

## **Inpatient Services**

The Inpatient Unit at the St. Louis VA Spinal Cord Injury (SCI) Service seeks to address the numerous and varied needs of people with SCI. Our patients include those who have suffered a recent injury and require initial rehabilitation, those whose injury dates back months, years and even decades and who are experiencing common consequences and complications of SCI such as urinary tract infections, skin breakdown (which sometimes results in bone infection), fractures of bones, increased muscle stiffness and spasms. In addition we electively admit patients for certain procedures and intervention such as yearly brief evaluations of their overall medical, rehabilitative and psychosocial needs, colonoscopies, as well as for pre-operative preparation before surgical procedures scheduled at the acute care John Cochran Division.

Our nurse practitioner, physicians, psychologists, social workers, rehab therapists, nutritionist, and pharmacist work together to take care of your health care needs in a comprehensive fashion, answer your questions, explain our recommendations and provide educational opportunities about your health care needs. We are ready to work with you and your family, friends and caregivers.

### **Initial Inpatient Rehabilitation**

While some spinal cord injuries are mild and don't require inpatient rehabilitation, in many instances a patient's life and independence is suddenly altered, often in a dramatic and catastrophic way. Patients and their families or significant others may feel a devastating loss, be fearful about their future. They need our support and care on numerous levels. We strive to address these needs in a comprehensive fashion:

- ❖ Due to the loss of spinal cord control over internal organs, many organs may function differently. Patients may need a lot of medical attention.
- ❖ After a SCI, patients typically improve to variable extents. Certain aspects of a patient's exam allow us to guess in a general and imprecise way at this recovery.
- ❖ Psychological Rehab
- ❖ Social Work
- ❖ OT, PT and RT evaluation & therapy program designed to meet individual needs

The goal of rehabilitation is to accompany and optimize the natural recovery process, and to develop adaptive strategies that allow patients to utilize functional muscles which compensate for weak muscles.

## Sustaining Care Admissions

Some medical issues require a lengthy time of stay for problems to resolve. Patients may be admitted to our service for fractures of limb bones or skin breakdown. Recovery can many weeks and months.

1. People with SCI are at considerable risk for *fractures*. This is so, because very quickly after the initial trauma to the spinal cord their bones below the level of the injury start losing calcium. So a person with paraplegia is at risk for fractures in the bones of the legs, a person with tetraplegia is also at risk for fractures in the arms. This risk is compounded by the likelihood of falls. Even though we teach patients how to do transfers from bed to wheelchair or from shower chair to bed correctly and safely, accidents happen. Due to the altered pain perception and because often they don't use their legs for walking, patients may not immediately notice the broken bone; this may worsen the damage to the surrounding tissue. Broken bones in SCI take a long time to heal. While in people without SCI a bone can often be stabilized with a steel rod, this is commonly not an option in SCI, so the bone has to heal on its own. This is often best accomplished in the hospital, because managing safely at home may be exceedingly difficult with the added disability of a broken leg for a patient and the family.
2. People with SCI are also prone to *skin breakdown aka decubitus ulcers*, for instance over the buttock or lower back area. This is in part related to the fact that patients may not notice skin irritation or pressure from objects between the bed sheets and their bodies such as plastic tubing or pencils. Furthermore, just like the limbs of the body and every organ, the skin is connected via the spinal to the brain. With SCI numerous changes ensue in how the nervous system controls all organs; the skin becomes very delicate and can easily break down.

Major additional risk factors that may be modified include smoking, diabetes, poor nutrition, sweating, stool and urine incontinence (because both irritate the skin), obesity, inappropriate mattresses and wheelchair cushions, spasticity/spasms, sunburns, prolonged travel, not doing pressure reliefs, anemia, emphysema, heart disease, vitamin deficiencies, and many more.

Skin breakdown is often preventable and educating patients and families how to take care of the skin is the goal during the initial rehabilitation, during outpatient visits and during continuity-of-care visits at their homes. Minor skin breakdown can often be treated at the patient's home, with a focus on future prevention and identification of what lead to this situation.

What happens when people need to be admitted for skin breakdown, depends on its severity. In general, ulcer management focuses on numerous issues:

- ❖ Several times a week, the lesion is measured and classified based on depth and tissues involved (skin, muscle, joints, bone).
- ❖ Improve the patient's general health

- ❖ Treat underlying medical problems
- ❖ Optimize nutrition
- ❖ Optimize the wound environment
- ❖ Clean the wound gently during daily dressing changes
- ❖ Protect the wound from contamination such as stool and urine
- ❖ Optimize wound healing
- ❖ Use special mattresses and/or wheelchair cushions to reduce pressure on the skin
- ❖ Use pillows to keep the body part that bears the skin ulcer off the mattress
- ❖ Avoid shearing forces during turning in bed and transfers to prevent further skin trauma
- ❖ Remove dead tissue:
  - Often this is done using gentle natural chemicals and wet to dry dressings
  - Sometimes this is done in a surgeon's office or in the operating room
- ❖ Surgical repair of skin (and sometimes bone)
- ❖ Education and prevention is taught at every level of care

**While minor skin breakdown can heal rapidly and at home, more severe situations can require prolonged hospitalizations that last many weeks or even many months. This further illustrates the need for prevention!**

During long sustaining care admissions we strive to maintain your physical and emotional well being.

Services that are provided are:

- ❖ Complete medical history and physical examination.
- ❖ Social Work evaluation and follow up.
- ❖ Rehabilitation Therapy (Physical, Occupational, Recreational, Arts & Crafts)
- ❖ Beside range of motion and strengthening
- ❖ Nutritional Evaluation and follow up
- ❖ Psychological Evaluation and follow up
- ❖ Educational programs, both one-on-one and Wellness Classes
- ❖ Discharge planning with the team
- ❖ Home evaluation if indicated

### **Elective Admissions**

These admissions are typically scheduled usually weeks ahead of time. They often last a couple of days or up to 2 weeks (in case of respite care). Reasons may include:

- ❖ Respite care: we offer the opportunity for respite care for our patients and their caregivers. Patients can be admitted for up to 14 days at a time and for a maximum of 30 days per year. This service is provided on our SCI Unit or in the Skilled Nursing & Rehabilitation Center. It is advisable to plan respite care in advance as beds are seldom available on short notice. Please call 314-894-6677 or 800-228-5459, ext 6-6677 for more details

- ❖ **Colonoscopy:**  
Depending on symptoms, past medical history, and family history, your provider may recommend that you have a colonoscopy. During this procedure which is done at the acute care John Cochran Division, a gastroenterologist (the specialist for the stomach, gut and liver) inserts a several foot long scope into your rectum and looks for abnormalities and may take tiny tissue specimens for microscopic analysis). While this is an outpatient procedure, people with SCI may be admitted because they often have problems using the standard methods required to clean out the gut, so we help them do it on our service over 2 days before the procedure.
- ❖ **Seating Systems:**  
We admit patients to fit them for special wheelchair cushions and back rests that are custom-designed to reduce the risk of skin breakdown, optimize posture, improve stability in the wheelchair, and reduce pain.
- ❖ **Pre-operative Preparations:**  
Sometimes we admit patients who are scheduled for specialized procedures such as kidney stone removal and need intravenous antibiotics for a urinary tract infection.

**Location: Jefferson Barracks, Building 52, Spinal Cord Injury Service, 1<sup>st</sup> floor**

**For questions please call 314-652-4100 or 800-228-5459, ext 6-6677**