

# The Brain Injury Rehab Program

The Inpatient Brain Injury Rehab Program at Wake Forest Baptist Medical Center provides specialized, intensive rehabilitation services for patients age 13 and older who have traumatic and non-traumatic brain injuries resulting in cognitive deficits, behavior problems, physical limitations and problems with self-care. Brain injuries may be related to trauma from motor vehicle and other accidents, brain tumors, stroke, anoxia/hypoxia and other neurological injuries. The Program outperforms other programs across the country by returning a higher percentage of patients to home. The Program's effectiveness is attributed to the expertise of its interdisciplinary rehabilitation care team and exceptional facilities designed for the unique needs of brain injured patients. The Program provides intensive patient and family training programs to prepare patients and their families for rehab discharge, to coordinate equipment needs and home modifications, and to provide information on lifetime health and wellness resources.

## Philosophy of Care

Each patient is unique, with specific needs, capabilities and potential. Therefore, each patient's treatment plan is individualized and modified as recovery progresses. The rehabilitation team, patient, and family/caregivers work together to set and achieve functional improvement goals.

## The Care Team

The Program's success is attributed to its comprehensive, interdisciplinary team, which includes the patient, family members/caregivers, and professionals specializing in:

Rehab Medicine  
Rehabilitation Nursing  
Clinical Psychology  
Neuropsychology

Clinical Nutrition  
Occupational Therapy  
Physical Therapy  
Speech Language Pathology

Social Work  
Recreation Therapy  
Assistive Technology\*

\*These services are provided by team members who are not directly employed by WFBMC, but who work very collaboratively with the Wake Forest Baptist Medical Center Rehab Programs.

## Scope of Services

- Board-certified physicians specializing in Physical Medicine and Rehabilitation (PM&R) direct the patient's plan of care on a daily basis.
- Rehabilitation Nursing is provided 24 hours a day, 7 days a week
- Each patient receives a minimum of 15 hours of therapy each week, including a combination of physical therapy, occupational therapy, speech therapy, and/or orthotics/prosthetics training. The types of therapy, intensity of therapy, and schedule are tailored to the needs of each patient. Therapy services are provided 7AM to 5PM, Monday through Friday and on Saturdays as needed.
- Recreation therapy, clinical psychology, neuropsychology, and assistive technology services are available 5 days a week, and are provided based on the needs of each patient.
- Each patient is assigned a Care Coordinator who acts as a liaison between patient, family/caregiver, rehabilitation professionals, and third party payers.
- Wake Forest Baptist Medical Center directly provides all ancillary services including, but not limited to, Diagnostic Imaging, Laboratory, Pharmacy, Spiritual Care, and Respiratory Therapy.
- Consulting physician services for other specialties are provided by Wake Forest Baptist, as needed.
- If services not available within the Wake Forest Baptist are needed, referrals or consultations are made for these services, which may include, but are not limited to: cognitive rehab, durable medical equipment, caregiver/family services, substance abuse counseling, vocational rehabilitation, rehab engineering, and driver's assessment and education.

## Treatment Goals and Common Interventions

The ultimate goal is to return each patient to the highest level of independence possible, and in most cases, to return patient to home. Specific treatment goals are individualized and may include:

- Maximizing function in:
  - Mobility
  - Activities of Daily Living (eating, grooming, dressing, bathing)
  - Communication and planning
  - Swallowing
  - Bowel and bladder management
- Improving attention span, memory, judgment, and spatial orientation
- Addressing behavioral or emotional issues such as anxiety, depression, mood swings, denial, emotional lability, egocentricity, impulsivity, disinhibition, agitation, and isolation
- Addressing sexuality and family issues
- Disability adjustment, counseling, and coping strategies
- Improving social skills
- Patient and family education for individualized needs
- Recommending healthy living practices for weight control and smoking cessation
- Optimizing community integration and life roles through community outings, recreation therapy and use of assistive technology
- Identifying and providing additional services for families/support systems (e.g., support groups)

## Specialized Facility and Services

The Program provides an environment and services ideally suited for brain injury rehabilitation.

- Dedicated brain injury nursing unit and therapy gym, ensuring reduced stimulation and a secure therapeutic environment that allows patients to move freely throughout the unit.
- On-site school tutoring education program for adolescent patients
- Home of the Region Resource Center for the Brain Injury Association of North Carolina

## Behavior Management

An injury to the brain can often cause changes in patient's behavior. Sometimes these changes are subtle and adaptable. Other times, the patient's behavior can become an obstacle to recovery and may even endanger the patient and/or others. For this reason, the Brain Injury Program staff monitors the patient's behavior and implements formalized behavior management plans. These plans are developed by the rehab team in conjunction with the patient and/or family and serve to enhance patient participation and satisfaction while addressing individual goals.

Family members are educated on positive reinforcement for desired behaviors and response strategies for inappropriate behaviors.

These formalized plans are monitored daily and require a consistent team and family effort. Several special features of our program that focus on the patient's behavior and recovery include:

- Keeping a consistent health care team
- Maintaining a calm approach with patients
- Reducing stimulation in the environment, such as activity and noise levels
- Providing routines for patients
- Providing a secure unit that allows for greater mobility of patients.

## Demonstrated Excellence in Rehabilitation

The Brain Injury Rehab Program has been awarded accreditation from the Commission on Accreditation of Rehabilitation Facilities. CARF Accreditation means that Wake Forest Baptist Medical Center's Brain Injury Rehab Program:



- is committed to excellence in rehabilitative care
- meets rigorous international standards of patient care and satisfaction
- is committed to helping each patient achieve their individualized rehabilitation goals
- constantly works to improve services and stays on the edge of rehabilitation techniques and technology
- surpasses communication expectations with referral and payer sources

## Admission Criteria and Referrals

Patients admitted to the Brain Injury Rehab Program must have realistic rehabilitation goals that reflect the potential for gaining independence or achieving a higher function in self-care activities and mobility. Additionally, a patient must:

- Be 13 years of age or older
- Require and be able and willing to participate in intensive physical, occupational and/or speech therapy (if indicated) at least 3 hours a day
- Have the need for more than one type of rehab therapy and have potential for functional improvement.
- Be medically appropriate for an inpatient hospital environment and have stable vital signs.
- Have a supportive social system and a defined, expected discharge destination to home
- Have a cognitive level of three or higher on the Rancho Los Amigos scale.
- Be able to breath without the help of a mechanical ventilator at all times.

Wake Forest Baptist Health accepts payment from all major private insurance plans, worker's compensation, Medicare and Medicaid. The Program evaluates and verifies insurance coverage for each patient prior to admission. If the patient does not have insurance coverage for the Rehabilitation Program, the patient and/or family/caregiver will be notified and alternate payment plans or treatment options will be discussed. Any estimated financial responsibilities will be communicated to the patient and/or family.

The Program welcomes referrals from many sources, including, but not limited to, physicians, short term acute care hospitals, rehab hospitals, nursing facilities, long term acute care hospitals, and home health agencies. To make a referral, call (336) 713-8500 or (888) 605-9568.

For additional information about the program, call (336) 716-8454 or email [Rehab4Life@wakehealth.edu](mailto:Rehab4Life@wakehealth.edu).

The Rehabilitation Programs at Wake Forest Baptist Medical Center do not discriminate against individuals of varying age, disability, race/ethnicity, religion, gender, or sexual preference and strive to understand and be sensitive to these characteristics and to patient-specific preferences.

# Brain Injury Rehab Program

## Program Patients – Calendar Year 2017

Number of patients: 111

Patients with Traumatic Brain Injury: 68

Patients with Non-Traumatic Brain Injury: 43

64% were males

36% were females

Average Days in Program: 15

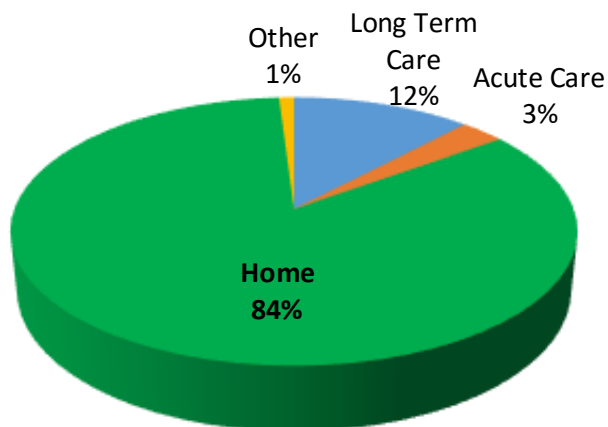
Average Intensity of Therapy:

3.5 Hours per day, 5 days per week

Age Group	Number of Patients
13-17	5
18-40	44
41-65	33
66-85	28
86-100	1

## Patient Outcomes – Calendar Year 2017

### Setting after Program Discharge



The ability to return home is a key outcome and expectation for most Program participants. Wake Forest Baptist's Program returns a higher percentage of patients to home than other programs nationwide. In 2017, 84% of the Program's patients returned home, compared to the national average of 77%. 3% of patients returned unexpectedly to their previous hospital setting, but often for a short period prior to returning to the Rehab Program. 12% of patients discharged to a long term care setting for continued rehab and/or nursing care. 100% of adolescent patients returned home.

Functional Improvement in:	% Patients With Improved Function between Admission and Discharge	
	Traumatic Brain Injury	Non-Traumatic Brain Injury
Self-Care	98	93
Bowel and Bladder	67	73
Locomotion (Walking/Stairs)	96	97
Bed, Toilet, & Chair Transfers	98	97
Communication	84	73
Interaction/Memory/Problem Solving	84	73

Function is measured, or scored, at admission, during the stay, and at discharge. The table to the left shows the percentage of patients who demonstrated improvement in function between admission and discharge from the Program. 100% of Adolescent patients had improved function in every category.

Source: Uniform Data Systems for Medical Rehabilitation

Patient/Family Satisfaction	Average Score (Out of 100 points)
Prepared to function at home	90
Likelihood of recommending program	92

Source: Press, Ganey

# What to Expect in Your Rehab Program

The information below will give you an idea of what your rehab program may include. Please keep in mind that your rehab care team will complete a thorough evaluation after admission and develop a more detailed care plan based on your needs and your family's needs.

Name\_\_\_\_\_ Diagnosis\_\_\_\_\_ Rehab Physician\_\_\_\_\_

Location: \_\_\_\_\_ Expected Days in Program\*\_\_\_\_\_ Expected Discharge\_\_\_\_\_

Insurance Coverage: \_\_\_\_\_

Rehab Intensity: Treatment will include a minimum of either three hours of therapy per day, five days per week, or fifteen hours of therapy over the seven day period. On average, patients in the Brain Injury Program receive 75 minutes physical therapy, 75 minutes occupational therapy, and 60 minutes of speech therapy per day, 5 days per week.

Program Services		Treatment Goals
<input type="checkbox"/>	Rehabilitation Physician Services	Manage your medical condition to ensure your safety and progress toward your goals. Nurse practitioners, physician's assistants, medical students, and residents may work in close collaboration with your rehab physician. During your stay, physician orders will be responded to, with results, within 24 hours, unless otherwise specified.
<input type="checkbox"/>	Physical Therapy	Improve & maximize your mobility skills, safety, strength and endurance
<input type="checkbox"/>	Occupational Therapy	Improve your ability to complete activities of daily living such as eating, dressing, bathing, toileting and home management; address sexuality issues related to impairment
<input type="checkbox"/>	Speech Therapy	Improve your swallowing, communication and cognitive skills
<input type="checkbox"/>	Rehab Nursing	Manage your bowel and bladder control, address family issues associated with impairment, educate on care needs, including health and wellness. Our team will be asking you to assume more responsibility and independence the closer you get to discharge. This will make you and your family better prepared for your activities of daily living and resuming home life.
<input type="checkbox"/>	Nutrition Services	Educate and ensure proper nutrition during treatment
<input type="checkbox"/>	Clinical & Neuropsychology	Help you and your family members with emotional and mental health challenges associated with temporary or permanent disability
<input type="checkbox"/>	Recreation Therapy	Educate you and your family on how to adapt to community environment after discharge and how to enjoy recreational activities safely
<input type="checkbox"/>	Care Coordination	Coordinate services with the care team, you, and your family members to ensure needs are met prior to discharge
<input type="checkbox"/>	Orthotics	Provide custom orthotic (if needed) to improve mobility and range of motion
<input type="checkbox"/>	Other	The Program is attentive to the specific cultural or other needs of each patient. Please let us know if you have any specific needs or requests.

# What to Expect During Your Stay

The following is a typical schedule for the first three days after admission to the Rehab Program.

## Day One

- Arrive on the 3rd floor of the Sticht Center at assigned room.
- Nurse assesses your condition and needs upon arrival to the rehabilitation unit.
- Meet with the physician, social worker and nurses within the first 24 hours.
- Receive an assigned wheelchair for the rehab stay.
- Receive a tentative schedule for each therapy. Throughout your stay, you will receive regular updates on the scheduled times for each therapy service identified for your care plan.

## Day Two

- Begin therapy evaluations and treatment, which could include physical therapy, occupational therapy, speech therapy and recreation therapy. You will participate approximately three hours of therapy each day and at least 15 hours per week.

## Day Three

- Working with you and your family, the Rehab team develops an individualized Plan of Care based on your condition and determines your functional status. The Plan of Care guides your treatment program. The rehab team reviews your progress toward your goals at least weekly.

# What to Expect During and After Discharge

Your care coordinator will work with you, your care team, and your family/caregiver to coordinate the best discharge plan for your individual needs. Many activities must be completed prior to discharge. For example:

- ☑ Your care team will make recommendations for equipment you will need at home or modifications that you will need to make at home for your safety and continued recovery.
- ☑ Your Care Coordinator will arrange for delivery of equipment.
- ☑ Your care team will determine if you need assistance from a home health agency, which includes nursing and/or therapy at home. Another option is outpatient therapy after your discharge. If the best option for you is home health, your Care Coordinator will give you a list of agencies to choose from near your home and arrange Home Health visits. If outpatient therapy is the best option for you, the Care Coordinator will set up appointments for outpatient therapy.
- ☑ Your care team will review all discharge instructions with you.
- ☑ The unit secretary will schedule follow-up appointments with your physician.

***When your physician notifies you that you will be going home, please be aware that it may take several hours for the care team to complete all necessary items and ensure that you have a safe and successful discharge from the Program.***

## **After discharge from the Inpatient Rehabilitation Program:**

- ◆ Your rehabilitation journey will continue, and you may need additional resources to assist with lifestyle changes. During your stay, we will provide information about additional resources that are tailored to your individual needs. If you have additional needs or questions about community resources, please contact Karen Lawrence at 336.716.8454 or email: Rehab4Life@wakehealth.edu.
- ◆ You will receive a Press-Ganey Survey in the mail to request feedback on your satisfaction with our services. Please note that you may receive 2 surveys — one for your stay in the acute hospital and a second one for your stay in our Rehabilitation Program.


# Brain Injury Resources for Your Continued Recovery

There are many other services within our health system and in your community that may assist in your recovery. The next two pages introduce some of the services and resources available through our organization, the local community, or national organizations. We encourage you to call or visit the websites for these organizations. However, please do not hesitate to ask us for additional information on these services or for other providers or services in your community.

The **National Institutes of Neurological Disorders and Brain Injury** provides a wealth of information on treatment, prognosis, research, and rehabilitation for traumatic brain injury.

 [www.ninds.nih.gov/disorders/tbi/detail\\_tbi.htm](http://www.ninds.nih.gov/disorders/tbi/detail_tbi.htm)

**The Brain Injury Association of NC (BIANC)**, an affiliate of the Brain Injury Association of America, is dedicated to prevention, education, research, and advocacy for persons whose lives have been forever changed by brain injury. **Wake Forest Baptist Health (WFBH) is a corporate sponsor of BIANC and is proud to be the home of BIANC's Regional Resource Center.** The Center is located just outside the Brain Injury Unit in the Sticht Center. All patients of the WFBH Brain Injury Program receive an application for free membership to BIANC. For more information, visit the BIANC resource room or:

 1.800.377.1464 (Family Help Line)

 [www.bianc.net](http://www.bianc.net)

**BrainLine** is a national multimedia project offering information and resources about preventing, treating, and living with TBI. For more information:


 [www.brainline.org](http://www.brainline.org)

**Peer support services** provide brain injured individuals and their families an opportunity to meet and talk with others who are successfully coping with brain injury. Peer Support services can be provided in informal one-on-one sessions or in small groups. WFBH offers family/caregiver support and information about area support groups. There are also opportunities to interact informally with other family members on the unit. To learn more, please notify your care coordinator or recreation therapist.

*After discharge*, the following Brain Injury **local support groups** are available.


Winston-Salem: *WS BI Support*

Contact: Kitty Barringer


 336.713.8582 or 336.906.9127

Greensboro: *BI Support Group*

Contact: Lucy Hoyle

 336.832.7450

WFBH's **Club Independence (Club I)** is an interactive Day Recreation Therapy Program providing education, recreation, and overall health and wellness opportunities for individuals with disabling conditions, including brain injury. **Club I** is the only program of its kind in the Triad and one of only two in North Carolina. Led by licensed recreation therapists, **Club I** addresses ways for members to enhance their quality of life and assists them in returning to the community and to recreational activities that they once enjoyed. **Club I** meets on Wednesdays from 9:00am to 4:00pm at Medical Plaza Miller. Members must be 18 or older and independent with their activities of daily living and medical management. For more information:

 336.716.8007

 [www.wakehealth.edu/Recreation-Therapy/Club-Independence.htm](http://www.wakehealth.edu/Recreation-Therapy/Club-Independence.htm)



# Brain Injury Resources for Your Continued Recovery

The **NC Center for Cognitive Rehabilitation and Brain Fitness** is devoted to helping individuals who have cognitive impairments as a result of Brain Injury or head injury. The treatment is functionally based and individualized to each person's specific goals. There is an emphasis on community integration and return to work. For more information:

Address: 1495 Rymco Drive, Suite 102, Winston Salem

☎ 336.283.9197

WFBH offers **myWakeHealth**, a patient portal that gives patients unprecedented access to their health information, without the unnecessary burden of waiting. *MyWakeHealth* allows you to get answers to your medical questions from the comfort of your own home; schedule your next appointment or view details of your past and upcoming appointments; and access test results. For more information:

💻 [www.mywakehealth.com](http://www.mywakehealth.com)

**BestHealth** is the Piedmont Triad's trusted source for hands-on health knowledge, classes and screenings. BestHealth is presented by Wake Forest Baptist Medical Center, one of America's top ranked hospitals. An optional membership is also available to individuals who want to take a more active role in improving or managing their health. For more information:

☎ 336.713.BEST (336.713.2378)

💻 [www.wakehealth.edu/BestHealth](http://www.wakehealth.edu/BestHealth).

**Driver Rehabilitation Services** include clinical assessments of a person's visual, perceptual, cognitive, physical, and behavioral abilities as it relates to safe and independent driving due to aging, an illness or injury. Two local providers of these services are:

Driver Rehabilitation Services, P.A.

☎ Toll-free: 888.888.0039

☎ Office: 336.697.7841

💻 [www.info@driver-rehab.com](mailto:www.info@driver-rehab.com)

Forsyth Rehabilitation Center

☎ 336.718.5780

The **Winston-Salem Mayor's Council for Persons with Disability (MCPD)** hosts free monthly meetings that are open to the public. Meetings are at 11:30am on the second Tuesday of each month. For more information:

☎ 336.245.5678

The Inpatient Rehabilitation Programs are pleased to offer a **Rehabilitation Resource Center** on the Comprehensive Inpatient Rehabilitation Unit. Please visit the center and let us know what you think.

If you need assistance finding additional resources in your community:

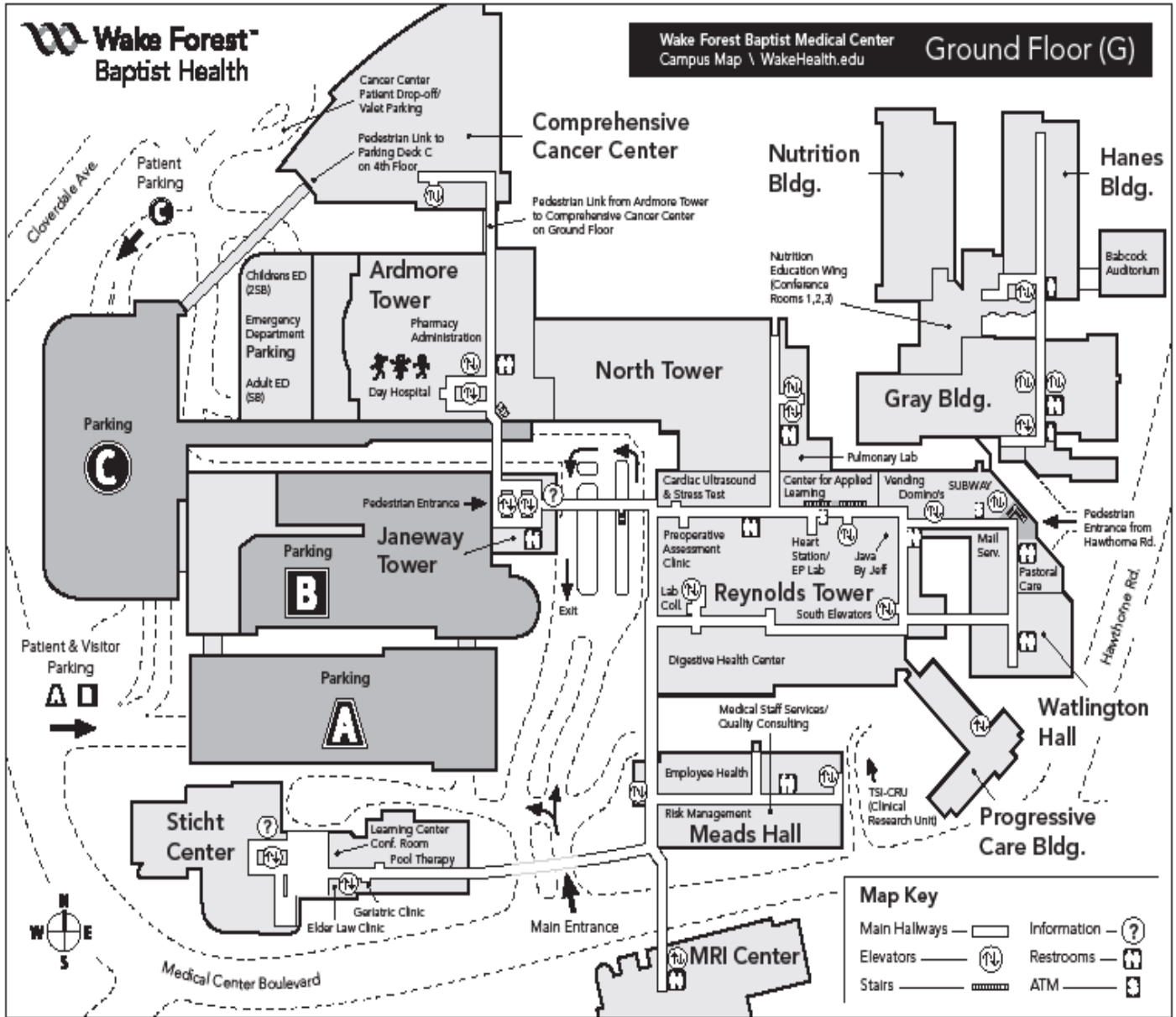
Contact: Karen Lawrence, Rehabilitation Outreach Coordinator

☎ 336.716.8454

Email: [Rehab4Life@wakehealth.edu](mailto:Rehab4Life@wakehealth.edu).



## Map and Driving Directions to the Sticht Center



The Rehabilitation Programs are located on the 3rd floor of the Sticht Center. Park in Patient/Visitor Deck A. **From Interstate 40 East:** Take Business 40 toward Winston Salem. Exit Cloverdale Avenue. At the bottom of the exit ramp, continue straight through the traffic light onto Medical Center Boulevard. Proceed up the hill and around the curve. Turn left into the Main Entrance to the Medical Center. Turn into the first drive on your left. And then right to park in Deck A.

**From Interstate 40 West:** Take Business 40 toward Winston Salem. Exit Cloverdale Avenue. At the bottom of the exit ramp, turn right on Cloverdale Avenue. At the first traffic light, turn left onto Medical Center Boulevard and proceed up the hill and around the curve. Turn left into the Main Entrance to the Medical Center. Turn into the first drive on your left, and then right to park in Deck A.

# Contact Numbers

We want to provide the best possible care and service to you and your family. If you have a problem, concern, or unmet need related to your stay on the rehab unit, please speak to your nurse or care coordinator as soon as possible. We are here to help you each step of the way.

## **Rehabilitation Units**

Acquired Brain Injury (ABI) Unit-3SA Rooms-301-310	336.713.8300
General Rehabilitation Unit-3SB Rooms-351-369	336.713.8341
Patient Rooms	336.702.5(room number)

## **Rehabilitation Program Management**

Nurse Manager: Jamie Brown	336.713.8355
Therapy Manager: Jennifer Brown	336.713.8065
Administrative Director: Amy Crews	336.716.8434

## **Care Coordinators**

Joy Watson	336.713.8815
Katherine Conrad	336.716.8024
Auria Chamberlain	336.716.1071

## **Office of Patient Experience**

336.713.2273

## **Billing and Insurance**

Billing	336.716.4958 or 877.938.7497
Financial Counselor	336.716.0681

## **After Discharge**

For Questions about community resources:

Karen Lawrence, Outreach Coordinator 336.716.8454

Inpatient Rehabilitation Website: [www.wakehealth.edu/rehabservices](http://www.wakehealth.edu/rehabservices)

Email for all general inquiries about rehab services: Rehab4Life@wakehealth.edu