

Clinical Services for Medicare Recipients: A Geriatrics Perspective

Susan G. Nayfield, M.D., M.Sc.
National Institute on Aging, NIA

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- **Goal:** Maintain independence and health in old age
- **Challenge:** Identify areas where additional evidence could lead to better targeting of coverage to effective clinical services (either expanded coverage or better focus of current coverage).
- **Clinical Services**
 - Coordinated multidisciplinary services to lessen risk of falls in community-dwelling elders
 - Structured exercise programs to maintain walking ability
 - Post-acute stroke rehabilitation
 - Coordinated management of transitions in medical and rehabilitation services following hip fracture
 - Therapies for unexplained anemia in the elderly

1. Falls Risk Reduction Services

- **Problem: Falls**
 - Falls Incidence:
 - 30% age ≥ 65 ; 50% age ≥ 80 ;
 - 50% recurrent
 - Major cause of hip fractures (>300,000 per year)
 - Major independent determinant of functional decline
 - Increase risk of SNF placement: 3X-fold falls; 10-fold with injury
 - Multiple risk factors include medical conditions, medications, environmental factors (home hazards, footwear), cognitive function
- **Service:** Coordinated multidisciplinary (physicians, nurses, physical therapists), multifactorial risk factor screening/intervention program for community-dwelling elders

1. Falls Risk Reduction Services

- **Evidence**

- Cochrane Review (2003): Efficacy of multidisciplinary program (and specific individual components)
- Effectiveness in “real world” large-scale program (Connecticut Collaboration for Fall Prevention: Mary Tinetti)

- **Establishment of Guidelines** by professional societies (American Geriatrics Society, American Academy of Orthopedic Surgeons)

Components of these services are currently covered, but despite evidence of effectiveness and professional guidelines, they are not widely provided.

- **Additional Needs for Evidence**

- Evidence on effect of the following on improving outcomes (falls, fall injury, disability):
 - changes in coverage
 - alternative administrative policies for current coverage
 - increased information dissemination about current coverage
- Studies on coverage for coordinated services, cost-effectiveness, payment-for-quality programs.
- Potential for demonstration projects

2. Structured Exercise Programs to Maintain Walking Ability

- **Problem**

- Loss of ability to walk a moderate distance (1/4 mile):
 - Impairs ability to live independently and increases needs for services
 - Is a strong predictor of worse subsequent problems, including mortality.
- Low physical activity is a strong predictor of severe disability
- Numerous current recommendations for “exercise” in general, but lack of evidence for efficacy of *specific* exercise programs for *specific* problems.

- **Service:** Structured physical activity program designed to maintain walking ability

- Center-based aerobic, strength, balance, and flexibility exercise training
- Center training followed by home-based maintenance with periodic center visits
- Training provided by a variety of qualified health professions



2. Structured Exercise Programs to Maintain Walking Ability

•Evidence: LIFE Pilot Study

- NIA-supported multi-center randomized clinical trial
- Good adherence, improved physical performance 424 persons over age 70 years
- abilities, and trend toward lower incidence of major mobility disability

•Additional Needs for Evidence

- Full-scale clinical trial
 - Long-term functional and health effects
 - Cost-effectiveness
- Coverage for clinical trial participation

3. Post-Acute Stroke Care

- **Problem**

- >50% stroke patients unable to walk at hospital discharge
- Impaired ambulation → falls, fall injuries, hospital readmission, SNF placement
- Clinical course and rehabilitation needs vary among patients

- **Service:** Integrated and coordinated post-acute rehabilitation services tailored to individual patient needs

- **Evidence**

- Cochrane Reviews (2003, 2007): Efficacy of extended home-based rehabilitation programs and physiotherapy in improving functional independence following stroke
- 50% of patients with limited ambulation have meaningful improvement in LE strength and gait velocity with post-acute stroke rehabilitation
- Following guidelines for post-acute stroke rehabilitation → improved outcomes

3. Post-Acute Stroke Care

- **Establishment of Guidelines** by professional societies (AHCPR (AHRQ), Department of Defense/Veterans Administration, American Heart Association)

Many services are currently covered, but despite evidence of effectiveness and professional guidelines, they are not widely provided, poorly integrated and coordinated, time-limited, insensitive to individual patient course and needs.

- **Additional Needs for Evidence**
 - Evidence on effect of the following on improving outcomes:
 - changes in coverage
 - alternative administrative policies for current coverage
 - increased information dissemination about current coverage
 - Studies on coverage for integrated and coordinated services, patient-tailored programs, cost-effectiveness, payment-for-quality programs
 - Potential for demonstration projects

4. Unexplained Anemia

- **Problem:**
 - Anemia in 10% ages 65+ yrs and 20-25% ages 80+ yrs
 - 1/3 Nutritional; 1/3 ACD/CKD; 1/3 “Unexplained” despite clinical evaluation
 - Anemia associated with:
 - Reduced survival, increased risk of death
 - Frailty, increased risk of and more rapid functional deterioration
 - Increased risk of CHF and death from acute coronary events
 - Increased risk of cognitive impairment and dementia
 - ↓ Responsiveness of erythroid precursors to EPO in aging
- **Service:** Coverage for therapy of “unexplained anemia” in older patients
 - Currently: EPO
 - Future:
 - non-traditional ESAs,
 - Approaches targeting cytokines, hepcidin, HIF or other mechanisms

4. Unexplained Anemia

- **Evidence**

- Small clinical studies show efficacy of EPO in older patients with anemia and CHF or frailty
 - Increasing hemoglobin
 - Improving physiologic measures and functional status
- Existing data on safety in older patients with anemia and cancer and CKD

- **Additional Needs for Evidence**

- Large-scale clinical trials to establish efficacy, dose and schedule for EPO
- Exploratory clinical studies testing new agents and new approaches (NIA Anemia Consortium)
- Coverage for clinical trial participation; possible coverage with data collection

5. Post-Hip Fracture Care

- **Problem:** Frequent transitions between care settings post hip fracture → poorly coordinated care
 - Vulnerable population
 - 20% never regain mobility
 - >50% do not return to pre-fracture function
 - Average 3.5 transitions in first 6 months; 20% five or more transitions
 - Transitions often associated with ADEs, falls, and fragmented or suboptimal care
- **Service:** Integrated and coordinated post-hip fracture care
 - Active (ACI) and new (NCI) clinical issues or problems
 - Assessment and management of osteoporosis
 - Rehabilitation tailored to individual patients or patient groups
 - Focus on management of transitions

5. Post-Hip Fracture Care

- **Evidence**

- 20% with one ACI and 40% with one NCI at discharge, associated with ↑ risk of readmission or mortality
- Bisphosphonates reduce risk of subsequent fractures but guidelines for osteoporosis management not routinely followed
- Rehabilitation can improve mobility outcomes and prevent subsequent falls

- **Additional Needs for Evidence**

- Research to optimize post-fracture rehabilitation
 - Effective components
 - Innovative approaches to delivery
 - Tailored to patient needs
- Studies on coverage for coordinated services, cost-effectiveness, payment-for-quality programs.
- Potential for demonstration projects

Opportunities for Collaboration

- What additional types of evidence from NIA-supported studies would be useful to CMS in decisions on coverage?
- How can NIA design research initiatives to provide better evidence relating to coverage issues?
- CMS-NIA collaborations on clinical trials, demonstration or evaluation projects, coverage with data collection projects?
- Collaborations for development of better methods for evaluating functional outcomes and risk/benefit considerations in the older population?
- Periodic reviews of new evidence relevant to coverage for services for geriatric problems?