Care Across the Continuum: From Evidence to Practice

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Meharry Consortium Geriatric Education Center

Conflict of Interest Disclosure

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<th>Item</th>
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<td>Grants, Contracts</td>
<td>National Institutes of Health AHRQ, Hartford Foundation</td>
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Objectives

• Identify current evidence supporting new models of care for older adults.
• Describe one new collaborative care and/or transitional care model.

Goals

• Review current quality problems in the care of older adults
• Review components and evidence of collaborative care models
• Review transitional care models
• Describe barriers and facilitators to implementation of these models
Quality Problems in the Care of Older Adults

- Americans receive about half of the recommended services for acute, chronic, and preventive care
- 10% of Americans take five or more prescriptions drugs
- Continued health disparities
- Education alone is ineffective


Hypertension 60 years later

- Prevalence of HTN has increased in last decade
  - 29% of adult US population has hypertension
  - ~67 million people
- 69% diagnosed
- 58% treated
- 31% controlled

Hajjar and Kotchen. JAMA, 2003; www.cdc.gov
US Physician Workforce Realities

Relative Numbers of Physicians

- Primary Care: 222,000
- Psychiatry: 2,500
- Neurology: 7,900

Maldistribution of Physicians

Number of Neurologists
Per 100,000 Population, 2004

Source: CDC

www.cdc.gov
Primary Care Structural Realities

- Typical office visit is 15-20 min
- Primary care physicians need:
  - 10 hours per day to deliver recommended health care for their patients’ chronic conditions
  - 7 hours per day for preventive services
- As much as 25% of 9-hour day spent on administrative duties and paperwork
- Only 20% of office-based practices have a basic EHR

Ostbye Ann Fam Med 2005; Grumbach JAMA 2002; Cunningham Health Affairs 2004
Yarnall AJPH. 2003;

Institute of Medicine 2008

- Calls for fundamental reform in the way the workforce is trained and used to care for older adults
- Recommends greater dissemination of models of care shown to be effective
- Recommends greater efforts to improve resources and support for patient self-management

www.iom.edu
Institute of Medicine 2012

- Determine the workforce implications of new models of care
- Calls for a redesign of Medicare and Medicaid payment rules to guarantee coverage of counseling, care management, and other types of services crucial for treating mental health conditions

IU Geriatrics

Redesigning Primary Care

- How do you redesign primary care to enable the primary care physician to deliver quality care?
- How do you shift the paradigm to care teams?
- How do you engage the resources in the community?
- How do you engage the patient and family?

“Collaborative Care” is a tested team-based model to accomplish practice redesign

IU Geriatrics
Components of the Collaborative Care

1. Screening and diagnosis program
2. Case-finding for reversible comorbid disability
3. Consideration for specialty referral
4. Patient and caregiver education
5. Treatment with adequate dose and duration of evidence-based therapy
6. Care of troublesome symptoms or behaviors with non-pharmacologic or pharmacologic approaches
7. Coordination of care across continuum of care
8. Tracking of patient outcomes with feedback to team
9. Support for personal caregiver’s health

Collaborative Care for Late Life Depression

- **Design**: Multi-center randomized trial
- **Duration**: 1-year intervention; 2-years evaluation
- **Setting**: 8 health systems, 18 clinics
- **Patients**: Primary care patients, age ≥ 60, with major depression or dysthymia
- **Outcomes**: process measures, satisfaction, depression severity, physical function, costs

Funders:
- John A Hartford Foundation
- California Healthcare Foundation
- Robert Wood Johnson Foundation
- Hogg Foundation
- Health & Hospital Corporation

Unützer et al, JAMA 2002
The IMPACT Treatment Model

- Patient and primary care MD
- Care manager
  - Patient education
  - Treatment protocols
  - Close follow-up and monitoring of symptoms and side effects using a computerized tracking system
  - Brief, structured psychotherapy provided in primary care
- Oversight from geriatric medicine and geriatric psychiatry

Unützer, Med Care. 2001

Substantial Improvement in Depression
(\geq 50\% \text{Drop on SCL-20 Depression Score from Baseline})

Unützer et al, JAMA 2002
Collaborative Care for Dementia

- Care management led by a nurse practitioner working with the patient’s family caregiver and primary care physician
- Focus on non-pharmacologic management of symptoms
- Medication management
- Web-based tracking system
- Quality indicators and oversight
- Access to specialty input

Callahan et al. JAMA 2006

Intervention

- At each contact, the care manager assessed current problems using symptom checklist
- Based on current symptoms, care manager could activate standardized protocols for:
  - personal care
  - sleep disturbance
  - mobility
  - depression
  - delusions
  - repetitive behavior
  - agitation/aggression
  - caregiver health

Protocols emphasized non-pharmacologic management

Guerriero Austrom M et al. Gerontologist. 2004
**Improvement in Behavioral Symptoms**

**ADCS Neuropsychiatric Inventory (NPI)**

**Patient NPI**

**Caregiver Stress**

Callahan et al. JAMA 2006

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**Collaborative Care for Low-Income Seniors (GRACE)**

- Low-income seniors represent a diverse and complex group of vulnerable patients:
  - Socioeconomic stressors
  - Low health literacy
  - Multiple chronic medical conditions
  - Disability
  - Limited access and fragmented healthcare
- Dual eligible older adults account for a disproportionate share of healthcare expenditures

Counsell et al. JAMA 2007
GRACE is a Home-Based Intervention

In-home comprehensive geriatric assessment by a geriatrics nurse practitioner and social worker

Counsell et al. JAGS 2006

GRACE Intervention

GRACE interdisciplinary team conference

Geriatrician
Pharmacist
Physical Therapist
Mental Health Case Manager
Community Resource Expert

Developed comprehensive care plan based on standardized protocols for targeted geriatric syndromes and conditions

Counsell et al. JAGS 2006
GRACE Findings

Among low-income seniors receiving primary care in a publicly funded urban healthcare system, the GRACE intervention:

- improved quality
- improved general health, vitality, social functioning and mental health
- may reduce acute care utilization especially among group at high-risk for hospitalization

Counsell et al. JAMA 2007; JAGS 2009

Review of Collaborative Care Models

- Compelling evidence that this approach improves:
  - diagnosis, treatment and quality of care
  - satisfaction with care
  - disease-specific outcomes
  - caregiver outcomes
- Major barriers to widespread implementation
- Insufficient evidence that this approach reduces:
  - hospitalizations
  - nursing facility use
  - overall costs of care

Transitions Present Opportunities for Problems

- Distressful for patients & family
- Potentially dangerous
  - Medical errors
  - Infections
  - Misaligned goals of care
- Costly
- Concerns about hospitalization and 30-day re-hospitalizations

Saliba et al 2000; Grabowski et al. 2007; Ouslander et al. 2010; Walsh et al. 2010

Medicare Spending on Post-Acute Care

Accessed at: www.cmms.gov
The progression to nursing facility care and death is not linear for subjects with dementia.

Outbound Transition Probabilities for Subjects with Dementia

Callahan et al. JAGS 2012
Callahan et al. JAGS 2012

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**Inbound Transition Probabilities**

![Transition Probabilities Diagram](image)

Callahan et al. JAGS 2012

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**Hospital – Nursing Facility Interface**

- The 30-day rehospitalization rate among older adults with dementia was 23%
  - 17% were to discharges to home with home health care
  - 38% were discharges to home without home health care
  - 45% were discharges to a nursing facility
- Subjects often “ping-pong” to and from nursing facilities in compound transitions with hospitals.

Callahan et al. JAGS 2012
Recent Systematic Reviews of Transitional Care


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Table 1. Taxonomy of Interventions to Improve Transitional Care at Hospital Discharge

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<tr>
<th><strong>Predischarge Interventions</strong></th>
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<tr>
<td>Assessment of risk for adverse events or readmissions</td>
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<tr>
<td>Patient engagement (e.g., patient or caregiver education)</td>
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<td>Creation of an individualized patient record (customized document in lay language containing clinical and educational information for patients use after discharge)</td>
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<td>Facilitation of communication with outpatient providers</td>
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<td>Multidisciplinary discharge planning team</td>
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<tr>
<td>Dedicated transition provider (who has in-person or telephone contact with patient before and after discharge)</td>
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<td>Medication reconciliation</td>
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<tr>
<th><strong>Postdischarge Interventions</strong></th>
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<tr>
<td>Outreach to patients (including follow-up telephone calls, patient-activated hotlines, and home visits)</td>
</tr>
<tr>
<td>Facilitation of clinical follow-up (including facilitated ambulatory provider follow-up)</td>
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<td>Medication reconciliation after discharge</td>
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<th><strong>Bridging Interventions</strong></th>
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<tr>
<td>Inclusion of at least 1 predischarge component and at least 1 postdischarge component</td>
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• “Much of what drives hospital readmission rates are patient- and community-level factors, such as mental illness, poor social support, and poverty, that are well outside the hospital’s control”
• “Although hospitals are now being penalized for excessive readmission rates, the strategies that an individual hospital can implement to improve transitional care remain largely undefined”

Recent Approaches Targeting Nursing Facilities

• Program for All-inclusive Care of Elders (PACE)
• Evercare
• Interventions to Reduce Acute Care Transfers (INTERACT)
• Nursing Home Value-Based Purchasing
• Common Active Ingredients
  - Population-based approach
  - Aligned financial incentives, often by bundling
  - Provide additional services in NH, often via care managers
  - Improve communication between sites, often through HIT
  - Enhance advanced care planning and palliative care

Gross et al. 2004; Kane et al. 2004; Ouslander et al 2010;
Barriers and Facilitators to Dissemination

- Presence of evidence does not assure diffusion
- Absence of evidence does not preclude diffusion
- Simplicity of intervention does not assure diffusion
- Complexity doesn’t preclude diffusion
- Low cost does not assure diffusion
- High cost does not preclude diffusion

Some Innovations Do Diffuse Rapidly

Symptomatic treatments
- Pain
- Anxiety
- Insomnia
- Erectile dysfunction
- Heartburn

 Accessed at: online.wsj.com
Very Complicated Innovations Have Been Implemented Worldwide

Accessed at: www.usrds.org

Barriers to Diffusion of New Models of Care

- competing priorities
- financial costs
- space and other practice redesign issues
- ineffective information technology
- organizational resistance to change
- changes in the external environment
- workforce issues

Callahan et al. Aging and Mental Health. 2011
Facilitators for Adoption

- Local champion
- Extramural funding
- New revenue
- New savings
- Safety
- Quality
- Satisfaction
- Emergent behavior

Callahan et al. Aging and Mental Health. 2011

Emergent Behavior in 2008
30-Day Readmissions and Medical Homes

http://www.hospitalcompare.hhs.gov
www.aafp.org  www.pcpcc.net
The Aging Brain Center Medical Home

- Nurse practitioner-led collaborative care based in primary care practice
- Targets patients with dementia or depression and provide co-management for cardiovascular risks
- Support from memory care practice
- Linked with community-based service providers
- Focus on adequate dose and duration of care
- High priority outcome is reduce re-hospitalization

Callahan et al. Aging and Mental Health. 2011

ABC Medical Home

- The program began 2008
- CMSI funding to scale up in 2011
- Required development of new:
  - local treatment protocols
  - clinical outcome measure
  - electronic medical record
  - financial outcome measures
  - new workforce development
  - Population perspective

Callahan et al. Aging and Mental Health. 2011
Looking Forward

- Single site models of care are unlikely to be effective
  - To improve quality and cost care management has to reach into hospitals and into nursing facilities and home care
  - This will require reach across payment sources, across different health care systems, and over time
- Condition-specific care models are unlikely to be effective
  - Most patients have multiple comorbid conditions
  - Patients are heterogeneous
  - Patient have variable levels of family support
- Models need greater engagement and partnership with community services

Conclusions

- Teams and population-based approaches are the future of new models of care
- Adoption of new models is unlikely without locally adapted efforts
- Academic geriatrics must continue to evolve to include knowledge generation, the application of that knowledge, and lead new policy

http://medicine.iupui.edu/iucar/