The Promise of Care Coordination: Models That Decrease Hospitalizations and Improve Outcomes for Medicare Beneficiaries with Chronic Illnesses

July 15, 2009

Presentation to AARP's National Health Policy Council, Health and Long Term Care Committee, Washington, DC

Deborah Peikes, Ph.D. Randall Brown, Ph.D. Greg Peterson, M.P.A. Jennifer Schore, M.S.W.



Acknowledgements

Funders:

- Centers for Medicare and Medicaid Services
- Robert Wood Johnson Foundation Health Care Financing Organization
- Washington University
- New York Academy of Medicine Social Work Leadership Institute (via Atlantic Philanthropies)
- Mathematica Policy Research

Other MPR team members:

Carol Razafindrakoto, Licia Gaber, Angela Gerolamo

Roadmap

- . The Problem
- II. Successful Interventions for People with Chronic Illnesses
 - Transitional care
 - Self-management education
 - Coordinated care
 - Model that has maximum potential
- **III.** Lessons for Medicare

I. The Problem

- Most health dollars are spent on a small percentage of beneficiaries with multiple, complex chronic conditions.
- Causes of high utilization and costs:
 - Deviations from evidence-based care
 - Poor communications among primary providers, specialists, other providers, and patients
 - Poor adherence by patients
 - Failure to catch problems early
 - Psychosocial issues

What is effective care coordination?

Rigorous evidence of:

- Improves beneficiary outcomes
- Reduces total Medicare expenditures for participating beneficiaries
 - Improved satisfaction or clinical indicators not sufficient
- Savings require reduced hospitalizations

II. Promising Interventions

- 3 types of interventions have been proven effective:
 - 1. Transitional care interventions (Naylor et al. 2004 and Coleman et al. 2006)
 - 2. Self-care management interventions (Lorig et al. 1999, 2001 and Wheeler 2003)
 - 3. Coordinated care interventions (select sites from the Medicare Coordinated Care Demonstration, Peikes, Chen, Schore, Brown 2009)

(Guided Care was described by Chad Boult earlier.)

1. Transitional Care

- Patients with chronic illnesses first engaged by APNs while hospitalized
- Followed intensively post-discharge
- Receive comprehensive post-discharge instructions on medications, self-care, and symptom recognition and management
- Reminded/encouraged to keep follow-up physician appointments
- Naylor and Coleman approaches differ
 - Coleman empowers/coaches patients how to self manage (1 month)
 vs. more active care manager role in Naylor model (3 months)

Effective Transitional Care Intervention: Naylor et al. (2004)

- Targeted patients age 65+ hospitalized for CHF
- Used advanced practice nurses (APNs)
- 12-week intervention; highly structured protocols: patient centered, medication reconciliation, early symptom recognition, symptom management, attend some physician visits, coordinate across providers
- RCT (118 treatment, 121 control)
- 1 year post-discharge followup
- Intervention patients had:
 - 34% fewer rehospitalizations per patient
 - Lower proportion rehospitalized (45% vs. 55%)
 - 39% lower average total costs (\$7,636 vs. \$12,481)

Effective Transitional Care Intervention: Coleman et al. (2006)

- Used APNs as transition coaches for 1 month
- Targeted patients aged 65+ hospitalized for various conditions
- Patients received (1) tools to promote cross-provider communication, (2) encouragement to take a more active role in their care, (3) continuity/guidance from transition coach, (4) medication review
- Nurses do not coordinate or manage care; they empower the patient/family to do so
- RCT (379 treatment, 371 control)
- Lowered rehospitalization rates at 90 days:
 - For any reason (17% vs. 23%)
 - For initial condition (5% vs. 10%)
- Lowered hospital costs 19% over 180 days (\$2,058 vs. \$2,546)

2. Self-Care Education

- Staff collaborate with patients and families to:
 - Identify individualized patient goals
 - Improve self-management skills
 - Expand sense of self-efficacy
- Assess mastery of these skills
- Uses group sessions led by peers or educators
- Limited duration (typically 1-2 months)

Effective Self-Management Education Intervention: Lorig et al. (1999, 2001)

- People age 40+ with heart disease, lung disease, stroke, arthritis
- 7 weekly group sessions on exercise, symptom management techniques, nutrition, fatigue and sleep management, use of medications, dealing with emotions, communication, problem-solving
- RCT (664 treatment, 476 control)
- One-third fewer hospital stays per person (0.17 vs. 0.25)
- Savings of \$820 per person over 6 months

Effective Self-Management Education Intervention: Wheeler (2003)

- Women age 60+ with cardiac disease
- 4 weekly group sessions with health educators teaching diet, exercise, and medication management specific to cardiac disease
- RCT (308 treatment, 260 control)
- Intervention group findings over 21 months:
 - 39% fewer inpatient days
 - 43% lower inpatient cost

3. Care Coordination

These programs typically:

- Teach patients about proper self-care, medications, how to communicate with providers
- Monitor patients' symptoms, well-being, and adherence between office visits
- Advise patients on when to see their physician
- Apprise patients' physician of important symptoms or changes
- Arrange for needed health-related support services
- Coordinate communication among physicians

Goal: reduce need for hospitalizations

- Don't wait for the train wreck
- Need ongoing contact for chronic illnesses and more intensive contacts around acute events

Medicare Coordinated Care Demonstration (MCCD) Programs

- RCT in 15 programs:
 - Varied populations (only 7 percent were under age 65)
 - Varied interventions
- Samples ranged from 934 to 2,657 for 12 programs
- Only 2 programs reduced annualized hospitalizations (by 0.17 or 17% and 0.49 or 24%) (Peikes, Chen, Schore, Brown, JAMA 2/11/09)
- Subsequent work shows 4 programs reduced hospitalizations for higher-risk patients by 0.14 to 0.22/year

Keys to Success

- 1. Targeting of patients at high risk of hospitalization
- 2. Staffing primarily by experienced registered nurses, with social supports available
- 3. Building rapport
 - With <u>patients</u> via some (~monthly) in-person contacts, not just by telephone
 - With <u>physicians</u> using different strategies:
 - Colocation, past work together, accompanying patients to doctors visits, contacts during hospital rounds, linking 1 nurse with each doctor
- 4. Early, comprehensive, and consistent response to hospitalizations
 - Access to timely information on hospital and ER admissions

Keys to Success

5. Medication management

Check for adverse interactions, polypharmacy, patient filling and taking
 RX

6. Strong self-care education

- Support adherence to treatment recommendations, educate about early warning signs and when to call the doctor
- 7. Support services to patients when needed
- 8. Serve as communications hub between patients and providers
 - Share patient RX lists, reconcile RXs
 - Provide hospital staff with relevant patient information upon admission and assist patients following discharge
 - Make sure tests recommended by evidence-based guidelines are ordered on schedule and that providers have the results when they see the patient

III. Lessons for Medicare: The "Optimal" Care Coordination Model?

- Augment effective ongoing care coordination with transitional care
- Offer group education on self-management
 - Tailor educational materials to people with lower educational levels
 - Assess comprehension
 - (Not realistic in rural areas)
- It's not just what you do, but how well:
 - Incorporate key features identified in Naylor, Coleman, Lorig, Wheeler, and MCCD
 - Use protocols to detail effective interventions
 - Focus on individual patients' goals/needs
 - Quality of patient interactions; education
 - Degree of physician trust

How to Fit Care Coordination Into Medicare Reform Options?

- Who should provide it, and what are the challenges?
 - Medicare FFS, MA/SNP--like MCCD, as wrap-around service
 - Primary care practices, a la medical homes (Guided Care for larger practices)
 - Hospitals (if hospitalization is warrantied)
 - Accountable care organizations
- How much should Medicare pay for it?

Ongoing Research Issues

- What is the optimal target population?
- Episodic vs. continuous enrollment
- How best to provide transitional care
- How to provide care coordination effectively
- How to provide care coordination efficiently
- How best to target and provide social service supports

Contact Information

- dpeikes@mathematica-mpr.com
- <u>rbrown@mathematica-mpr.com</u>