

**REHABILITATION CENTER
SANTA CLARA VALLEY MEDICAL CENTER**

**BRAIN INJURY REHABILITATION PROGRAM
SCOPE OF CARE**

POLICY

The SCVMC Brain Injury Rehabilitation Program provides a broad range of therapeutic activities structured in a program individualized to meet each patient's strengths, cultural needs, age requirements, abilities and preferences. The program serves both traumatic and non-traumatic brain injury. Considered payer sources include: Medicare, Medi-Cal, Commercial, Health Maintenance Organizations (HMO), Workers Compensation, California Children's Services (CCS), and private pay. Final authorization is at the discretion of the insurance company. Referrals are accepted from all sources which may include hospital, physician/group, payer, and private pay.

Admission Criteria:

1. Patient must have an acquired brain injury resulting in a significant loss of function.
2. Patient must be medically stable, without complications, which would interfere with intensive rehab, and attainment of realistic rehab goals.
3. Must be 13 years or older.
4. Must have a primary presenting problem in two or more of the following:
 - A. Self -care
 - B. Mobility
 - C. Motor dysfunction of one or more limbs
 - D. Bowel/bladder control/management
 - E. Pain management
 - F. Safety
 - G. Cognitive functioning
 - H. Communication
 - I. Swallowing difficulties
5. Patient must require an interdisciplinary team approach, consisting of at least 2 therapies physical therapy, occupational therapy, or speech pathology.
6. Patient must be able to tolerate and benefit from at least 3 hours of therapy 5 days/week.
7. Must have a viable discharge plan generally to a non-institutional setting.
8. Demonstrates rehab potential, and is expected to make a significant improvement in functional skills within a reasonable period of time.
9. Requires 24 hour rehabilitation nursing.
10. Requires daily medical supervision of a physician experienced in rehabilitation medicine.

Transition/Discharge Criteria:

1. Patient requires intensive medical treatment not provided by the program such as telemetry, surgery, or life supporting treatment.

2. Patient is unable to participate or unwilling to participate in the required therapy program.
3. Patient is unable to be safely discharged to a non-institutional setting.
4. Patient no longer requires daily medical management.
5. Patient has made enough progress to be safely discharged to non-institutional setting.

Services available

The following services are provided on site 24 hours a day, seven days a week:

- Medical management by a physical medicine and rehabilitation physician
- Rehabilitation nursing services provided by a registered nurse including assessment, implementation, planning, and critical decision making
- Diagnostic imaging
- Laboratory
- Pharmacy services
- Comprehensive medical and surgical specialty services include but not limited to: Orthopedics, Neurology, Neurosurgery, Cardiology, Endocrinology, Pulmonology, General Surgery, Urology, Internal Medicine, Interventional Radiology, and Psychiatry.

Consultations and results are received in a timely fashion, typically within 24 hours.

Other services provided on site by physician referral and are based on the individualized needs of the person:

- Audiology
- Case Management
- Chaplaincy
- Dialysis
- Nutrition
- Occupational Therapy (OT)
- Ostomy/wound care
- Peer support
- Physical Therapy (PT)
- Psychology/Neuropsychology
- Respiratory Care
- Social Services
- Speech Pathology (SLP)
- Therapeutic Recreation
- Visual Assessment

Services available through contractual agreements:

- Acupuncture
- Orthotic services
- Prosthetic services

Referrals are made to community based programs for:

- Driver rehabilitation/attendant van
- Inpatient substance abuse treatment
- Physical environmental modifications
- Rehabilitation engineering
- Vocational rehabilitation
- Transportation options

Rehabilitation Focus Areas:

I. MOTOR FUNCTION

The Brain Injury Program focuses on functional mobility, balance, standing, walking, strengthening, tone management, coordination, conditioning, in addition to instruction and practice for family and/or caregivers to prepare them to assist the patient at home. Adaptive equipment is provided as appropriate. Pool therapy is available and addresses stretching, walking, exercising, and relaxation, in groups or individually.

II. SENSATION AND PERCEPTION

Perceptual deficits are identified on initial evaluation and addressed in functional therapeutic activities. The environment may be modified with signage to remind staff and family of the best way to approach the patient or the best placement of call lights. Neurovision assessment and training are performed by OT. Reading material is modified by SLP as appropriate. Assistive devices are utilized to optimize attention. Consultations with audiology, ENT, optometry and ophthalmology are available.

III. ACTIVITIES OF DAILY LIVING

OT and PT provide assessment and training for participation in activities of daily living. Patient preferences and physical and cognitive ability determine which activities of daily living are addressed. When indicated, patients are provided training in the use of appropriate assistive and orthotic/prosthetic devices prior to discharge. Family training is provided in the areas that are appropriate for each patient.

IV. PSYCHOLOGICAL NEEDS

Mood assessment and psychological history are obtained on admission. When needed, the Brain Injury Program provides psychology and psychiatry consultation, evaluation for psychotherapy and pharmacotherapy, and referral to community resources. One to one supervision around the clock is available when self-harm is

a concern. Family and caregiver support services are available when needed and referrals for ongoing services are made should they be required.

V. COMMUNICATION

Assessment and treatment are guided by SLP. Communication strategies and augmentative communication technologies are used and reinforced by other disciplines within individual and group settings.

VI. COGNITION

Formal and informal assessments are performed on admission and daily by various rehabilitation staff including neuropsychology, SLP, physician, nurse, PT, and OT. Treatment occurs within individual and group settings.

VII. BEHAVIOR/SAFETY

Formal and informal assessments are performed on admission and daily by various rehabilitation staff including psychology/neuropsychology, SLP, physician, nurse, PT, and OT. Behavioral observation and input from family members or friends are also solicited. If certain identified behaviors are assessed to pose safety risks to the patient and/or others, interfere with optimal therapy participation, or present potential challenges to discharge, then these behaviors are tracked every shift and a behavioral management plan is implemented. One to one supervision around the clock is available when safety is a concern. Family and caregiver education is performed regarding behavior changes after brain injury. Pharmacotherapy is employed when necessary. Psychiatry consultation is available.

VIII. SWALLOW

Preadmission screening identifies most dysphagia. Swallow evaluation by SLP on admission is ordered if dysphagia is a concern. Diets are individually tailored to ability, diet restrictions and upgraded when safe and appropriate. Video fluoroscopy and FEES are available. Nursing and SLP together provide appropriate individual or group supervision for meals. NGT placement can be performed on the unit by nursing or physician. Gastrostomy placement is performed on consultation with gastroenterology or interventional radiology. Gastrostomy removal is performed on the unit. Family teaching is performed individually by SLP and nursing, and formally in patient education classes held by SLP.

IX. HYDRATION AND NUTRITION

When needed, the Stroke Program monitors daily intake/output, skin turgor, secretions, caloric count, periodic weight measurements, and laboratory tests. Physician and registered dietician determine physiologic fluid goals. The interdisciplinary team assists with meeting fluid goals. For patients with dysphagia, SLP may evaluate for free water protocol to assist with adequate hydration. Fluid

supplementation, either intravenously or enterally, is provided as needed. Family is able to provide home food; the rehab unit provides refrigeration and microwave oven. Ethnic diets are offered and dietary preferences can be accommodated by the hospital kitchen. The Brain Injury Program also provides family and patient education and training regarding diet restrictions and recommendations including administration of tube feeds when appropriate.

X. CONTINENCE

Bowel and bladder continence needs are assessed on admission by the physician and nursing; assessment is repeated daily. Needs are met by a coordinated interdisciplinary approach to address medications, timing, monitoring (bladder scans), self-care training, and family training.

XI. MEDICAL STATUS AND COMORBIDITIES

Initial and daily evaluations of medical status and co-morbidities are performed by the physician and nursing. Monitoring and management recommendations are made by physicians. Telemetry is available in therapy for patients who need cardiac monitoring. Electroencephalography, including video EEG is available. Consultation is available 24 hours a day from all medical and surgical subspecialties available at SCVMC including neurosurgery, neurology, ENT, ophthalmology and urology.

XII. SEXUALITY AND INTIMACY

Sexuality and intimacy are addressed with patients and partners by physicians and psychologists in private and via educational literature. Positioning concerns can be addressed by OT. Capacity to consent to sexual activity is assessed by physician and psychology. Intimate partner violence concerns are addressed by social worker.

XIII. SKIN INTEGRITY

Preadmission screening identifies existing skin breakdown and wounds. Admission assessment verifies the accuracy of preadmission screening. Nursing performs daily skin checks or breakdown and wounds, identification of patients at high risk for skin breakdown, patient and family education for prevention and treatment. Wound specialist RN consultation is available. Medications for treatment are ordered by physician. PT and OT monitor skin integrity closely when applying casts, splints, and provide input with seating, positioning, and adaptive equipment to promote skin integrity. Mobility tasks are evaluated to determine if skin shearing is possible. Activities may be restricted or modified based upon skin condition. Appropriate beds/mattresses are provided based upon skin issues. Registered dietician gives input regarding protein, calorie, and mineral/vitamin supplementation for skin healing.

XIV. HEALTH PROMOTION AND PREVENTIVE SERVICES

Patient education classes and individualized teaching are performed by all interdisciplinary team members. Consultations by diabetic nurse educator, wound/ostomy nurse specialist, and dietician are available. Community referrals are made to smoking cessation programs, drug and alcohol treatment, mental health treatment, support groups, senior nutrition site, exercise programs, and adaptive PE classes.

On admission, nursing and physician assess need of Influenza and Pneumovax vaccinations. Universal precautions are practiced in the hospital. Patient and family teaching regarding best hygiene practices is performed by physicians, therapists and nurses. Children visitors under 14 years of age are screened for illness prior to visitation which is permitted in the dayroom rather than patient rooms.

All patients are screened for infections in times of epidemic. TB screening is performed upon request prior to placement in another facility. MRSA screening is routinely performed on patients admitted from another acute facility or from SNF; it is repeated during rehab if applicable. Nursing monitors vitals and skin on a daily basis. Routine admission laboratory tests may detect common medical conditions.

XV. COMMUNITY INTEGRATION/LEISURE ACTIVITIES

Opportunities are available for patients to identify and participate in leisure activities in both individual and group activities that promote social and physical function. Community integration activities are provided by interdisciplinary staff throughout the patient's stay. Patient education and practice is provided in community accessibility and barrier management.

XVI. VOCATIONAL/EDUCATION

Neuropsychology and occupational therapy provide assessment and individualized treatment to develop pre work skills or simulate current job tasks and/or age/level appropriate school activities. Recommendations are provided to school/work for the best way to create a learning environment or special accommodations for that might be needed. If the patient is appropriate to resume educational activities while in the program, tutoring will be arranged.

XVII. FAMILY DYNAMICS

Psychology and social services assess the function of the family system and provide targeted treatment to improve the adjustment to the disability and new life roles and relationships within the family.