N²: Never Never Fall Detection System

Yvonne Weideman Scott Fisk Bahar Laderian

Hospital Falls

- Facts
 - 84% of all adverse events are falls
 - Most falls happen at night: toileting
 - Complications include fractures, head injuries, death
 - > \$31,000 per fall
- IOM Patient Safety Focus



The N² System – Preventing the Fall

- Existing Technology to Monitor
 - Motion
 - Sleep State
- Feedback
 - Escalating Prompt
 - Awakening state
 - Stirring in bed
 - Movement out of bed
- Prevention of Fall
 - Healthcare worker intervention



Market

- Primary: Hospital
 - Save money
 - \$150 for unit vs \$31000 per falling incident
 - No payment "never-never" event
 - Higher payment from insurers
- Secondary Markets:
 - Nursing facilities
 - Personal homes

\$\$\$ = Fall Prevention

- Comparable devices
 - BedAlarm \$200 per unit
 - LG1 System \$15 a day per bed
- N² Fall Prevention
 - \$150 per unit
 - \$3 per day disposables

Development

- Design and prototype the device
 - HRSA Funding
- Pursue patent
- Begin FDA medical device approval process
- Partner with hospital system
- Preliminary pilot study/clinical trials