

## Novant Health Safe Med

### Managing Patients with Multiple Chronic Conditions

**Novant Health Safe Med showed a statistically significant reduction in its primary outcome of 30-day readmission rates.**

#### Project Goals

Safe Med is a medication safety and disease education program for patients in Novant Health's integrated health care system. The program's goal is to decrease inpatient readmission rates in medically complex patients aged 65 years or older who are followed by a primary care provider in the medical group.

Headquartered in Winston-Salem, North Carolina, Novant Health is a not-for-profit health care system serving 3.5 million people. With more than 350 physician practices across North Carolina, South Carolina, and Virginia, Novant Health and its network encompass more than 1,600 providers. The group's physician specialties include cardiology, endocrinology, orthopedics, ear, nose, throat and sinus, and others.

Data collected by Novant Health's analytics group from 2006 to late 2008 demonstrated a statistically significant decrease in 30-day hospital readmission rates for Safe Med participants (11.5%) vs controls (14.2%). The control group comprised patients discharged from Novant Health between January 1 and December 31, 2005, who were not followed by a medical group provider. Controls and participants were matched according to gender, race, clinical classification system primary diagnosis roll-up, Carlson Comorbidity score, and age quartile. A maximum of 5 controls were randomly matched to each Safe Med patient. A total of 1,624 patients and 7,335 controls were used.

Novant Health Safe Med showed a statistically significant reduction in its primary outcome of 30-day readmission rates. However, the program did not achieve an equivalent impact on the 60-day readmission rate.

#### Recent Improvements and Outcomes

Several improvements were made since the beginning of the original case study, including adding a 30-day call back for the highest risk patients. This has resulted in reduction in both the 30- and 60-day readmission rates to 8.2% and 12.9%, respectively. Additionally, this intervention has reduced ER visits from 12.8% to 4.1%.

There was less difference in 60-day readmissions for Safe Med participants (18.2%) vs controls (20.3%) within the targeted population. The organization speculates that these results may be due to only a single contact by pharmacy staff following discharge and has subsequently added a second phone contact 30 days after the first call.

## Sustaining Strategies

Novant Health has expanded its workforce to increase capacity. Additionally, technicians are being used to assist with follow-up calls and to triage the most complex patients to be called by a pharmacist, if appropriate. The group has moved to an electronic health record (EHR) for documentation to expedite and enhance the transfer of information between pharmacist and primary care provider.

## Future Plans

Novant Health would like to continue to reduce its primary outcome of 30- and 60-day readmission rates by combining medication management services with an electronic pill reminder system to impact overall adherence. Staff also envisions using EHR to further determine the impact of the Safe Med study on clinical outcomes in patients with multiple chronic conditions.



## Lessons Learned

There are many barriers to reaching and educating patients after discharge, including difficulty making contact, patient engagement, and patient-specific issues such as vision and hearing impairments, health literacy, etc. Collaboration on the inpatient side would have developed the relationship prior to discharge. Additionally, for the highest risk patients, Novant Health would like to have a pharmacist available for face-to-face visits in the ambulatory care office and is currently piloting that model in 1 practice.



Copyright © 2014 American Medical Group Association. All rights reserved.  
© 2014 American Medical Group Foundation. All rights reserved.



Copyright © 2014 Merck Sharp & Dohme Corp., a subsidiary of Merck & Co., Inc. All rights reserved.  
Printed in USA Minimum 10% Recycled Paper ♻️

Novant Health—Best Practices  
English  
NOND-1099257-0000 06/14  
[Order Reference #]