WakeMed Rehab provides an integrated, comprehensive delivery of rehabilitation services directed toward a population of individuals who have suffered an acquired brain injury as a result of illness, injury, or disease process. Various elements of the BIRS program are available in the acute care WakeMed – Raleigh, Acute Neuro Care Program and Unit at WakeMed - Raleigh, the Rehabilitation Hospital, and the Day Treatment Program at WakeMed – Raleigh. Specific program elements are described in detail in the BIRS manual. Admission to the BIRS program would benefit these individuals in ways not otherwise possible by developing and restoring skills toward independence and decreasing the dependency effect on their families and communities.

The scope of the BIRS program addresses the unique aspects of delivering care to the person served according to their level of impairment, activity level and participation in the following areas:

- Recognizing, assessing, and treating conditions related to brain injury
- Prevention of complications and co-morbidities
- Identifying and reducing risk factors for recurrent brain injury
- Facilitating functional independence and performance
- Facilitating psychological well-being, coping and social adjustment
- Facilitating community inclusion and participating in life roles
- Promoting use of assistive technology

It is also within the BIRS program scope of service to address prevention of brain injury through on-going education of patients and families as well as involvement in community programs. Services for families and support systems are also within the scope of brain injury services, including education about brain injury and participation in the rehab process.

WakeMed Rehab receives referrals from many sources, including, but not limited to, private physicians, physiatrists, acute care hospitals, rehab hospitals, nursing facilities, Wake County Health Department, home health agencies, WakeMed Emergency Departments, local urgent care centers and follow-up appointments from former inpatients and outpatients. Payer sources for WakeMed Rehab include both state and federal public payers (Medicare, Medicare Advantage Plans and Medicaid), commercial insurances, worker’s compensation, and self pay. Any payer requirements that potentially affect the provision of services are identified and communicated to the treatment team, including the person served.

Annually, WakeMed reviews market comparisons and establishes reasonable rates for private and semi-private rooms, as well as updating the Charge Description Master for all provided services. Program fees are defined, and anticipated liability related to services are discussed with patients individually prior to admission and provided in writing via the Written Disclosure Form. On-going discussion regarding the financial impact of hospitalization and services post-discharge is the responsibility of the case manager.

Admission decision-making occurs within a team process by evaluating the patient’s impairments, activity and participation limitations, determining rehab needs and potential for functional improvement. Additionally, a review of the program’s ability to meet the patient’s needs and recognize community resource alternatives and availability is assessed. WakeMed Rehab serves patients ages 4 and up, though younger children may be accepted after discussion and approval of Medical Director, Director of the Rehab Hospital and Nurse Manager of 3C or Outpatient Rehab Director on a case-by-case basis. Appropriate placement of each person served is also addressed through the admission and discharge/transition criteria for each component of care, the resources available, resources previously used, ongoing assessment and the person’s potential to benefit.
A physiatrist medically supervises WakeMed Rehab’s BIRS program. Services are provided by highly qualified professional staff designated specifically for the brain injury rehabilitation program. Treatment space, bed assignment and equipment are also specifically identified for provision within the brain injury rehabilitation program.

The interdisciplinary teams for the brain injury program are comprised of the person served, family member/caregivers/support system, as appropriate, and the following consistently assigned professional disciplines dependent on patient need:

- Neuropsychology
- Clinical Case Management
- Rehabilitation Medicine
- Rehabilitation Nursing
- Occupational Therapy
- Physical Therapy
- Speech-Language Pathology
- Therapeutic Recreation
- Clinical Dietician

If services not available within the WakeMed Rehab system are needed, referrals, contracts or consultations will be made to provide patients with appropriate services that may include, but are not limited to:

- All medical, diagnostic and laboratory services offered at WakeMed
- Pediatric services
- Audiology
- Assistive Technology
- Behavioral Health, Psychiatry, Neurobehavioral and Psychological Services
- Caregiver/Family services
- Community Support Agencies, Advocacy Groups, Support Groups
- Department of Social Services
- Dialysis
- Drivers Assessment and Education and Rehabilitation
- Durable Medical Equipment
- Dysphagia Management
- Environmental Modification/Rehab Engineering
- Nutrition
- Optometry
- Orthotics and Prosthetics
- Ostomy/Wound Care
- Palliative Care
- Peer Support
- Respiratory Therapy
- Sexual Counseling and/or Assessment of Sexual and Reproductive Functioning
- Social Security Administration
- Spasticity Management
- Specialty consultants
- Spiritual Care Services
- Substance Abuse Counseling/Chemical Dependency Specialist
- Total Parental Nutrition
- Vestibular Assessment
- Visual Assessment
- Vocational Rehabilitation

Provision is made to include all consulting services and external case managers as members of the interdisciplinary team.

Upon admission to the BIRS Program, each individual receives a comprehensive assessment and
evaluation by each team member initially involved in provision of his/her direct treatment. Appropriate assessments are provided based on the ages, cognitive levels, interests, concerns and cultural and developmental needs of the person served. Designated space, equipment, furniture, materials and private areas for family/peer visits are provided as appropriate. Pediatric patients are appropriate for BIRS programming with special attention given to developmental needs and age-appropriate assessment/interventions.

For patients served in the Rehab Hospital, with input from all team members, the physician develops an Individualized Plan of Care for each patient within four days of admission. In both inpatient and outpatient settings, the treatment team will meet to update the Plan of Care based on realistic, achievable, functional goals and planned interventions necessary for goal achievement in a realistic time frame. Treatment planning includes a minimum standard of intensive rehab programming of either three hours of therapy per day, five days per week or fifteen hours of therapy over a seven day period. In the inpatient setting, weekend therapy is routinely provided as recommended by the team and as part of the treatment plan. The Outpatient Rehab Day Treatment Program operates Monday and Wednesday from 8am-6pm, Tuesday, Thursday and Fridays from 8am-4:30pm, and frequency of therapy services is based upon the individual rehab needs of the person served.

The Care Plan is structured to include the patient/family goals and discharge planning issues. An estimated length of stay and assessment of discharge needs are identified within the parameters of the long term goals. Through the case management process, the Plan of Care is shared with the patient/family and, when appropriate, the individual’s insurer to facilitate communication, reimbursement and a collaborative discharge plan.

Patient and family involvement in the brain injury program begins during the pre-admission and assessment phases and continues throughout the program. The comprehensive Plan of Care, progress and goals are formally discussed with the patient/family at least weekly in inpatient settings. In the Day Treatment settings, it is reviewed upon evaluation, at time of progress note update and as needed by the treatment team. Discipline specific goals, focused on fostering self-management are discussed during treatment sessions and include the family during specific family training sessions. Every effort is made to meet patient/family needs and goals through participation in the decision making process. Goal conflicts are addressed primarily through the Case Management process or Family Conferences, but may also be addressed during family training sessions, individual treatment sessions, or other contacts with person served and/or family. The BIRS program provides or arranges for family/support system advocacy training, support services, education, family support, and peer/sibling support as appropriate.

Each patient’s program includes Orientation, Assessment, Treatment, Discharge Planning and Follow Up. Evaluation, treatment, programming and focus on the functional areas of:

1. Health/Medical Stability  
   - Bowel function, Bladder function, Skin integrity, Sleep/wake cycles, Medication management, Wellness Promotion, Prevention of complications, contraindications
2. Nutrition/Diet  
   - Nutritional status, Nutritional intake, Assessment and Interpretation of lab values, Diet education
3. Psychosocial  
   - Support system, Education, Vocation, Patient/family understanding of illness, Patient/family coping/adjustment/insight, Community and financial resources, Discharge planning.
4. Behavior  
   - Behavior management, social interaction, self-control
5. Mobility  
   - Bed mobility, Transfers, Gait, Wheelchair mobility, Environmental barrier management.
6. Self-care  
   - Feeding, Grooming, Bathing, Dressing, Toileting, Home management, Visual perception.
7. Communication  
   - Auditory comprehension, Verbal/nonverbal expression, Speech intelligibility, Reading, Writing, Hearing, Swallowing.
8. Cognition  
   - Orientation, Attention, Memory, Reasoning/problem solving.

10. Environment  Level of stimulation, safety, accommodations, compensatory aids.

The program provides an organized education program about brain injury for persons served and their family/support systems that includes education on:

- Neuroanatomy
- Etiology and epidemiology of acquired brain injury
- Communication with providers
- Professional Boundaries
- Active involvement in the service delivery process
- Financial resources and benefits systems including, but not limited to, Vocational Rehabilitation, Social Security, Medicaid, etc.
- Behavioral supports
- Cognitive and communication interventions
- Developmental/life transitions
- Aging with a disability
- Community resources
- Recognizing and reporting suspected abuse and neglect
- Sexuality and Reproductive Issues
- Medical complications
- Risks associated with brain injury
- Advocacy for patient and family
- Psychosocial issues following brain injury
  - Adjustment to disability
  - Role changes
  - Mental health needs
  - Cultural impact
  - Adjustment issues
  - Delineation of roles
  - Social perceptions
- Substance misuse

Continued Care Planning occurs throughout the patient’s admission and includes, as needed:

1. Contact with the patient’s primary or referring physician and/or hospital.
2. Early identification of a realistic discharge destination.
3. Assessment of accessibility and characteristics of the discharge environment and community.
4. Identification of family/primary caregivers.
5. Identification of and referral to community support resources, including but not limited to advocacy services, counseling/support resources for individual, family, parent, sibling, etc.
6. Referral for continued rehabilitation therapy on an outpatient or home care basis.
7. Referral to medical specialists for follow-up after discharge.
8. Education regarding prognosis, prevention and wellness.
9. Referral to equipment, orthotic or prosthetic agencies.

Need for continued admission is decided upon by all team members during team and family conferences and is based on:

1. Medical/physical problems which can best be treated within the rehabilitation hospitalization or within the Outpatient Rehab Day Treatment Program.
2. Continued progress toward stated goals.
3. Expected improvement in function and independence.
4. Availability of alternative treatment or programming.

Discharge dates are planned or set when continued admission is no longer necessary, patient and family are adequately prepared and discharge destinations are finalized.

Upon discharge, each patient and family receive a follow-up plan including the following, as needed:

1. Follow up medical appointments with the primary physician and/or physiatrist and any other medical specialist determined by the discharging physiatrist.
2. Telephone numbers for doctor’s offices and other staff for questions or problems after discharge.
3. List of medications, doses and directions for use.
4. Therapy prescriptions.
5. Recommendations for activity/participation levels.
6. Dietary instructions.
7. Contacts with Home Health Care or Outpatient rehabilitation, as needed.
8. Contacts with referred financial and vocational assistance agencies.
9. Contacts with DME, orthotics or prosthetic agencies.
10. Educational service contacts.
11. Referral for psychosocial adjustment counseling (family counseling, individual counseling, parent support groups, sibling support groups).
12. Substance misuse treatment referrals.
13. Community support groups and/or advocacy groups (Specifically BIANC).