

Cardiac Pulmonary Program Scope of Services

Our Mission

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

Our Patients

The cardiac program is designed to meet the needs of individuals, ages 20 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, idiopathic cardiomyopathy and other cardiovascular pathology.

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

Some of these disabilities may include deconditioning, skin or wound care issues, arrhythmias, fluid overload, swallowing disorders, and prolonged respiratory problems causing difficulty in communicating, eating, dressing, walking, as well as limitation in memory, emotional control and social skills.

Services to treat comorbidities such as stroke, COPD and diabetes, which may complicate cardiovascular and pulmonary diseases, are also offered.

We accept referrals from all over the country, however our top 5 referral sources are Good Samaritan Hospital, Nyack Hospital, Columbia Presbyterian Medical Center, Valley Hospital and Englewood Hospital. Helen Hayes Hospital accepts most insurance but 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, 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 clothes and are served breakfast. Patients participate in at least three hours of therapy, following the assigned therapy schedule. Lunch takes place at about 12:00 noon and therapy generally ends of the day at about 4pm. Patients are then free to rest, relax and spend time with visitors. Dinner is generally served at 5:00pm.

The primary cardiac team consists of a board certified internist, nurse practitioner, an exercise physiologist, 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 specialists, therapeutic recreation, pharmacist. The other team members may be added as necessary to provide individualized care.

The Attending Physician, who is an internist, is the Cardiopulmonary Program Medical Director and the patient's primary physician.

The physician will perform a physical examination upon admission and a comprehensive review of all medical systems. This review allows the Attending Physician to discover the patient's general state of health and specifically cardiac and/or pulmonary status. Cardiac patients are placed on telemetry monitoring for the first 24-72 hours after admission. Laboratory and diagnostic tests are completed based on the needs of the patient. Consultants are called as indicated and include cardiologists, pulmonologists,

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neurologists and mental health counselors.

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

All of the above findings are discussed with the patient. The physician carefully discusses any complications that may have developed management of symptoms and the short and long-term prognosis. An individualized treatment plan is developed with each patient and this plan includes the patient's and family goals as well as the rehabilitation teams knowledge and experience in guiding patients towards realistic goals. Current medications are reviewed and adjusted as our physician and patient feel is warranted. If appropriate, smoking cessation programs are discussed and medication is provided as needed. 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 Cardiac/Pulmonary 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 licensed nursing staff administers all medications, monitors cardiac signs and symptoms, provides wound and skin care and monitors your 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 current environment as well as for discharge setting. Our OT staff assesses 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 symptoms and symptom management, oxygen saturation rates, 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, address physical impairments and functional limitations, to restore the greatest degree of function and mobility. In conjunction with Occupational Therapy, PT will also assess any issues associated with the aging process. PT and OT also help patients and their 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, and arrange for home

care, outpatient therapy and nursing home services where appropriate as well as hiring of personal care assistants and other available resources. 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 work with patients to manage supplemental oxygen, bronchodilators, or incentive spirometry to regain lung function and improve over oxygen saturation. If appropriate the respiratory therapist works with the therapy team to wean the patient from oxygen so they can return home without it. If oxygen is required upon discharge the respiratory therapist ensures that it is provided.

A Licensed Dietician works with the patients to ensure they are getting proper nutrition and following the recommended dietary restrictions based on their cardiac and or pulmonary condition.

Admission Criteria

Referral to the cardiac 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, both the 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 three hours of therapy 5-6 days /week. Therapies include Occupational, Physical, Speech, Mental Health Specialist and Therapeutic Recreation. The practice of therapy extends beyond the individual sessions throughout the entire 24 hours when the rehabilitation nursing staff reinforces the 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
- recent 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, electrocardiogram, echocardiogram and cardiac surgical notes.

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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 10-16 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.

As needed other professionals may be added to the team for consultant services. Available adjunctive and/or diagnostic services are; audiology, chaplainry, chemical dependency counseling, diagnostic radiology, orthotic services, prosthetic services, laboratory services, genitourinary/ gynecological services, podiatry, consultative medical, neurological, surgical 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, 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 status is subsequently the foundation of the individualized Plan of Care.

This plan is set upon day of admission and an intended discharge date is projected at the first team rounds. The discharge date is

discussed with the patient/family and discharge information is given to the patient/family at the time of discharge. Within the framework of three possible paths actual discharge occurs. With safety as the bottom line, discharge occurs when the patient and/or family:

- have accomplished their goals
- no longer require an intensive rehabilitation setting
- could be safely managed in an alternative environment
- have an acute medical need which prohibits participation in the rehabilitation program

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 nurse. A copy of discharge summary with all pertinent information of medications, equipment, care, medical/surgical follow up is given at the time of discharge. Prescriptions for the medication will be given by the physician.

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

Advocacy

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