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Goals of Presentation

- Identify proven interventions for beneficiaries with chronic illnesses
- Describe key distinguishing features
- Outline model with greatest potential
- Suggest policy implications for Medicaid and Medicare
The Problem

- Most healthcare dollars are spent on a small percentage of beneficiaries who have complex chronic conditions.

- Causes of high utilization and costs:
  - Deviations from evidence-based care
  - Poor communications among primary physician, specialists, other providers, and patients
  - Poor adherence by patients
  - Failure to catch problems early
  - Psychosocial issues
What is effective care coordination?

Intervention with rigorous evidence that it:

- Improves beneficiary outcomes
- Reduces total health care expenditures for participating beneficiaries
  - Improved satisfaction or clinical indicators not sufficient
  - Net savings require reduced hospitalizations
Most evidence showing impacts is unreliable

3 types of interventions have been proven effective:

1. Transitional care interventions (Naylor et al. 2004 and Coleman et al. 2006)
3. Coordinated care interventions (some sites from the Medicare Coordinated Care Demonstration)
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
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-Management 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
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, like transitional care
  - Need ongoing contact for chronic illnesses
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 (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 over 3-year followup
Keys Components of Effective Models

1. Targeting of patients at high risk of hospitalization

2. Staffing primarily by experienced registered nurses

3. Building rapport
   - With patients via some (~monthly) in-person contacts, not just by telephone
   - With physicians 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 Components of Effective Models

5. Medication management
   – Check for adverse interactions, polypharmacy, patient filling Rx’s

6. Strong self-care education
   – Support adherence to treatment recommendations, educate about early warning signs and when to call the doctor, how to take medications

7. Provide social support services to patients when needed

8. Serve as communications hub between patients and providers
   – Share patient Rx lists, reconcile Rx’s
   – 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
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
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
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