

Transitional Care Reduces Pneumonia Readmissions

A pilot program launched last November helped reduce the rate of readmissions for pneumonia patients by bringing education, medication reconciliation and transitional care to the bedside and to the home. In six months, the readmission rate for this test population of 95 patients declined significantly, from 17.4 percent to 11.5 percent. Based on the success of this small pilot, the project team is now looking to expand the program to all patients on general medicine floors who are at increased risk for readmissions for any diagnosis.



(Left to right) Janjri Desai, Rita Ghatak, Teresa McMannis and Neera Ahuja, MD, created a transitional care pilot to reduce readmissions for patients with pneumonia.

When Aging Adult Services' head Rita Ghatak, PhD, met General Medicine's Neera Ahuja, MD, at a Design Thinking Boot Camp last year, the two shared a similar concern—the escalating rate of readmissions for pneumonia patients at Stanford. Nationally, patients with pneumonia have a one in five risk for being readmitted to the hospital within 30 days of discharge. The rate at Stanford at that time was slightly higher.

Ahuja and Ghatak began developing a pilot project to tackle the problem, bringing in their pharmacy, case management, general medicine and nursing colleagues to create a multi-layered approach to reducing readmissions. The pilot program was based on the successful Transitional Care program used by Aging Adult Services for patients with heart failure and dementia.

“Readmissions are multifactorial,” said Ghatak, director, Aging Adult Services and Geriatric Health. “They are not just the result of clinical illness, but are also affected by psychosocial issues that cause people to come back. You have to consider transitions of care.”

Three-pronged approach

The Pneumonia Pilot program utilized the core tenets of the transitional care model, which include medication reconciliation, post-discharge follow-up, care compliance education and psychosocial support, and distilled them down to three primary interventions. These included a pharmacy consult from a Transition of Care pharmacist,

education provided at the bedside and by phone from an Aging Adult Services nurse, and a home visit for the most vulnerable patients. All 95 patients in the pilot received the first two interventions, and 35 patients also received the home visits.

“The goal of all of these interventions was to reduce readmissions, and to improve transitions of care,” said Ahuja, medical director for General Medicine, and director of the Hospitalist Program. Partnering with Aging Adult Services really made this possible, said Ahuja, clinical associate professor of medicine. “The home visit is time intensive, but a really thorough approach to the care of the patient.”

During the bedside visit before discharge, the Aging Adult Services nurse went step by step through a checklist that outlined how to continue medical care at home—when to take medications, when to schedule a follow-up appointment, what symptoms to look for and when to call a doctor. The nurse then called patients the next day to ensure that they were following through with their care. Did they make an appointment with their primary care physician? Have they been taking their medications? Do they have any new symptoms? Do they have any questions?

The second step in the discharge process included a visit from a Transition of Care (TOC) pharmacist right at the time of discharge. The TOC pharmacist reviewed the medication orders and the patient’s history to ensure that the discharge medication list was accurate. The pharmacist also educated patients about their medications, using teach-back to ensure that they understood how and when to take medications at home. Each of these pharmacy consults took about 45 minutes to complete, and almost every interaction uncovered a discrepancy of some kind, either an incorrect dose or an issue with access to the prescribed medication, said Janjri Desai, PharmD, who heads the Transition of Care pharmacy team.

“All of the errors we catch have the potential to cause harm or to cause a readmission,” said Desai. “So we ensure that medication-management wise, everything is accurate and safe for the patient, thereby preventing a medication error or a readmission, or possibly both.”

The most at risk patients, those with low health literacy or little support in the home, also received the third intervention—a home visit—which was conducted by a nurse from Aging Adult Services. In all, 35 patients received this additional level of attention during the pilot.

“The pilot showed us that the transitional care model does work to help reduce readmissions,” said Ghatak, who oversees a team of nurses who manage the transition from hospital to home for Stanford’s most vulnerable patients. These same nurses juggled already full schedules to help Ghatak and Ahuja prove their hypothesis. “This

entire effort would not have been successful without the hard work of my wonderful nurses,” said Ghatak.

Today, Ahuja, Ghatak and Desai are back at the drawing board, working to expand their model to more patients. The Transitionalist Program, which is still in development, will include the same interventions as the pneumonia pilot, but will add an IT solution to help identify patients at risk for readmission, and a pre-discharge visit from a social worker.

“When we were conducting the pilot targeting just patients with pneumonia, I felt like we were leaving all of these other patients out,” said Ahuja. “Because the results from the pneumonia pilot were so promising, we wanted to apply that same approach to all patients in general medicine at risk for readmission.”