Falls Prevention at the MARC

- The Problem
- The Team
- The Plan
- The Implementation
- The Results
Falls Prevention at the MARC

- Falls are a common source of injury among older adults
  - One-third of adults >65 will fall this year
- Injury often minor, but 10-15% result in serious harm
- Falls are associated with:
  - decreased function
  - greater chance of going to a nursing home
  - increased use of medical services
  - the development of a fear of falling
Falls Prevention at the MARC

- MARC Opened August 2009
- Centralized location for outpatient specialty clinics
- Over 60 specialties, more than 200 physicians
- “One-stop shopping” for patients
- Building is 280,000 sq. ft.
- Distance from parking garage to patient elevators is 90 ft.
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The Team

- **MARC Team Members**
  - Deborah Cantu, Clinic Services Manager
  - Mike Charlton, Environmental Health and Safety
  - Helena Crosby, Clinical Services Coordinator
  - Denise R. Flinn, Clinical Geriatrician
  - Pam Glasscock, Director of Clinical Operations
  - Jenny Greenlee, Physical Therapist and Clinical Operations

- **MARC Team Members Cont’d**
  - Ronald and Karen Nichols, Patients
  - Dan Parker, Facilities
  - Michelle Sanchez, Medical Assistant
  - Rick Silva, Housekeeping Supervisor
  - Michelle Webb, Greeter/Transporter

- **Sponsor Department**
  - Department of Medicine
  - Chair: L. David Hillis, MD
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What We Are Trying to Accomplish?

OUR AIM STATEMENT

To reduce the number of falls among patients visiting the MARC for outpatient appointments by 50% by January 1, 2011.
Project Milestones

- Data Collection Begins: May 2010
- Team Created: August 2010
- AIM statement created: August 2010
- Bi-weekly Team Meetings: Sept—Dec 2010
- Background Data, Brainstorm Sessions: Sept—Dec 2010
- Workflow and Fishbone Analyses
- Interventions Implemented: October 2010
- Data Analysis: Oct—Dec 2010
- CS&E Presentation: January 20, 2011
Fishbone Diagram: Falls at the MARC

**PERSONNEL**
- Lack of staff training
- Inadequate # of transporters
- Lack of Patient information

**ENVIRONMENTAL**
- Wet, slippery floors
- Lack of mats, benches
- Poor building layout

**PATIENT FACTORS**
- # of Meds
- Age
- Mobility problem
- Sensory impairment
- Gait disorder
- Hx of fall

**SYSTEMIC**
- Lack of building policy
- Lack of coordination between clinical and facilities staff
Pt arrives at MARC
- Front Circle
- Revolving door?
  - N: Incr. risk
  - Y: Garage Parking
    - Front door?
      - N: Incr. risk
      - Y: Assistive device?
        - N: Incr. risk
        - Y: Park in des. space
          - Y: Pt arrives in clinic
          - N: Park in reg. space
            - Incr. risk
              - Assisted ambulation
                - Pt arrives in clinic
Process Flow Chart Post-Intervention

1. Pt arrives at MARC
2. Front Circle
3. Revolving door?
4. Garage Parking
5. Adequate parking?
6. Y: Park in des. space
7. N: Park in reg. space
8. Call for WC assistance
9. Assisted ambulation
10. Y: Call for WC assistance
11. N: Call for WC assistance
12. Y: Pt arrives in clinic
13. N: Front door?
14. N: Call for WC assistance
15. Y: Revolving door?
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Implementation

- Bi-monthly meetings with team members to identify problem areas and brainstorm solutions
- Development of educational tools and planning of training for staff and patients
- Continued collection of falls data
Interventions

- Umbrella bags at entrances
- Re-surfacing of slippery entrances
- Additional transporters
- Benches, seating on the first floor
- Staff education and training
  - Cards with helpful information and contacts
  - Inservice with clinic staff to review WC etiquette and transfer techniques in the clinic
Falls Prevention Information

Tips to Prevent Falls
1). Watch for patients using assistive devices and offer help
2). Identify obstacles and clear area
3). Offer a wheelchair
4). Seek assistance from others, if appropriate
5). Notify Housekeeping of any wet/slippery areas...669-5075

*In the event that a patient needs transport ..450-0974/0-9992
*In the event of a fall activate ERT by dialing...........2-2222

Factors Contributing to Falls
1). Age 65 and older
2). Use of assistive devices (e.g. canes, walkers)
3). Physical impairments (poor vision, weakness)
4). Medications (sedatives, anti-hypertensives)
5). Gait and/or balance problems
6). History of prior falls
7). Inclement weather conditions
Staff In-services

- **Staff Training**
  - Targeted high-risk clinics
  - Performed in each clinic setting
  - PT and Physician staff
  - Simulated Scenarios
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Run Chart

Interventions

Mar-10  Apr-10  May-10  Jun-10  Jul-10  Aug-10  Sept  Oct-10  Nov-10
Additional  Umbrella bags  Resurfacing  New transpo  Additional  Series2
Number of Falls at the MARC

Number of Falls at the MARC

- Additional Rest Stops: UCL = 12.54
- Umbrella Barge Resurfacing of Employee entrance: CL = 5.50
- New Transporter Started: CL = 3.50
- Additional Wheelchairs: CL = 9.11

Time Period: Mar-10 to Nov-10

Number of Falls

- Trendline
  - June-10: 4.00
  - August-10: 4.00
  - October-10: 0.00

Event Timeline:
- Additional Rest Stops: May-10
- Umbrella Barge Resurfacing of Employee entrance: June-10
- New Transporter Started: Sep-10
Falls Prevention at the MARC

- Task Force was created in August 2010, with interventions implemented over the course of the next four months.
- Prior to task force (March to July): 24 falls
  - Avg number of falls: 4.8 per month
- After task force (August to November): 8 falls
  - Avg number of falls: 1.6 per month
Falls Prevention at the MARC

Discussion of Results

- We successfully reduced the number of falls at the MARC through an interdisciplinary team effort to identify problem areas and implement solutions
  - Interventions implemented throughout course of intervention period
  - Change in seasons could have affected results
  - Reporting system may be inadequate leading to underreporting of falls
Return on Investment

- Somewhat difficult to estimate given variability
  - Average cost of fall without serious injury: $3,500
  - Average cost of fall with serious injury: $27,000

- Does not include costs of potential litigation
Conclusions

- Our interdisciplinary team was able to reduce the number of falls at the MARC.
- This model may be applicable to other ambulatory buildings or inpatient services.
- Our team will continue to meet quarterly to assess progress and identify new areas of concern.
Questions?