

# FRAILTY FOCUSED SERVICES IN THE ED: Strategies, Benefits and Challenges

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# Objectives

- Identify service models aimed at frail elderly in the ED setting
- Describe the advantages of frailty focused service models
- List the challenges in implementing frailty focused Services in the ED

# Why Should We Focus on the Elderly in the ED?

- The aging population
  - Demographic imperative
  - Outcomes following ED visits
- ED professionals' knowledge and skills

# Aging Population

- Increasing proportion of population  $> 65$  years
- Increased ED visits with increasing age
  - Highest using group: 75+
- **Sentinel Event**
  - Tend to be sicker
  - More frequently admitted to hospital
  - Higher ED readmission rates
  - Higher mortality rates
  - Functional decline

# ED Professionals' Geriatric Knowledge & Skill

- ED MDs and RNs are aware that older patients are:
  - Different
  - More complicated
- Do not feel adequately trained in most effective management of complex geriatric conditions
- Can lead to undetected problems/conditions

# Challenges to Incorporating Frailty Focused ED Models

- Nature of the ED setting
- ED model of care versus geriatric model of care

# Nature of the ED Setting

- ED professionals under great time pressure and have many expectations place on them
- Overcrowding & long waits
  - Multiple factors: closure of EDs, lack of hospital beds, RN shortage
  - Increasing acuity and intensive therapy in ED
  - Range of patients: Minor ailments to multiple organ system trauma
- Complex, noisy and busy environment
- Furniture, equipment and beds not conducive to caring for frail elderly

# ED Model versus Geriatric Model

- ED Model: Focus is on chief complaint, triaging and treating to save 'life and limb'
  - Example: fell at home - no injury - sent back home
- Geriatric Model: Comprehensive, interdisciplinary assessment and treatment to maximize function and quality of life
  - Example: fell at home – H & P to determine underlying etiologies, PT/OT Home Evaluation, exercise prescription for Tai Chi and/or strengthening exercises; complete review of medications

# Successful Geriatric Case-Finding Models

- Various settings: Ambulatory, Hospital, Rehabilitation
- Three factors
  - Targeting the right group of patients – many robust elderly are not in need of comprehensive, interdisciplinary services
  - Delivering the needed services
  - Extending the services over time
- **Difficult to achieve in the ED!**

How do we incorporate the principles of the geriatric care model within an ED model of care?

# Factors to Consider

- Volume and pattern of use in the ED
- Responsibility for the screening (may require additional personnel)
- Responsibility for the linkages to long term outpatient care and/or community home care

# Two Approaches for ED Case-Finding Models

- **General Focus**
  - Screen for ‘at risk’ older adults
  - E.g., decline in cognitive, physical or social function and/or use of health services
- **Targeted Conditions**
  - Delirium
  - Alcoholism
  - Falls
  - Depression

# Screening Programs

- Single-stage screenings by clinical personnel: either general screening or a targeted assessment
  - Medical Students
  - Registered Nurse separate from ED staff

# Screening Programs (Continued)

- Two stage-screenings: Brief screening of pre-set 'risk factors'. If positive, followed by a targeted comprehensive assessment by clinical personnel (usually RN) separate from the ED staff
  - ISAR: Self-completed questionnaire by older patient
  - TRST: ED triage nurse

# What is the Feasibility and Utility of Screening Programs in the ED?

- Studies have varied in targeted population. Examples:
  - Community-residing elders who are returning home
  - Age 75 years and older
- Length of time: < 5 minutes for single targeted condition (e.g., delirium); 15 – 60 minutes for general focus
- High acceptance by older adults: > 75%

# Feasibility and Utility (Continued)

- Clinical Validity
  - Identification of unmet clinical/social needs
  - Increased risk of adverse outcomes, health resource use
  - Predict functional decline

# Interventions

- Favorable outcomes depend on successful transition from ED to home
- Coordination of necessary resources
- Patient and family education
- Communication among health professionals

# Interventions

- Notification of primary care provider
- Direct referrals to home health care providers
  - Arrangements for rapid response by home care agencies
- Short term follow-up post ED discharge
- Short term management as needed

# What are the benefits of frailty focused ED models?

Two types of evaluation:  
Health Care Processes  
Health Care Outcomes

# Outcomes – Process Variables

- Acceptance of Referrals by Older Adult and Family
- New referrals generated
  - Primary care provider
  - Home health agencies
  - Outpatient clinics
  - Allied health professionals (e.g., PT)

# Outcomes – Health Care Utilization

- Decrease in subsequent ED use (2,3)
- Decrease in subsequent hospitalization (3,4)
- Decrease in subsequent NH use (4)
- Subsequent greater community agency use  
– (3,4,12)

# Patient Outcomes

- Delayed deterioration in function (3,7)
  - ADL
  - IADL
- Improved satisfaction (4)
- No impact on quality of life

# Should Case-Finding and Interventions for At-Risk Elders Be Implemented in the ED?

- Magnitude of problem – not going away
- Growing evidence of effectiveness of intervention
- Still need to examine how to improve processes of emergency care for older adults
  - Out of hospital
  - In the ED
  - Linkages with providers after discharge

# Who Conducts the Intervention in the ED?

- Part of the ED staff? Other department within the hospital? Or from a community agency?
- What type of professional?
  - RN? MSN or BSN?
  - SW? Geriatric specialty?
  - OT? PT? Geriatrician?
- Separate specialists and ED environment ... analogous to the ACE units for hospitalized elders and to Pediatric EDs?

# Cost Effectiveness

- Open versus closed systems of health care
- What is motivation for adding process of care? For adding personnel?
- Convince payors and financial administrators of cost-benefit for providing the additional service

# Experience from the Field: The SIGNET Model

- SIGNET: Systematic Intervention for a Geriatric Network of Evaluation & Treatment
- Implemented in 1997
- Case-finding model centered in the ED
- Two stage screening by nurses
  - All patients receive simple 6-item screen by triage nurse
  - Positive screen: Receive MSN assessment
- Formal linkages with PCP, home care, social service agencies, OPD, Geriatric Clinic

# Problems Identified - 1996

- Few ED professionals had geriatric knowledge; few geriatric specialists involved with ED
- Admitted to hospital with catheters and physical restraints – no rationale
- Found to have been in ED several times due to missed geriatric syndrome
- Frustration on part of ED nurses

# Potential Model

- Implement a mechanism to screen for
  - Common geriatric syndromes
  - Aimed at those at-risk for frequent ED use
- Utilize geriatric nurse specialist
  - Provide training & education to staff
  - Assist with assessment & care planning of more complex geriatric patients
- Improve follow-up in the community
- **But how to convince others??!?**

# Step 1. Convincing Your Organization

- Meetings one-on-one with key stakeholders
  - Nursing administration
  - Emergency physicians
  - Emergency nurses
  - Geriatricians

## Step 2. Convincing Personnel in Other Organizations

- Community agencies
  - Health care
  - Social service
  - Government, e.g., Adult Protective Services
- Other emergency departments

# Participating Organizations

- 5 EDs approached, 4 agreed
  - Community based 400-bed
  - 1000-bed tertiary referral center
  - 740-bed county, Level 1 Trauma Center
  - Free-standing, managed care setting
- Approached 11 agencies, 10 agreed
  - 4 public
  - 6 private

# Choice of ED Settings

- Project director's organization
- Personal relationship with individuals in other settings
- Affiliation of organization with other organizations
  - Shared ED Medical Director (two EDs)
  - Within same system (two EDs)
  - Contractual arrangement (two EDs)

# Choice of Community Settings

- Units of partnering hospitals
- Agencies formally linked to partnering hospitals
- Large, well-respected multi-service organizations
- Legally mandated adult protective services
- Administrative personnel known personally

# Structural Aspects

- Project Director: Overall administrative
- Ability to work collaboratively with various disciplines
- “We” mentality versus “my” discipline or “my” site
  - In-kind support for grant work
  - Approximately 25-30% effort

- Project Coordinator

- Full time funded position. Once funding ended, position was not refilled.
- Day-to-day operations
- Organizational skills
- Familiarity with data bases, word processing
- Flexibility/ability to work with many individuals

- Advanced Practice Nurse (APN)
  - Master's prepared RN, specializing in geriatrics
  - Clinical nurse specialist or Nurse practitioner
  - Full time: one site opted for two part-time APN
- Choice of personnel for comprehensive assessment
  - MS Social worker versus APN
  - RN versus APN
  - Economic consideration
  - Assumption: Medical and social model

- ED Physicians/nurses
  - At all 4 sites, active participation by ED medical director and/or designee
  - At 2 sites, active involvement of NM.
  - At 2 sites, active involvement of Director of Nursing
  - No grant monies for ED personnel time

- Community agencies
  - Active participation by senior administration in the development of proposal, processes, initiation and maintenance phase
  - Intake coordinators assumed responsibility for facilitating referrals, intake and assignment of case workers
  - No grant monies for community personnel

- Geriatricians
  - Available for ED consultations
  - Available and participated in program development, meetings
  - No grant funds

# Development of First-Stage Screening

- Triage Risk Screening Tool (TRST)
- Reviewed multiple risk factors by expert, interdisciplinary panel
- Reached consensus after 3 meetings
- Completed by triage nurse or primary nurse
- 6 factors: walking/transfers; cognitive impairment; 5+ meds; no caregiver; recent ED visit/hospitalization; RN referral

# Implementing TRST Screening

- Standardized tool, multiple and ongoing educational sessions
- Each ED had its own process
  - E.g., included TRST in packets versus separate form
- Notifying the APN of a positive screen
  - Color paper system
  - Electronic notification
  - APNs reviewed/rounded periodically

# Second Stage Assessment by APN

- Logistics
  - APN only available 5 days/week
  - No coverage for sick, vacation, days off, off hours
  - Office space for APN
  - Computer, printer, fax for APN

- Informatics
  - At time of implementation, no computerized charting
  - Developed own software
  - Unanticipated learning curve of APNs for computerized charting
- APN learning curve
  - Geriatric in ED: anxiety provoking
  - Learning community agency personnel and processes

- APN intervention
  - Recommends services to patient & family
  - Sends referral to participating agency, PCP, specialty clinics
  - May elect to do short term phone follow-up management until home care agency in place
  - Patient and family education
- APN
  - Conducts ongoing staff education
  - Plans, participates in quality improvement projects

# Development Phase

- August – December 1997
  - Frequent meetings (every 2-3 weeks) among senior level administrators
  - Processes of collaboration, mechanism for intra-agency referrals, APN role/job description, APN referral process
  - Identify types and scopes of services available
  - Streamline intake procedure for SIGNET referrals

# Implementation Phase

January 1, 1998 – December 31,  
2000

- Meetings maintained monthly Year 1; quarterly thereafter
- Executive meetings quarterly Years 1-2, twice in final year
- RWJ, Cleveland Foundation, & Callahan Foundation site visits annually

# Program Evaluation

- Administrative data bases from all SIGNET participants (monthly reports)
- Agency data base
  - Number of referrals from ED sites
  - Number of referrals from other agencies

- Hospital/ED data base
  - Number of visits to ED
  - Number of those 65+, by gender & total
  - Disposition from ED: Home, hospital, NH, died
  - ED return rate (< 30 days)

# Challenges of Data Networking

- Complexity of networking unique systems
  - Technologic differences
  - Individual coding and tracking forms
  - Staff changes in ED and IS
  - Variables not easily tracked
  - Volume of forms
  - Inability to obtain more detailed information

- Delays in the evaluation process & backlog of forms
- Learning curve of APNs on computer
- Learning curve of project coordinator and site personnel to make full use of data bases at each site
- Create cross checks to verify data
- Use of volunteers in ED to verify legibility of TRST forms (teleforms)

# After the Funding Stops

- 3 of 4 EDs maintain program
  - 2 continue with APNs based in ED
  - 1 has incorporated the case management personnel into the ED
- Several home care agencies have closed.
- Maintained yearly meetings first three years. Now occasional trouble-shooting phone call

# Implications

- ED important location for geriatric assessment and liaison interventions
  - Huge potential benefit to do this right
  - Worth the struggle with the process and systems of care
  - Critical time of health trajectories in this population

# Implications

- **Key components of ED-based interventions:**
- Focus on the high-risk. Can vary:
  - Syndrome
  - Health utilization
  - Disease State
- Systematic, feasible and quick
- Rapid transfer of key information
- Rapid community response

Be creative

Prove the value of services

Advocate

Persist

D. Miller, 2005