CASE STUDY
Long Island College Hospital: Improving Heart Failure Outcomes through Patient Teaching
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Long Island College Hospital (LICH) is a 516-bed general medical and surgical teaching hospital located in the Brooklyn Heights/Cobble Hill area of Brooklyn, N.Y. Founded in 1858 as a medical school and hospital, today LICH is the hub of Continuum Health Partner’s services in Brooklyn. LICH is also the primary teaching hospital of the State University of New York Health Science Center at Brooklyn (SUNY-Downstate Medical Center), training resident physicians in more than 20 medical specialties. The LICH School of Nursing is one of the oldest in the country. In 2009, LICH recorded 18,978 inpatient admissions; 64,104 emergency room and 283,710 outpatient visits; and 3,096 inpatient and 7,874 outpatient surgeries. LICH prides itself on combining the best features of a major medical center with the personal, caring approach of a community-centered hospital.

Challenge
Research shows that heart failure (HF) inpatients educated in all six HF discharge instruction items required by The Joint Commission and CMS core measures are less likely to be readmitted than patients who miss one or more item. In early 2007, ongoing retrospective chart reviews showed we were not consistently delivering all six discharge instructions, with weight monitoring and symptoms worsening the two most often overlooked. In June 2007, our quality team began regularly communicating HF discharge instruction performance to nursing and other involved staff. But after three quarters we saw no substantial improvement—just 66% of HF patients received all six instructions during the first quarter of 2008. Our challenge was to ensure that all six key discharge instruction items are addressed for all heart failure patients. Our short-term goal was to raise our compliance above the national average, then about 85%. The overall objective was to improve heart failure outcomes through improved patient teaching.

Preparation
We assembled a project team consisting of members of our performance improvement and quality initiatives staff as well as the hospital’s vice president of quality initiatives and risk management, in collaboration with nursing leadership, nursing education, nursing staff, department of medicine leadership and members of the department of medicine staff. Using the Hospital Compare web site, we identified area hospitals that exceeded the HF discharge instruction national average. In April 2008, we contacted our peers at three of these higher-performing hospitals for information on best practices. We concluded that most successful hospitals use a pre-printed discharge instruction form that includes specific instructions for all six HF items—weight monitoring, symptoms worsening, diet, activity level, medications and follow-up with a physician. The discharge resume we were using at the time did not.

Solution
We recognized that changing the discharge instruction form alone was unlikely to change behavior enough to meet our performance improvement goals. So we developed a comprehensive interdisciplinary performance improvement program to support timely delivery of appropriate discharge instructions. It included training for nurse and medical staff, and retrospective review to track performance and improve care processes. We also added concurrent review to ensure that all HF patients are identified in time to receive appropriate discharge instructions before they leave the hospital.
The program began at the end of April 2008 with the quality staff and the nursing department amending the HF discharge instruction form to include all six core measures items and make it easier to document patient education. The department of nursing education trained nurses and other applicable staff on HF patient education and documentation using the new form. The training emphasized key elements to discuss with patients, and provided contact information and support groups for any questions patients may have after discharge. Staff were also instructed on showing patients how to use the discharge instruction form as a guide to self-management of heart failure at home.

Retrospective chart abstraction of second quarter 2008 HF discharges revealed that not all units were using the new discharge instruction form for every HF patient, that the form required certain clarifications, and that nurses needed additional training on properly using and filling it out. A new version of the discharge instruction form was rolled out in July 2008 with training provided to applicable staff.

At the end of July 2008, the quality department also began quarterly meetings with medical and nursing leadership to discuss core measures results, recommendations and changes to the measures. Through these meetings we have expanded our communication with the departments and increased interdisciplinary communication. The quality team has also become regular members of the department of medicine performance improvement committee, where core measures information also is shared.

Nonetheless, through December 2008, our quality coordinators were still finding prior versions of the discharge instruction form in retrospective reviews. So the department of nursing began a major effort to ensure that only current discharge instruction forms were available. The quality coordinators also began routinely bringing to the attention of the applicable department leadership any issues with teaching or documenting discharge instructions identified through the retrospective core measures review process. These included anything that causes a failure in the discharge instructions measure, such as nurses not circling all six items, or doctors not indicating heart failure as the primary or secondary diagnosis.

Once the revised discharge form was implemented, the quality department began a concurrent review program of patients with admitting diagnoses likely to end up in one of the three condition-based core measures sets (HF, pneumonia and acute myocardial infarction). Discharge instructions for confirmed or suspected HF patients are reviewed, and unit staff advised to use the HF form if it is missing. From October 2008 through March 2009, 84% of records reviewed included the revised discharge form.

Results
In the first quarter 2009, LICH achieved 97% compliance with the heart failure discharge instructions core measures, an increase of 31% from the first quarter 2008 baseline. This exceeded The Joint Commission national average of 85%. For the 12 months ending June 2010, our performance was 97%, again above the 89% national average. Based on research showing that appropriate discharge instruction decreases future heart failure hospitalizations, we conclude that by improving our discharge instruction performance we have, in turn, improved outcomes of heart failure patients.