FIELD NOTES



Problem

Low socioeconomic status is associated with poor cardiovascular disease (CVD) outcomes, including heart failure,¹ and increased hospital readmissions among heart failure patients.² Heart failure is one of the leading causes of CVD-related disease and death in the United States.

Program

The Grady Heart Failure Program works to increase health equity by improving the quality of care and outcomes of low-income, vulnerable patients with heart failure. It uses a multidisciplinary approach to reduce high rates of hospital readmissions by giving patients education to help them manage their health and offering services to reduce socioeconomic barriers to care.

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Overview

Since 2011, Grady Memorial Hospital, a public safety net hospital in Atlanta, Georgia, has offered the Grady Heart Failure Program as a way to decrease health disparities in cardiovascular disease (CVD) care for vulnerable patients. Specifically, the program works to reduce the risk of 30-day readmission rates for low-income heart failure patients who are insured, uninsured or underinsured.

To achieve this goal, the program works to reduce the barriers that prevent patients from getting the ongoing care they need. It uses a team-based approach and an electronic medical record (EMR) system to address the unique health and socioeconomic needs of heart failure patients at high risk for 30-day hospital readmission, improve the quality of care and health outcomes of these patients, and advances health equity. The multidisciplinary team includes Advanced Practice Providers (APP) (i.e., nurse practitioners and physician assistants), certified medical assistants, cardiologists, pharmacists, case managers, data abstractors, and community partners who work together to provide oversight and guidance for the program.

The program identifies and enrolls heart failure patients, provides inpatient and outpatient services, and offers services to reduce socioeconomic challenges to care and **management of patients'** CVD conditions. The table below describes core components of the Grady Heart Failure Program as described by leadership, staff, and partners.

Core Components	Program Description
Identify and Enroll Eligible Patients	 Patients who could benefit from the Grady Heart Failure Program are identified through the hospital's EMR system when they are admitted to the emergency room (ER) or when they receive inpatient or outpatient care services. Eighty percent of patients come from the ER. Patients are enrolled in the program if they: * Have been diagnosed with heart failure. * Do not have other major medical problems, like cancer or end stage renal disease. * Are willing to participate in the program as often as needed.
l npatient Services	When patients are admitted for inpatient services, they receive a 30-minute consultation with an APP and are given a self- management tool, the <i>Grady Heart Failure Survival Guide</i> . APPs use the guide to teach patients how to manage their CVD conditions and to identify any socioeconomic challenges. APPs also schedule follow-up appointments for the Heart Failure Program within 7 days of hospital discharge and contact patients within 3 days of discharge to help them transition to outpatient services and make sure they are taking their medication. Patients can also meet with a pharmacist who can give them a 30-day supply of medication for free or at a reduced cost to help them start their medication right away.
Outpatient Services	Patients admitted to the ER or who are receiving other outpatient services are flagged in Grady's EMR system and added to the Grady Heart Failure Program's daily consultation list. Program staff meet with patients for a 30-minute education consultation, submit requests for urgent cardiology follow-ups, monitor lab results, and make referrals. When needed, they admit patients with signs of worsening heart failure to the hospital's Clinical Decision Unit for further observation . Prior to hospital discharge, program staff schedule a post-discharge appointment, typically within 7 days of the initial consultation. Additionally, program staff contact patients within 3 days of post-hospital discharge to ensure a seamless continuity of care and reduce hospital readmissions.



"We work so hard to

provide continuous care for hundreds of patients with heart failure because their care is unimaginable without the Grady Heart Failure Program. We really aim to transform their lives through the clinical care **that we provide.**"

-Grady Heart Failure Program Leadership

Reduce Socioeconomic Barriers to Care

The program advances health equity by offering a variety of services to reduce socioeconomic challenges that may prevent patients from accessing care. Examples include transportation services and help with medication costs. By helping patients overcome these barriers, the program can reduce rates of 30-day hospital readmissions and improve the quality of care and health of heart failure patients.

Intended Participants

Grady Memorial Hospital is a safety net health care provider to low-income, uninsured, homeless, and vulnerable populations. The Grady Heart Failure Program has served over 4,000 patients since it started in 2011. Close to 80% of the p**rogram's current patient** population is African American. It serves patients with heart failure who are at high risk of being readmitted to the hospital within 30 days of an initial admission. The program places a particular emphasis on serving patients who are homeless, have mental health conditions, have alcohol or substance use disorders, or are uninsured or underinsured.

Goals and Expected Outcomes

By addressing socioeconomic barriers to care, the program has reduced 30-day readmissions and improved the quality of care and outcomes of heart failure patients. As of April 2017, the 30-day readmission rate had dropped to 19.2%, compared to 24.9% from July 2006 to June 2009. The program's goal is to reach 85% of eligible patients within 3 days of initial discharge. To date, staff members have surpassed that goal, contacting 94.3% of patients by telephone within 3 days of discharge and scheduling follow-up appointments before discharge for more than 97% of patients.

Progress Toward Implementation

The Grady Heart Failure Program has grown significantly since 2011, and all core components are fully in place. The size of the staff has doubled since 2011 and now includes 10 nurse practitioners (6 of them full-time), 4 registered nurses, and 1 certified medical assistant. The program has expanded and increased its operating hours, allowing it to serve more patients. Clinical outcomes are tracked **according to the American Heart Association's Get with the Guidelines metrics**. The program is also working to customize its electronic data collection system to collect, and monitor outcomes related to **patients'** social needs and socioeconomic barriers to care.

Addressing Health Disparities

Disparities in care for heart failure patients are well-documented, especially those who have a low socioeconomic status or who are members of racial and ethnic minority groups or other vulnerable populations.³ The Grady Heart Failure Program aims to reduce disparate care and increase health equity by offering the following services that help heart failure patients access appropriate care as quickly as possible:

- Specialized Transportation: Lack of transportation is a barrier to health care access that can lead to worse clinical outcomes.⁴ Patients who may be confined to their homes because of poor health receive transportation to and from their appointments from a local ride service company. Through a custom-designed interface that is not publicly available, program staff can also order Uber or Lyft services for patients to attend their medical appointments.
- Mobile Integrated Health: Low-income populations often have limited access to CVD services, which has a negative effect on the quality of health care they receive.⁵ The program partners with the Grady Emergency Medical Services mobile unit to pair a paramedic with an APP to provide CVD care and deliver medication to patients' homes.
- Medication Access and Assistance: High medication costs are associated with lower medication adherence.⁶ The program collaborates with pharmaceutical companies to provide access to free or reduced price medications for its patients. Upon documentation of a need for affordable medication in Grady's EMR, patients can receive a 30-day supply of medication right away.

This document does not constitute an endorsement of any organization or program by CDC or the federal government, and none should be inferred.

^{1.} Diaz-Toro F, Verdejo HE, Castro PF. Socioeconomic inequalities in heart failure. Heart Fail Clin. 2015; 11:507-513.

^{2.} American Heart Association. Lower socioeconomic levels drive increase in heart failure readmissions. American Heart Association News website. Accessed October 16, 2017.

^{3.} Bahrami H, Kronmal R, Bluemke DA, et al. Differences in the incidence of congestive heart failure by ethnicity: the multi-ethnic study of atherosclerosis. Arch Intern Med. 2008; 168(19): 2138–2145.

^{4.} Syed A, Gerber BS, Sharp LK. Traveling towards disease: transportation barriers to health care access. *J Community Health*. 2013; 38(5): 976–993.

^{5.} Pedrana L, Pamponet M, Walker R, Costa F, Rasella D. Scoping review: national monitoring frameworks for social determinants of health and health equity. *Glob Health Action*. 2016;9:28831.

Ferdinand K, Senatore FF, Clayton-Jeter H, et al. Improving medication adherence in cardiometabolic disease: practical and regulatory implications. J Am Coll Cardiol. 2017;69(4):437–451.