Clinical Safety & Effectiveness Cohort # 10

Improving the patient’s cycle time at the Geriatric Evaluation and Management (GEM) Clinic at ALM-VA using a patient flow analysis.
The Team

• Division-Geriatrics
  - CS & E Participant
    Carol M. Espinal MD
  - Team Members
    Monica Horton MD
    Lisa Burns RN
    Michael Hawkins- Clerk
  - Facilitator
    Amruta Parekh, MD, MSPH
    Hope Nora, PhD
    Leticia Bresnahan, MBA
  - Sponsor: UTHSCSA/VA, S. Liliana Oakes, MD
What We Are Trying to Accomplish?

OUR AIM STATEMENT

Decrease the wait time for all the patients evaluated by a provider (Attending, Fellow, Nurse practitioner or Resident) at the Geriatric Evaluation & Management Clinic (GEM Clinic) by 25% over a period of 4 months.
Project Milestones

- Team Created: December 2011
- AIM statement created: January 2011
- Weekly Team Meetings: December 2011-present
- Background Data, Brainstorm Sessions, Workflow and Fishbone Analyses: January-March 2012
- Interventions Implemented: Feb –March 2012
- Data Analysis: March 2012- present
- CS&E Presentation: June 15, 2012
- Graduation Date: June 15, 2012
Background

• The patients in the GEM – VA clinic are the Geriatric population that have multiple medical problems including dementia and frailty. They should not need to wait for more than a hour for their scheduled appointment.

• It is well known that extended patient wait times for appointments is a very frequent complaint among the patients.
PLAN

• Collect Background Data
• Develop Cause & Effect Diagram for current Wait Time
• Develop flow maps and understand sources of variation in the current patient flow process.
• Assess baseline “time-to” at the various points in the patient flow process from when they arrive until they leave.
• Brainstorm how to improve the patient flow with Team members.
  – Specific targets for change-wait times due to scheduling issues and duplication of work
Flowchart

Patient comes for appt. to the GEM Clinic → Checked in by Front Desk Clerk → Patient returns to waiting room → Nurse takes patient from Waiting Room and records Vitals in SPICE → Patient returns to Waiting Room → Provider goes to Waiting Room to get patient → Patient examined → Front desk to schedule next wait → Social Worker for resources → Prosthetics → Pharmacy → End of Patient Wait
DO- Initial Interventions

• January 2012- changed Monday morning schedule for the GEM fellow clinic.

• February 2012-
  – changed hours for walk in clinic and
  – patients that checked in late only had vitals done, not the entire nurse questionnaire.

• March- decreased the number of providers scheduled per clinic session.
CHECK: Time To Measures

• **Types of measures:** Pre and Post Cycle time measures

• **What will be measured:** Notation of time when the patient arrives to clinic, registers with the clerk, is vitalized by the nurse, is seen by the provider and leaves the provider’s office.
Results: Average “Time-To” See Nurse and Physician

• **Pre-Intervention**
  – Nurse: Ave 121 minutes
  – Doctor: Ave 160 minutes

• **Post-Intervention**
  – Nurse: Ave 81 minutes – 33% improvement
  – Doctor: Ave 104 minutes – 29% improvement
Results: Total Wait Time to see Healthcare Professional

Pre-Intervention:
• Ave of 281 minutes

Post-intervention:
• Ave of 183 minutes – Improvement of 35%
Results: Effect on Average “Time With”

• Pre-Intervention
  – With Clerk-4.38 min.
  – With Nurse- **9.59 min**

• Post-Intervention
  – With Clerk-4.60 min
  – With Nurse- **7.72 min**
Return on Investment/ What’s Next

- Improved patient satisfaction
- Efficiency in clinic internal work-flow
- Improved outpatient care avoids hospitalization and associated costs
- Because VA is training facility, this could aid in preparation for future trainees
- This project prepared me to understand and apply quality improvement to my medical practice