walking was a life skill that 16-year-old Rachel didn't need to give a second thought to, until a serious motor vehicle accident on Aug. 20, 2009.

Rachel suffered a spinal cord injury causing quadriplegia, or paralysis from the neck down. She spent two weeks in acute care at Avera McKennan Hospital, including time in the ICU.

A nine-week stay in the rehab unit began Sept. 3, as physiatrist Dr. Thomas Ripperda and therapists began working with Rachel to prevent complications, and help her learn ways to adapt to life with a spinal cord injury.

"Each day she retrained her body how to do the activities of daily living, whether it was scratching her nose or feeding herself. These were all great milestones to us," said her mother, Dianne.

"Rachel's main goal was to walk again," Dianne said. "It wasn't until the evening of Sept. 18 that we got a glimmer of hope that Rachel was going to move her legs." Dianne, a registered nurse, was doing leg stretches on Rachel when she felt her daughter's leg muscles push out. They shared this victory with the rehab team, which began to do further testing and then therapy to help improve movement in her lower extremities. This included work on the electrical stimulation (e-stim) bike, pool therapy and a standing frame. Finally, Rachel took her first steps using the partial weight-supporting treadmill.

Rachel continued to work on walking. When she left Avera McKennan Nov. 6, she was still unable to walk unassisted, but was well on her way. Now, with the help of continuous outpatient therapy, she is walking using a walker. Her ultimate goal continues to be to walk on her own. Rachel, now 17, is a junior at Russell, Tyler, and Ruthton (RTR) High School in Minnesota.

Rachel's family lives near Russell, Minn. Her dad, Brad, is a dairy farmer and her mother is a registered nurse. She has a younger sister, Krista, and brother, Ross. Instead of going to a rehab center in Nebraska, Denver or Minneapolis, the Johnsons were thankful Rachel could receive this level of care near home in Sioux Falls. "With the expertise of Dr. Ripperda and the rehab team, we felt confident she was going to get good care. We also felt that being close to family and friends would be excellent for our healing process, rather than being many, many miles away from everyone," Dianne said.

Over the past several months, there have been struggles along with celebrating victories. "We have found strength within ourselves through God, family, friends and even strangers," Dianne said. "Rachel still has a long road of recovery ahead of her, but with her determination and faith we truly believe great things will happen for her."