

HOSPITAL CHARACTERISTICS

## NOVANT HEALTH

- ▶ Winston Salem, NC
- ▶ 8 hospital project
- ▶ [www.novanthealth.org](http://www.novanthealth.org)

### S . T . E . E . E . P .



#### SAFE

The program identifies patients at risk and has led to reduced readmissions due to ADEs.



#### EFFICIENT

The program targeted indicators of readmission as well as patients on high risk medications to reach the highest risk population.



#### PATIENT-CENTERED

The program contacts the patient directly and works with the primary care provider to assure safe medication management and improve coordination of medication management across the continuum of care.

## SAFEMEDS SAVES LIVES

### The Problem

As a result of our care coordination activities with Medicare patients, the opportunity to improve patient understanding and involvement in their health care and the realization that many of these patients needed additional support and information concerning medication management, led the organization to explore opportunities for improvement. The Novant Health Clinical Improvement (CI) department created a committee in 2005, to look at adverse drug events leading to hospital admissions, their causes and areas for improvement. Indications for the study included:

- » A study by the Institute of Medicine that reported that adverse drug events harm more than 1.5 million people and cause several thousand deaths each year.
- » A Columbia University Center for Addiction and Substance Abuse study that showed that fewer than 40 percent of U.S. physicians contact a patient's other physicians or receive information from other caregivers about other medications their patients may be taking. Individuals 65 and older are twice as likely to be treated in an ED for adverse drug events and seven times as likely to require hospitalization as those who are younger than 65.

### The Solution

The CI staff developed the idea for the SafeMed Program to target readmission rates of recently discharged individuals who are over 65 years of age and taking multiple medications. The program targeted any inpatient, at discharge from a Novant facility and followed by a Novant primary care physician, taking five or more medications or a high risk medication. Initially, physicians and physician office staff, as well as the Novant Medical Group disease management program, evaluated opportunities to provide services at discharge or at the time of the initial visit post discharge. After several pilots it was determined that the program could touch patients after discharge at a very vulnerable time.

The program employs specially trained clinical pharmacists working with Novant Medical Group physicians and staff to educate patients and or caregivers telephonically. The pharmacist reviews medication safety, reconciles the medication regimen to identify potential complications of therapy and provides the primary care physician with a written consult that details identified issues when applicable.

### Results

Comparing patients in the Novant safe medication reconciliation program with a control group of patients not participating in the program, revealed that patients in the control group were 1.74 times more likely to be admitted within 30 days and 4.19 times more likely to be admitted within 60 days due to an adverse drug event. In addition to reducing ADE-related readmissions at 30 days (2.0% vs 3.4%;  $P < 0.0074$ ) and 60 days (0.6% vs 2.5%;  $P < 0.0001$ ) during the evaluation period between January 2007 and October 2008, the safe medication team reduced overall readmissions at 30 days (6.0% vs 13.1%;  $P < 0.0001$ ) and 60 days (2.7% vs 7.7%;  $P < 0.0001$ ).

## TEAM MEMBERS

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The hospitals involved include:

- » Forsyth Medical Center, 961-bed, Winston-Salem, NC
- » Medical Park, 22-bed, Winston-Salem, NC
- » Presbyterian Hospital, 531-bed, Charlotte, NC
- » Presbyterian Hospital Matthews, 102 beds, Matthews, NC
- » Presbyterian Orthopaedic Hospital, 156 beds, Charlotte, NC
- » Presbyterian Hospital Huntersville, 50 beds, Huntersville, NC
- » Thomasville Medical Center, 149-bed, Thomasville, NC
- » Brunswick Community Hospital, 60-bed, Supply, NC