Effective Care Coordination: the Hard Evidence from the Field

Chronic Illness Demonstration Projects

Learning Collaborative #1

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Goals of Presentation

- Identify proven interventions for beneficiaries with chronic illness
- Describe key distinguishing features
- Outline model with maximum potential
- Suggest policy implications
The Problem

- Most Medicare and Medicaid dollars are spent on small percent of beneficiaries with *chronic conditions*

- **Causes:**
  - Inadequate care
  - Poor communications among primary providers, specialists, and patients
  - Weak adherence by patients
  - Failure to catch problems early
What Is “Effective” Care Coordination?

- Reduces total Medicare/Medicaid expenditures for participating beneficiaries
- Maintains or improves beneficiary outcomes
- Savings require reduced hospitalizations
  - But it isn’t easy…
Illustration of the *Funnel Effect*

**Best Case Scenario for a Voluntary (Opt-in) Program**

Average of 1 Hospitalization per Member per Year

- 50% Theoretically Preventable
- 30% Actually Prevented

= 15% Decrease in Hospitalizations

⇒ ~10% Decrease in Medicare Costs
Credible Evidence of Effectiveness

- Most "evidence" showing impacts is unreliable
- 3 types of interventions have been effective:
  1. Transitional care interventions (Naylor and Coleman)
  2. Self-management education interventions (Lorig and Wheeler)
  3. Coordinated care interventions (Select sites from the Medicare Coordinated Care Demonstration)
Transitional Care : Key Components

- Engaged patients while hospitalized
- Followed them intensively post-discharge
- Provided comprehensive post-discharge instructions on medications, self-care, and symptom recognition and management
- Reminded/encouraged patients to keep follow-up physician appointments
Effective Transitional Care Intervention: Naylor et al. (2004)

- Targeted patients hospitalized for CHF
- Used advanced practice nurses (APNs)
- 12-week intervention; highly structured protocols
- 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
- Targeted patients hospitalized for various conditions
- Patients received (1) tools to promote cross-site communication, (2) encouragement to take a more active role in their care, (3) continuity/guidance from transition coach
- 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)
Self-Management Education: Key Components

- 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

- Limited duration
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

- 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
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 social support services

Goal: reduce need for any hospitalization
- Don’t wait for the train wreck
- Need ongoing contact for chronic illnesses
Medicare Coordinated Care Demonstration (MCCD) Programs

- Peikes, Chen, Schore, Brown; *JAMA* 2/11/09

- RCT in 15 sites:
  - Varied populations
  - Varied interventions

- Samples ranged from 934 to 2,657 for 12 sites

- Only 2 reduced hospitalizations
Key Components of Effective Care Coordination Models

- Target high risk patients
- Frequent in-person contacts by care coordinator
- Timely information on hospital/ER admissions
- Colocation of care coordinators and physicians
- Same care coordinator for all of physician's patients
- Strong patient education, guidance on taking Rx's
- Social supports for those who need it
Supporting Evidence from Less Successful Demos: LifeMasters

- 1 program; dual eligibles in 11 Florida counties
- Population-based intervention
  - Low engagement rate exacerbates challenge
- Target population: CHF, CAD, and diabetes
- Treatment group: ~37,000 (~50% in South Florida*)
- Average monthly Medicare costs = $1,800
- Intervention: Primarily telephonic with in-person phase for high-need patients
- Average follow-up ~18 months (3-year study)

* Miami-Dade, Broward, and Palm Beach counties.
LifeMasters: Program Impacts Analysis

- No impacts on inpatient or ER use
- Scattered impacts for Medicare Part B services
- No overall impact on Part A or total Medicare costs
  - Possibly modest savings in Part B
- Reductions in costs for patients with CHF or with CAD + diabetes in South Florida
  - But no impacts even for this group on hospital or ER use
LifeMasters: Lessons

- Little evidence that population-based disease management with limited in-person contact can generate savings
- Savings might be achieved if the intervention is well-targeted and patients are followed for 24+ months
- Low engagement (20% to 30%) makes achieving savings difficult
Lessons from Other Disease Management Programs

- Medicare Health Supports and Medicare Disease Management demonstration were both ineffective.

- Large-scale telephonic interventions with high cost patients don’t generate even *gross* cost savings in a 2-year period.

- Programs require reliable contact information to engage patients effectively.
  - Underestimated patients’ communication difficulties and non-medical needs.
The “Optimal” Care Coordination Model?

- Augment effective ongoing care coordination with transitional care
- *Offer* group education on self-management
- It's not just what you do, but how well:
  - Incorporate key features identified in MCCD
  - Use protocols to detail effective interventions
  - Focus on individual patients’ goals/needs
Lessons for medical homes:
- Several features associated with success, but...
- Needs tighter targeting to save money
- Not easy; adapt protocols of effective programs
- Needs strong transitional care component

Small practices will need other options for effective care coordination

Create incentives for hospitals to adopt transitional care programs
Ongoing Research Issues

- 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
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