

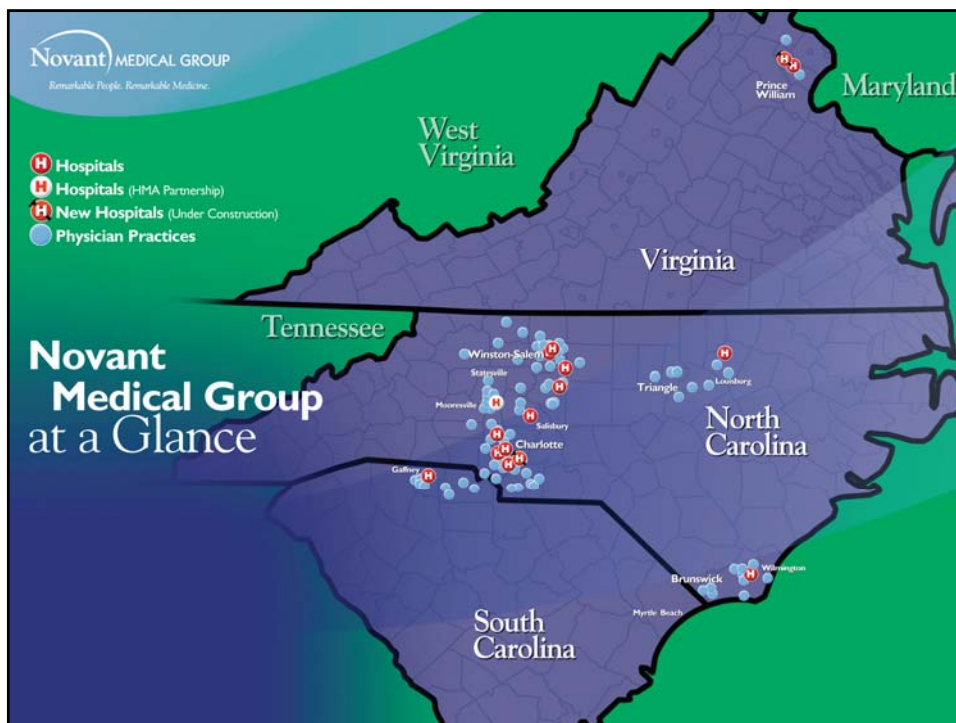
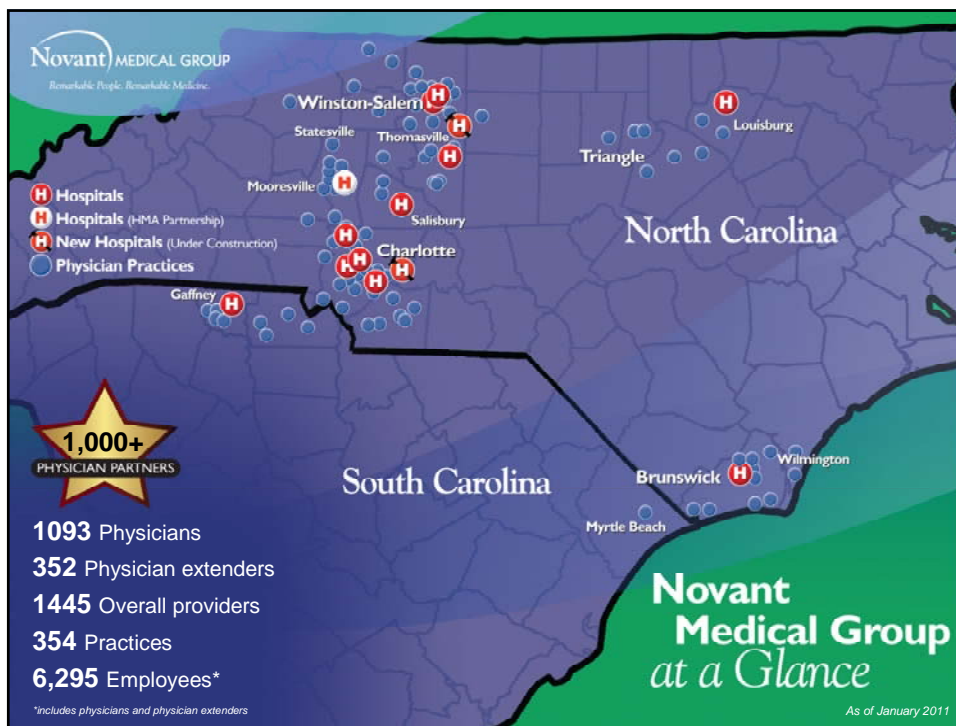
Novant) HEALTH
Remarkable People. Remarkable Medicine.

**Safe Med
Bridging the Gap
& Improving Outcomes**

**Terri Cardwell, Pharm D, MHA
April 13, 2012**

OBJECTIVES

- Describe the process used by Novant Medical Group (NMG) for reducing hospital admissions & readmissions utilizing pharmacist support with medication reconciliation
- Identify three patient specific risk factors for adverse drug events (ADE) or poor medication outcomes
- Identify three disease/medication specific risk factors for ADEs or poor medication outcomes
- List effective methods for decreasing adverse drug events, drug/drug interactions & potentially inappropriate medications in the elderly



Goals of Safe Med

To address safe medication use in the community dwelling elderly population cared for by a NMG provider and

- Decrease number of Adverse Drug Events
- Decrease number of conflicting or antagonistic medications
- Improve medication adherence & understanding by population
- Recommend appropriate therapy per Evidence Based Guidelines

The names on the prescription bottles don't match what they told me



What Happens When Patients are Discharged?

- 19.6% of Medicare beneficiaries are re-hospitalized within 30 days of discharge (34% within 90 days)
 - 90% of the readmissions deemed unplanned
 - Only 50% of those readmitted had seen their physician prior to readmission
 - These readmissions estimated at \$ 17.4 billion for one year (2004)

Jencks SF et al. N Engl J Med 2009; 360:1418-28.

Medicare Payment Advisory Committee (MedPAC)

- 2007 Report to Congress
 - Readmission affect patients and are costly
 - 7 conditions contribute to 30% of readmissions and may be preventable
 - Heart Failure (HF), Acute M.I., COPD, Pneumonia, CABG, PTCA, Other vascular procedures
- CMS adds 3 readmission measures to reporting requirements (HF, AMI, Pneumonia)

Readmission Reduction Program Proposed Regulations

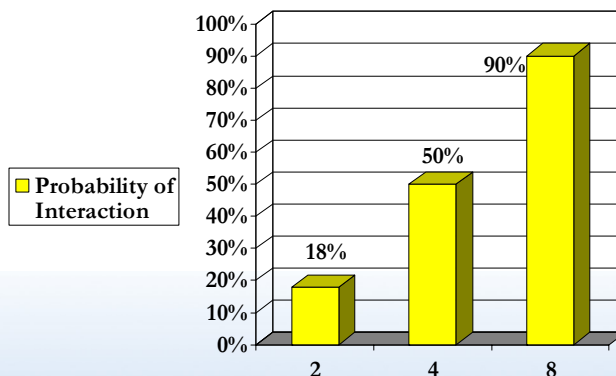
- FY 2012 – Submission of data for HF, AMI & Pneumonia readmissions measures
- FY 2013 – Payment penalty for ‘excess readmission rates’
 - Up to 1% reduction of Medicare payment
 - Will apply to entire related DRG for one year
- FY 2014 – Possible increase of penalty up to 2%
- FY 2015 – Possible increase of penalty up to 3% and addition of more readmission measures

Adverse Events Following Discharge

- 19% of patients experience adverse events (AE) post inpatient discharge
- 66% of AEs are adverse drug events (ADEs)
- Half of ADEs are preventable
- 33% of AEs cause ED visit or readmission
- Key recommendations: **Improve Communication**
 - Hospital caregivers and the patient
 - Hospital caregivers and the PCP

Forster, Murff et. al., *Annals of Internal Medicine*, 2003: 138:161-67

Predicators of Drug Interactions



Hansten. *Science & Medicine* 1998;5:16-25
 Weideman RA et al. *Hosp Pharm.* 1998;33:835-40

Pharmacist's Role in ADE Prevention

- 178 patients discharged from general medical unit
- Randomized to 2 groups:
 - Usual care (no call post-D/C)
 - Pharmacist education at discharge & call 3-5 days post-D/C
- 29% patients had unexplained discrepancies
- Preventable ADEs 30 days after discharge:
 - 11% of patients in usual care
 - 1% of patients in intervention group

Schnipper et. al., *Archives of Internal Medicine*, 2006: 166:565-68.

Next Steps

- Funded four clinical pharmacists
- Developed weekly reports of discharged patients
- Created a database to capture measurement data
 - Patient Assessments
 - Medication Lists
 - Educational Topics & Resources
 - Physician Consults

Think about other factors that put a patient at risk for ADE besides number of medications.

What are some of the other patient specific factors to evaluate?

- Length of stay and diagnosis associated with hospitalization
- Number of ED visits and Inpatient visits
- Age of patient, hearing or vision impairments
- Frequent falls or injury
- Assessment of cognitive impairments and health care literacy
- Cultural, linguistic and socioeconomic challenges

Think about other factors that put a patient at risk for ADE such as diseases or medications.

What are some of the other disease or medication specific factors to evaluate?

- Congestive Heart Failure
- HTN
- Diabetes Mellitus
- Coronary Artery Disease
- AF
- Beer's List Medications
- Narrow Therapeutic Index Medications

Engaging and Motivating Patients

- Essential Connections – Tools to Inspire Change – GSK
- Medication Therapy Management Certification – APhA/ASCP
- Pharmacy Today – MTM Tip of the Month
- Motivational Interviewing Workshop- Bruce Burger
- Communications Skills for Pharmacists – Book APhA by Burger

Communications About the Program

- Flyers sent to providers to increase awareness of program.
- Queue line phone number for patients to contact pharmacist.
- Flyers mailed to patients unable to be reached by phone
- Articles: published in Novant publications.
- Monthly provider newsletter: *Safe Med Update*

Do You Need Help Understanding Your Medications? Presbyterian MEDICAL GROUP

Your physician has a resource for you – SAFE MED.

Safe, effective management of your health can mean managing multiple medications. It is important to know what medicines you are taking and why you are taking them. It is especially important when you have been in the hospital and new, unfamiliar medicines have been introduced.

Clinical pharmacists from Presbyterian Medical Group, of which your physician is a member, are available to help you understand and manage your medications, as part of the SAFE MED program. These pharmacists have advanced training and will review your medications. They will then communicate any issues or instructions to your physician.

The clinical pharmacists will also:

- Assess all of the medications you take
- Provide you with a daily and weekly pill schedule to help you organize and remember your pills
- Provide you with detailed information about specific medicines you take and how to manage multiple medications

Please remember to:

- Make an appointment with your primary care physician within one day of hospital discharge
- Bring your medication list from the hospital to the appointment

For more information, please call one of the numbers on the card to the right.

Presbyterian MEDICAL GROUP
Member of Novant Health

SAFE MED
Pharmacist

704.343.7222 | 704.343.7223 (toll-free)

Contacting the patient

- Introduction – engaging the patient
- Assess patient's current medications
- Reconcile with hospital discharge list and or PCP list when possible
- Educate patient/caregiver regarding proper medication use
- Mail reconciled medication list, educational materials and pill box to patient to assist with medication management as needed
- Patient assessment sent to the PCP with current medication list, potential drug interactions, adverse drug reactions, and recommendations if applicable

Understanding Your Medications

- What is the name and dosage?
- What medical condition does it treat?
- How and when should I take it?
- How long should I take it?
- What side effects can I expect?
- What should I avoid while taking this medication?
- Will it interact with any of my medications?

Patient Management Tools

- Reconciled Medication List in Layman's terms
- Pill box and/or Pill splitter
- Educational information about disease states and medications
- Magnet with Queue Line tool free number



Safe Med Outcomes

The results of the analysis showed that the controls were statistically more likely to have a 30 and 60 day readmission compared to the matched Safe Med population.

	Control Group	Safe Med
30 Day Readmissions	13.1%	6.0% *
60 Day Readmissions	7.7%	2.7% *

* $p < 0.0001$ Chi Square Test

The control group was 2.34 times more likely to be readmitted within 30 days and 3.02 times more likely to be readmitted in 60 days compared to the Safe Med matched population.

	Control Group Odds Ratio	95% Confidence Intervals
30 Day Readmissions	2.34	1.87 – 2.94
60 Day Readmissions	3.02	2.18 – 4.19

Safe Med - Part of an Integrated Approach to Medication Safety- Identify other opportunities to decrease ADE's

- Develop patient educational materials
- Provide providers/nursing with education
- Develop monthly medication update
- Institute Queue Line for patients
- Patient education classes



NOVARTIS MEDICAL GROUP
 Research. Practice. Breakthroughs.™

Lessons Learned

- Identify high risk population
- Target intervention
- Involve key providers as champions of the initiative
- Build trust with patients and providers
- Budget for technician
- Provide education for engaging the patient and motivational interviewing
- Continue to identify opportunities to extend appropriate healthcare resources to patients across the continuum of care