Cardiac Pulmonary Program Scope of Services

Our Mission

The mission of the Cardiac/Pulmonary Program is to assist our patients to achieve their highest level of independence and function. This is consistent with the core values and mission of Helen Hayes Hospital which is to promote independence and health through high quality, cost effective medical rehabilitation with dignity and respect for all.

Our Patients

The cardiac program is designed to meet the needs of individuals, ages 18 through the life span, who are recovering from a cardiovascular incident. This program offers rehabilitation services for a culturally diverse population who have disabilities caused by coronary artery disease, valvular disease, peripheral vascular disease, cardiomyopathy and other cardiovascular pathology.

The pulmonary program is specifically designed to meet the needs of individuals with acute and chronic lung diseases such as emphysema, chronic bronchitis, asthma, interstitial lung disease, pneumonia, and lung surgery.

Disabilities may be compounded by deconditioning, skin/wound care issues, arrhythmias, fluid overload, swallowing disorders, and prolonged respiratory problems resulting in difficulty communicating, eating, dressing, and walking, as well as limitations in cognition and social skills. Comorbidities such as stroke, renal disease, liver disease, and diabetes are also managed.

Referrals are accepted from all over the country. Helen Hayes Hospital accepts most insurance, however, if your insurance is not contracted, fees can be negotiated. Helen Hayes Hospital has contracts with most major payor sources which include but are not limited to Medicare, Blue Cross, Aetna, United Health Care and Medicaid.

Our Approach and Our Rehabilitation Team

The program provides unified, interdisciplinary services with a focus on health education and disease management and prevention, increasing strength and endurance, maximizing independence in activities of daily living, providing adaptive and durable medical equipment when necessary, safe medication administration and nutrition management. The rehabilitation program offers a minimum of 3 hours per day of both individual and group therapy.

Each morning patients dress in their own attire, and are served breakfast. Patients participate in at least three hours of therapy daily, following an assigned individualized therapy schedule.

Lunch occurs at about 12:00 noon and therapy generally ends at approximately 4pm. Patients are then free to rest, relax and spend time with visitors. Dinner is served at 5:00pm.

The primary cardiac team consists of a board certified pulmonologist, nurse practitioner, registered nurses, respiratory therapist, nutritionist, physical and occupational therapists and case management/social services. Other services are available for consultation and treatment if needed including speech therapists, mental health professionals, therapeutic recreation specialists, and pharmacists. Other team members are added as necessary.

The Attending Physician, who is an Internist and Pulmonologist, is the Cardiopulmonary Program Medical Director and the patient’s primary physician.

The physician will perform a thorough history and physical examination upon admission and a comprehensive review of all chart records. Cardiac and pulmonary patients are placed on telemetry monitoring for the first 24-72 hours after admission. Laboratory and diagnostic tests are completed twice weekly. In house consultants including Cardiology, Neurology, and Psychiatry/Psychology are requested as needed.

Around the clock medical coverage is provided by 24 hour nursing staff and an in-house on call hospital physician. Outside consultations for other aspects of medical management such as Infectious Disease, Urology, and Radiology, are also obtained on an as needed basis.

The physician discusses any complications that may have developed, management of symptoms, treatment course, and short and long-term prognosis. An individualized treatment plan is...
developed for each patient and takes into consideration the patient’s and family goals as well as our rehabilitation teams knowledge and experience in achieving these goals. Medications are reviewed and adjusted by our physician or nurse practitioner. The treatment plan addresses each patient’s medical, physical and psychosocial needs. This plan is reviewed with the patient and family shortly after admission and is modified as necessary based upon the degree of progress seen over time.

**The patient receives 24 hour nursing care by licensed, Registered Nurses (R.N.’s).** All registered nurses are ACLS and Dysrhythmia Certified. In addition we have HCA’s (Health Care Assistants) to provide assistance with activities of daily living (ADLs) and transfers. The nursing staff administer all medications, monitor cardiac signs and symptoms, provide wound and skin care, and manage pain.

**Our occupational therapists** evaluate the ADL (Activities of Daily Living) and adaptive equipment needs of our patients. OT also evaluates the patients’ overall endurance, standing tolerance, cognitive status, and safety needs for the current environment as well as for discharge settings. Our OT staff assess physical impairments and functional limitations of the upper body with specific attention to managing cardiac and pulmonary symptoms, post-surgical precautions and proper breathing techniques, allowing for the development of optimal individualized exercise programs.

**Our physical therapists** address lower body function, upright and functional mobility and endurance, respiratory and circulatory issues, cardiac symptom management, oxygen saturation levels, and proper breathing techniques. A therapist with experience in Cardiopulmonary disease works one-on-one with the patient, providing therapeutic interventions designed to regain strength, endurance, improve physical impairments and functional limitations in order to restore the greatest degree of function and mobility. In conjunction with Occupational Therapy, PT will assess any functional issues associated with the aging process. PT and OT will help patients and family members evaluate the home for necessary home modifications.

**Case managers** assist patients and families with insurance issues and the exploration of community resources. They disseminate information regarding discharge planning, arrange for home care, outpatient therapy, and nursing home services where appropriate. They are available for guidance to both patients and caregivers especially for transition, discharge and long term planning. They facilitate communication between the family and the Cardiopulmonary team throughout the continuum of care to insure a smooth transition from hospital to home.

**Licensed Respiratory Therapists** manage supplemental oxygen, bronchodilators, and incentive spirometry to maximize lung function and improve oxygen saturation. The respiratory therapist works with therapy team to wean appropriate patients off oxygen. If oxygen or other respiratory equipment is required upon discharge, the respiratory therapist facilitates ordering these items.

*A Licensed Dietician* works with the patients to ensure they are getting optimal nutrition, and educates the patients with regards to adhering to dietary restrictions based on their cardiac and or pulmonary condition.

**Admission Criteria**

Referral to the cardiac and pulmonary program is under the direction of the patient’s attending physician. The patient’s attending (typically from an acute care setting) deems the patient medically clear to participate in individual/group therapy daily. The amount of therapy provided, number of disciplines involved as well as the amount of time per discipline, is individualized. While the total time may vary on different days relative to each patient’s tolerance and needs, patients will receive at least three hours of therapy 5 days /week. Therapies include Occupational, Physical, Speech, as well as Mental Health and Therapeutic Recreation if clinically warranted. Therapy extends beyond the individual sessions throughout the entire 24 hour period through the rehabilitation nursing staff who reinforce therapeutic techniques during daily activities.

A referral specialist, from Helen Hayes Hospital does a pre-admission assessment of medical and rehabilitation needs to ascertain the patient’s/family potential benefit from the rehabilitation program.

For continuity of care it is necessary that the cardiac team receive a copy of the patient’s chart with a discharge summary including:

- History and physical
- All consults
- Discharge medication list including date and time of last dose
- Nurses transfer summary
- Recent progress notes
- Lab work (last several days)
- Any diagnostic test results: (chest x-ray, report, echocardiogram, ultrasounds, dopplers, CAT Scan, MRI, etc.
- The Medical Director requests a copy of the most recent cardiac angiography, electocardiogram, echocardiogram and cardiac surgical notes.

**Program Description**

Upon admission to Cardiac/Pulmonary Rehabilitation program, the patient will receive a comprehensive medical, physical, and occupational therapy evaluation and a therapy program specifically designed to increase mobility and independence will be provided. When specifically identified, ancillary therapy programs (ie: Speech Therapy) will be incorporated.

Typical services include rehabilitation nursing services, wound care, arrhythmia monitoring, fluid status monitoring, incontinence training, physical, occupational therapy, respiratory therapy patient/family education, home/food management training, nutritional services, case managers and social services/discharge planning.
In addition, other services might include speech therapy, psychological services/cognitive neuropsychology, and therapeutic recreation services.

The average length of stay is dependent on patient needs, functional level, cognitive status and discharge priorities but is usually between 10-14 days. Patient progress is reviewed on a weekly basis by the team. Progress is measured using the Functional Independence Measure Instrument (FIM).

The interdisciplinary team works with the patient in a goal directed fashion to focus on functional status in the intended discharge environment. The team and patient work toward preventing future cardiovascular/pulmonary events, minimizing impairments, reducing disability, and achieving predicted outcomes.

Other professional services may be added to the overall treatment plan. Available adjunctive and/or diagnostic services include audiology, chaplainry, chemical dependency counseling, diagnostic radiology, orthotic services, prosthetic services, laboratory services, genitourinary services, podiatry, and consultative medical, neurological, or rehabilitation physician services.

**Discharge Criteria**

Discharge of the patient to the appropriate environment is critical to the success of the cardiac/pulmonary rehabilitation program. The Hospital offers a continuum of care through the Sub Acute Unit, Transitional Care Unit, Outpatient Cardiac and Pulmonary Rehabilitation, and Outpatient Neurological Rehabilitation programs. Appropriate referrals, medical follow up and communication with referring clinicians are established. These services are important to prevent recurrent cardiovascular disease and to optimize independence and functional capacity. Prior to discharge, the team works with the patient and family to assure referral to appropriate outpatient services (visiting nurse services, home services including PT/OT, outpatient cardiac or pulmonary rehabilitation), stresses the importance of follow-up with referring physicians in a timely fashion, and optimizes communication with referring physicians with written material (discharge summaries) and telephone contact (if appropriate).

The discharge plan is initiated on day of admission, and an intended discharge date is projected at the first team rounds. The projected date is discussed with the patient/family and final discharge information is given to the patient/family on the day of discharge. Within the framework of three possible paths actual discharge occurs. Patient safety is the bottom line, therefore, discharge occurs when the patient:

- Has accomplished goals set by the team
- No longer require an intensive rehabilitation setting
- Could be safely managed in an alternative environment

Discharge may be delayed if the patient has an acute medical need prohibiting participation in the rehabilitation program.

**Advocacy**

The interdisciplinary Cardiac/Pulmonary team is at all times advocating for the patient. This can take many forms and may include educating family about access to programs and services with activity limitations and participation restrictions; arranging for appropriate counseling and support services, and enabling peer support.

**Education**

Patient and family education is an ongoing individualized process. Each discipline provides educational information through the use of videos, brochures, pamphlets and didactic discussion.

As therapy participation increases, various educational handouts including, managing cardiac and pulmonary signs and symptoms, cardiac precautions, proper breathing techniques, disease prevention, dietary restrictions, smoking cessation, and home and community ADL management are given to patients. Home exercise information is given before discharge to help continuation of therapies.

Individual teaching about medication is provided by the nursing staff. A discharge folder with all pertinent information including discharge medications, equipment, home care, medical/surgical follow up is given to the patient at the time of discharge. Prescriptions for medication are electronically prescribed for a maximum of 30 days by the physician or nurse practitioner.

The case manager will review with patient/family the arrangements for any needed care post discharge.

Community education is done through various modalities, i.e., participation in the OPCR and OPPR programs, Helen Hayes Hospital Web Site, information from American Heart Association and Health Fair activities.