Transitions of Care in People with Multiple Chronic Conditions

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Transitional Care

Range of time limited services and environments that are designed to ensure health care continuity and avoid preventable poor outcomes among at risk populations as they move from one level of care to another, among multiple health care team members and across settings such as hospitals to homes.

The Case for Transitional Care

• High rates of medical errors
• Serious unmet needs
• Poor care experiences
• High rates of preventable rehospitalizations
• Tremendous human and cost burden
Published Evidence

- 21 RCTs of diverse “hospital to home” innovations targeting primarily chronically ill adults
- 9/21, + impact on at least one measure of rehospitalization plus other health outcomes
- Effective interventions
  - Multidimensional and span settings
  - Use inter-professional teams with primarily nurses, as “hubs”

(Naylor, et al., 2011. THE CARE SPAN--The Importance of Transitional Care in Achieving Health Reform. Health Affairs, 30(4):746-754.)
Different Goals of Evidence-Based Interventions

• Address gaps in care and promote effective “hand-offs”

• Address “root causes” of poor outcomes with focus on longer-term value
Transitional Care Model

- Screening
- Engaging Older Adult & Caregivers
- Managing Symptoms
- Educating/Promoting Self-Management
- Collaborating
- Assuring Continuity
- Coordinating Care
- Maintaining Relationship
Unique Features (Hospital to Home)

Care is delivered and coordinated...

...by same advanced practice nurse (APN) supported by team

...in hospitals, SNFs, and homes

...seven days per week

...using evidence-based protocol

...supported by decision support tools
Core Components

• Holistic, person/family centered approach
• Nurse-coordinated, team model
• Protocol guided, streamlined care
• Single “point person” across episode of care
• Information/decision support systems that span settings
• Focus on increasing value over long term
Hospital to Home Findings*

- Decreased symptoms, Improved function, Enhanced quality of life
- Enhanced access, Reduced errors, Enhanced care experience
- Better Care
- Better Health

TCM's Impact on Readmission Rates After Index Hospitalization

TCM's Impact on Total Health Care Costs*

<table>
<thead>
<tr>
<th></th>
<th>TCM Group</th>
<th>Control Group</th>
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<tbody>
<tr>
<td>at 26 weeks**</td>
<td>$3,630</td>
<td>$6,661</td>
</tr>
<tr>
<td>at 52 weeks***</td>
<td>$7,636</td>
<td>$12,481</td>
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* Total costs were calculated using average Medicare reimbursements for hospital readmissions, ED visits, physician visits, and care provided by visiting nurses and other healthcare personnel. Costs for TCM care is included in the intervention group total.


Translating Evidence Into Practice

Penn research team formed partnerships with Aetna Corporation and large health systems to test “real world” applications of research-based model of care among high risk elders.

Funded by The Commonwealth Fund and the following foundations: Jacob and Valeria Langeloth, The John A. Hartford, Gordon & Betty Moore, and California HealthCare; guided by National Advisory Committee (NAC)
Tools of Translation

• Patient screening and recruitment
• Preparation of TCM nurses, teams and sites (e.g., online seminars, on-site consultations)
• Documentation and quality monitoring (clinical information system)
• Quality improvement (case conferences grounded in root cause analysis)
• Evaluation
Project Goals (Aetna)

• Test TCM in defined market
• Document facilitators and barriers*
• Present findings to Aetna decision makers
• Widely disseminate findings

Findings (Aetna)

• Improvements in all quality measures
• Increased patient and physician satisfaction
• Reductions in rehospitalizations through 3 months
• Cost savings through one year
• All significant at p<0.05

Would cognitively impaired hospitalized older adults and their caregivers benefit from TCM?


Funding:
Marian S. Ware Alzheimer Program, and National Institute on Aging, R01AG023116, (2005-2011)
Cognitive Deficits at Baseline

- Orientation deficits, 43.2%
- Recall deficits, 43.2%
- Executive Function deficits (clock task), 37.6%
- DX Dementia/Delirium, 19.2%
- 24.9% also had delirium (+ Confusion Assessment Method)
Time to First Readmission

<table>
<thead>
<tr>
<th>TCM</th>
<th>ASC/RNC</th>
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<tr>
<td>93.4%</td>
<td>79.8%</td>
</tr>
<tr>
<td>78.6%</td>
<td>67.9%</td>
</tr>
<tr>
<td>63.7%</td>
<td>63.7%</td>
</tr>
<tr>
<td>53.1%</td>
<td>53.1%</td>
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</tbody>
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Days: 0 30 60 90 120 150 180

TCM: TCM
ASC/RNC: ASC/RNC
Mean Number of All-Cause Rehospitalizations Through Six Months

![Graph showing the mean number of all-cause rehospitalizations over 180 days for APN and ASC/RNC. The graph indicates a significant difference (P=.0049) between the two groups.]

(Marian S. Ware Alzheimer Program, and National Institute on Aging, R01AG023116, 2005-2011)
Implementation of TCM Service Line within Health Systems (e.g., UPHS)

• Placed within health system’s home care and hospice division

• Reimbursed by local payers (IBC and Aetna) using case rate with defined performance expectations

• Implemented using a learning health system framework
What do we know about effects of transitions among elderly long-term care recipients over time?

Funding:
National Institute on Aging, National Institute of Nursing Research, R01AG025524, (2006-2011)
Depressive Symptoms* Through One Year

Categorized Depression Score Distribution Over Time

* GDS-SF
Does the TCM add value to the patient centered medical home?

Funding:
Gordon and Betty Moore Foundation, Rita and Alex Hillman Foundation and the Jonas Center for Nursing Excellence (2011-2014)

Study Aims

• In collaboration with Patient Centered Medical Homes and guided by an Advisory Committee, the Penn team is:
  • Comparing outcomes of PCMH+TCM, a new care delivery approach, to those achieved by the PCMH only
  • Using lessons learned and findings to advance larger scale effort
Local Adaptations of the Transitional Care Model

Funding:
Study Aims

• Describe how sites in health systems and communities across the U.S. are implementing the TCM

• Examine the effects of adaptations to the TCM
Project ACHIEVE

Achieving Patient-Centered Care and Optimized Health In Care Transitions by Evaluating the Value of Evidence

Study Aims

• Identify which transitional care services and outcomes matter most to patients and caregivers,

• Compare how evidence-based transitional care services are meeting these needs

• Develop recommendations to spread highly effective, patient-centered care transition programs.
The TCM…

• Focuses on transitions of high-risk cognitively intact and impaired older adults across all settings
• Has been “successfully” translated into practice
• Has been recognized by the Coalition for Evidence-Based Policy as an innovation meeting “top-tier” evidence standards
Key Lessons

• Solving complex problems will require multidimensional solutions
• Evidence is necessary but not sufficient
• Change is needed in structures, care processes, and health professionals’ roles and relationships to each other and the people they support
• *Carpe Diem!*
Getting Patients Back on Their Feet Faster

Study Says Care Before and After Discharge From the Hospital Saves Money, Spurs Recovery

By Judy Light
Special to The Washington Post

Clifford Lynd Sr. is breathing easier these days. In the heat of the summer, he's feeling strong enough to paint a bumper chair he built for his great-granddaughter. "I can always find something to do," said Lynd, a 79-year-old retired meat cutter who lives in Philadelphia. "I have lawn chairs that need new webbing, and I'm refinishing an end table for my grandson."

Lynd would have had trouble tackling these projects a year ago. In July 1998, he was hospitalized with congestive heart failure. He was re-admitted in September. "The last time I went in, I had been to church on Sunday morning. I stopped by to see my youngest daughter, who is our family doctor's office manager. When she saw that I could hardly breathe—my lungs were filled up with so much fluid I was panting—she took me right to the hospital."

Congestive heart failure is a chronic debilitating disease. Typically, patients like Lynd are in and out of the hospital. They suffer fatigue, shortness of breath, fluid buildup in their lungs, sleeplessness. The heart muscle is weakened, unable to do its job pumping blood to the lungs and through the rest of the body.

Without proper care, Lynd's condition would have deteriorated. But he was able to take advantage of a research project at the University of Pennsylvania School of Nursing that patients who received intensive at home follow-up did significantly better. Compared to a control group that received standard discharge care, the patients receiving intervention by trained professionals had fewer readmissions to the hospital, saving Medicare an average of $3,000 per patient during the six months after their original admission.

The study depended on "advanced practice" nurses with training in geriatrics to assess the patients' physical, emotional and social condition in the hospital and determine what support services would be needed at home.

Collaborating with physicians, family members and other health professionals, the nurses designed individual discharge plans for every patient. They taught patients and the people who would be involved in their care at home about prescribed medications and dietary requirements. They recommended levels of exercise and activity and made follow-up medical appointments. They pointed out potential symptoms and early warning signs of complications that might occur.

Home visits were an integral part of the program. The program's nurses were also available by telephone. All in all, they acted as the go-between for patients and the rest of the medical community. They talked to the patients' doctors when questions or problems arose. They helped patients enroll in supplemental insurance plans and arranged for additional in home care services. They also found support services for the patients'
Univ. of Pennsylvania Health System
Independence Blue Cross of Phila.
Aetna Corporation
Kaiser Permanente
Other Health Systems and Communities
CMS QIOs
PCMHs

Partners

Research Team

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With Gratitude