

# McLeod Regional Medical Center

- Located in Florence, SC
- 461 beds
- Community-based Regional Medical Center
  - Largest of 7 hospitals in the McLeod Health hospital system
- Services include:
  - Cardiology
  - Nephrology
  - General Medical/Surgical
  - Cardiothoracic
  - Peds/L&D
  - Neurology
  - Psychiatric
  - Medical, Cardiovascular and Trauma Intensive Care units
- Family Medicine Residency Program
- PGY1 Pharmacy Residency Program

# Road to Med Rec Improvement

- Multiple pilot programs involving both pharmacists and pharmacy technicians over the last several years
- Most recently in October 2015
  - Granted approval in April 2016 for a Pharmacy-based medication history program using pharmacy technicians based primarily out of the ED
    - Go Live in September 2016
- Shortly before that we applied and were accepted into the Marquis2 study

# Data Collection

- Ongoing data collection is a requirement for the approval and continuation of the Medication History Technician (MHT) Program
- Monthly audits of home medication lists of 5 patients per each Medication History Technician (MHT)
  - Original data included
    - Home medication list accuracy
    - Average time to complete a medication history interview
    - Time completed relative to time of admission
    - Average number of sources used per patient
    - Average number of meds per patient
    - Number of discrepancies found/resolved
- No plan initially to perform admission and discharge comparisons until we were accepted into Marquis2

# Data Collection

- Most significant barrier was the lack of time and personnel to obtain “Gold Standard” (GS) medication lists
  - MHT average time 27 minutes per patient
- MHT training was developed using Marquis materials, but we do not utilize them to obtain GS lists
  - Compare discrepancies between MHT and RN obtained PAMLs
- 2 pharmacists and 2 pharmacy residents underwent initial training
  - Each resident responsible for obtaining 2-3 GS medication lists per week – built in as requirements during their residency year
  - The remaining of the GS obtained by one of the other study pharmacists
- At the start of the new PGY1 year, 2 new residents were trained and continue to be responsible for the bulk of the GS data collection each month

# Time Burden

- GS medication list: 20-25 minutes
- Comparisons: 10-15 minutes
- Data Entry: 5-10 minutes
- **Total time: 35-50 minutes per patient**
- It gets quicker and easier the more you do it – especially the comparisons!

# Comparisons

- Get to know your EMR
  - Know how to sort and filter the orders you're looking through
- Match the time of admission with corresponding progress notes, vitals, ancillary orders, labs, etc
  - Helps determine if a discrepancy was INTENTIONAL or UNINTENTIONAL
  - Example: Home glyburide not continued on admission, however you notice a blood glucose of 43. Even though it may not be explicitly addressed in a progress note, this is an INTENTIONAL discrepancy
- Professional judgement
  - If speaking to the physician is not possible, rely on your clinical knowledge
    - Did the physician order Lexapro 20 mg intentionally, even though the patient was taking 10 mg at home, or was this a reconciliation error? What else is going on with the patient?

# Challenges and Solutions

- Identifying and locating patients
  - Identify several patients at one time – if one not available, move on to the next
  - Use an admission or similar report to identify patients to include in your sample
  - Assign patients geographically depending on where the pharmacist or resident is based to eliminate travel time
- Time crunch
  - Obtain the GS list first – comparisons can be done later when there is more time, even AFTER the patient is discharged
    - Eliminates ethical dilemma and allows data to reflect the true current state
- Know when to stop collecting sources
  - If the patient is knowledgeable, and information provided matches one or more readily available sources – STOP!

# Quality Improvement

- Use the data you collect to identify problems and develop solutions
  - Standardize work
    - Too many ways to conduct patient interviews leads to inconsistent results
  - Medication History Interview Tool
    - Developed in response to observed increase in PAML omissions
- Identify ways to disseminate useful information for all personnel involved in obtaining PAMLs
  - Nursing newsletters
  - Annual training
  - Health safety fairs