The Transitional Care Model: Translating Research into Practice

Development and Translation of the Transitional Care Model for Older Adults

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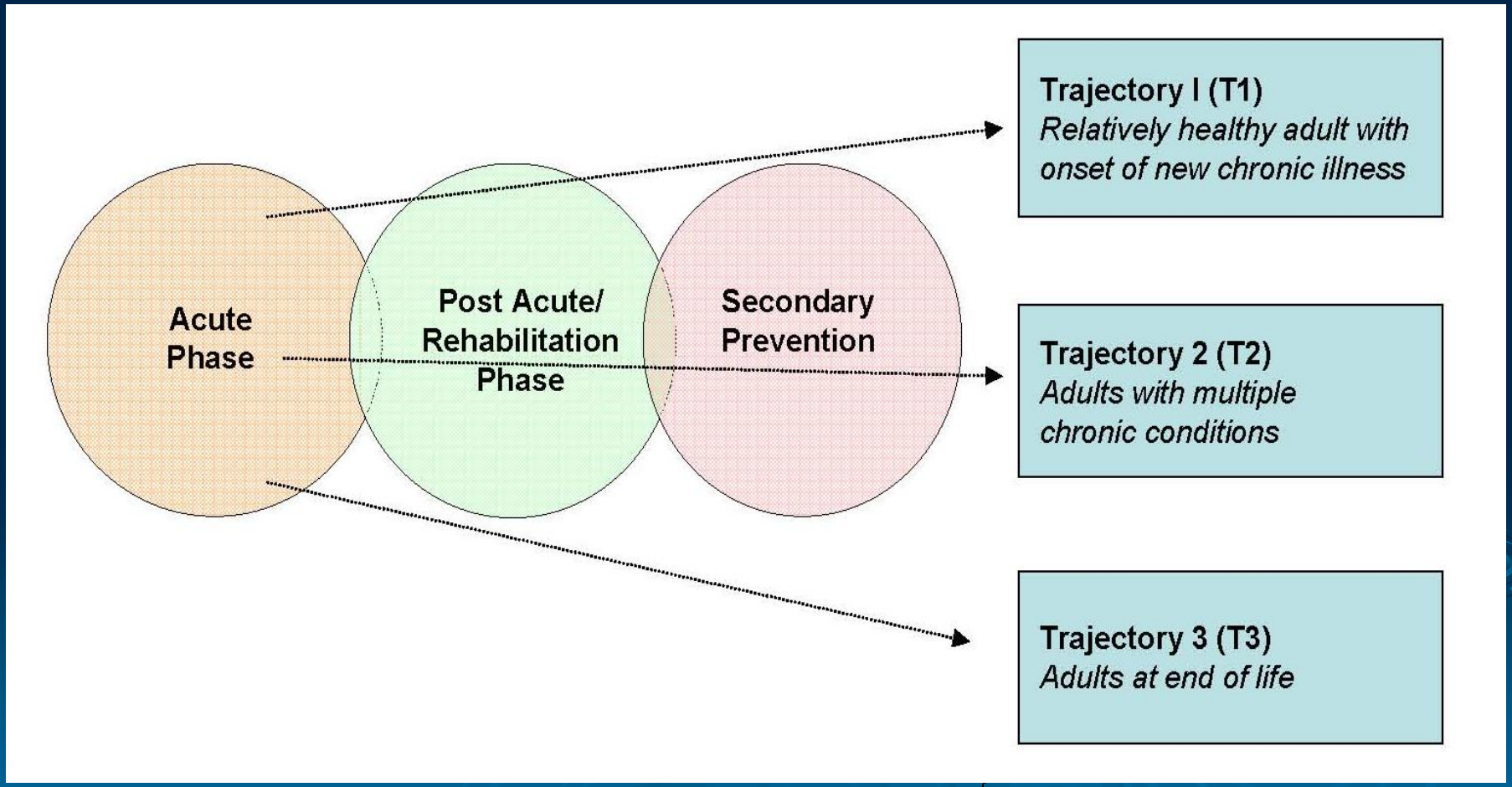
Transitional Care

Transitional care – range of time limited services and environments 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 providers and/or across settings.

Context for Transitional Care
Acute Care Episode:



Adapted from the National Quality Forum committee on Measurement Framework: Evaluating Efficiency across Episodes of Care

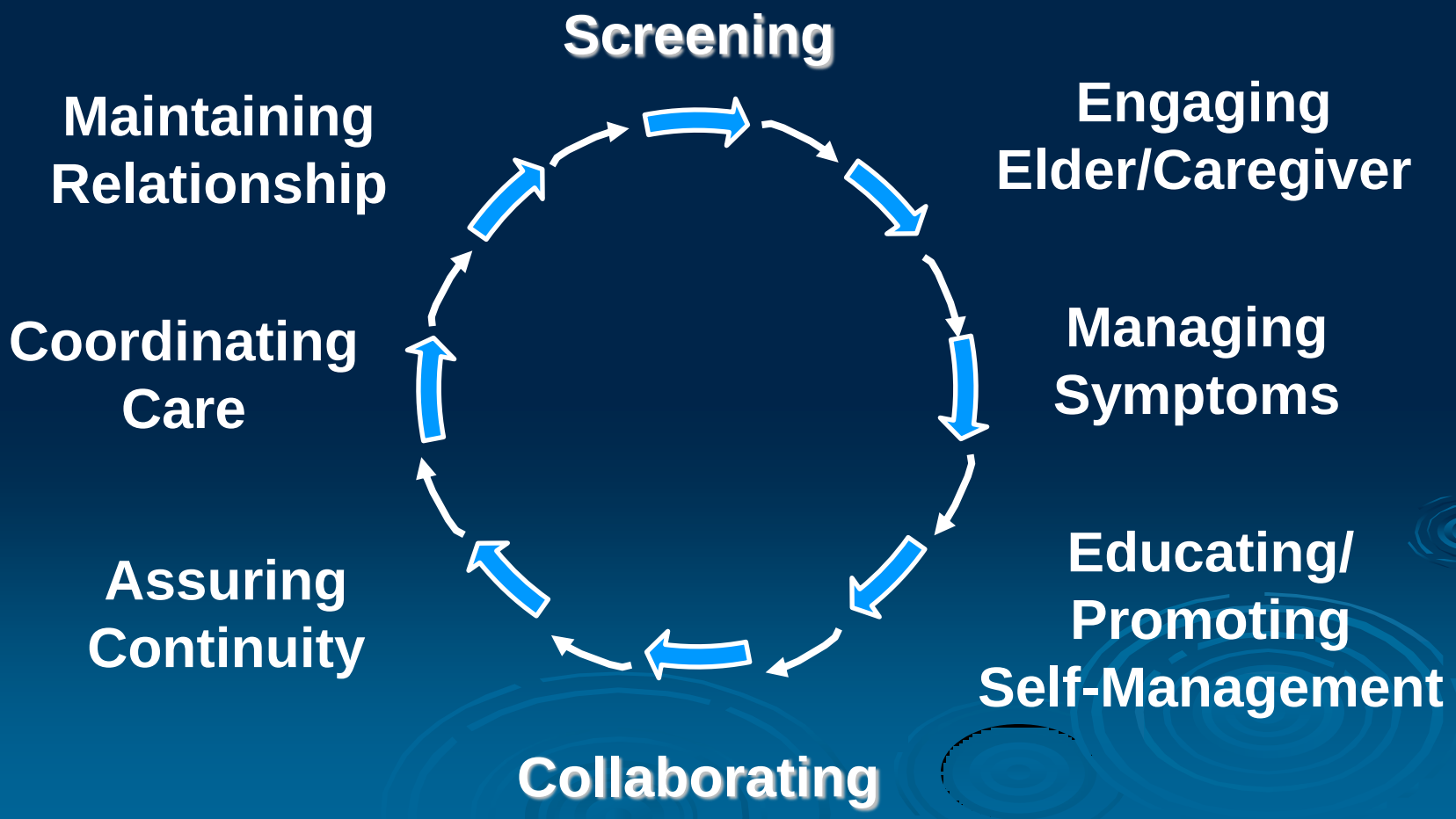
The Case for Transitional Care

- High rates of medical errors
- Serious unmet needs
- Poor satisfaction with care
- High rates of preventable readmissions
- Tremendous human and cost burden

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, positive outcomes

Quality Cost
Transitional Care Model (TCM)



Unique Features

Care is delivered and coordinated

…by same nurse

…across settings

…7 days per week

…using evidence-based protocol

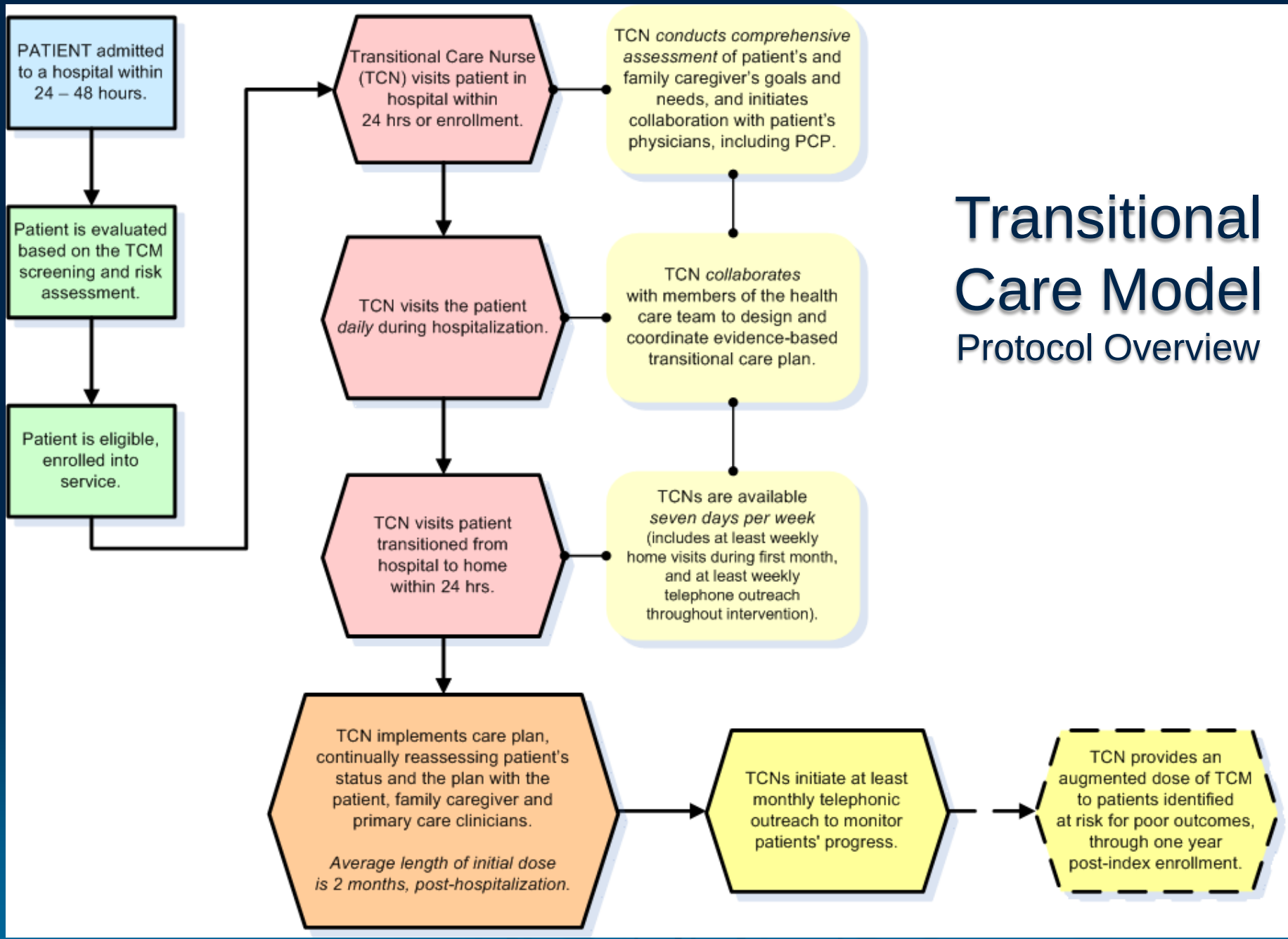
…with focus on long term outcomes

Findings from Randomized Clinical Trials

Funding: National Institutes of Health, National Institute of Nursing Research, National Institute on Aging (1990-2010)

Transitional Care Model

Protocol Overview



Across RCTs, TCM has consistently…

- Increased time to first rehospitalization
- Decreased total all-cause rehospitalizations
- Increased patient satisfaction
- Improved physical function and quality of life*
- Decreased total health care costs

*Most recently completed RCT only

Barriers to Adoption

- Organization of current system of care
- Lack of quality and financial incentives
- Culture of care

Translating TCM into Practice

Penn research team formed partnerships with Aetna Corporation and Kaiser Permanente to test “real world” applications of research-based model of care for 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)

Project Goals (Aetna)

- Test TCM in defined market
- Document facilitators and barriers
- Provide for ongoing NAC input
- Present findings to Aetna decision makers
- Widely disseminate findings

Tools of Translation

- Patient screening and recruitment
- Orientation of TCNs (web-based modules)
- Documentation and Quality Monitoring (clinical information system - CIS)
- Quality improvement (case conferences and CIS)
- Evaluation

Integrating TCM within Aetna

- Project team
- Key decisions
  - Link to geriatric case management program
  - Partner with home care agency
  - Target 200 members in mid-Atlantic region
  - Clearly define roles and work flow processes

Key Indicators of Success

- Decisions by Aetna re: adoption
- Decisions by other insurers and providers to implement model
- Use of findings by CMS and insurers to reimburse evidence-based transitional care

$$\text{Value} = \frac{\text{Quality/Satisfaction}}{\text{Health Resource Utilization (Costs)}}$$

Environment: Extant comprehensive system of telephonic care management

Question: Does the Transitional Care Model offer greater value in this environment?

Quality (N=172)

Significant improvements pre- and post-TCM in the following outcomes:

- self-reported health status (1 item)
- symptom status (Symptom Bother Scale)*
- depression (Geriatric Depression Scale)
- functional status (SF-12)
- quality of life (one item)

*improvements in 10/13 symptoms at $p < 0.05$

Satisfaction

- *Members (N=171)*
  - Overall high satisfaction - Mean of 3.0 on each of the 15 survey items (1 low - 4 high)
- *Physicians (N=25)**
  - Overall high satisfaction with APN involvement in members' care – Mean of 3.5 on each of 10 survey items* (1 strongly disagree – 4 strongly agree

** Satisfaction data from MDs with at least 3 TCM patients

Health Resource Utilization

- Quasi-experimental design simulating RCT
- Each elder in TCM matched with “control”
- 155 pairs using stringent criteria (e.g., # of comorbid conditions) were available for final HR analyses
- HR data obtained from Aetna’s claims’ dataset

Rehospitalization Rates*

Significant reductions in readmission rates and hospital days through 3 months

- 0-3 months, 45 TCM vs. 60 controls (25% decrease; 99 fewer hospital days)
- 0-6 months, 104 TCM vs. 112 controls
- 0-12 months, 184 TCM vs. 203 controls

*ED rates similar (85 TCM vs. 81 controls at 12 mos.)

Skilled Nursing Facility Rates

Trend toward reduced SNF admissions between TCM vs. controls

- 0-3 months, 5 TCM vs. 11 controls
- 0-6 months, 14 TCM vs. 22 controls
- 0-12 months, 26 TCM vs. 38 controls

Skilled Home Care Visits

Trend toward decreased use of home visits for TCM vs. controls

- 0-3 months, 252 TCM vs. 436 controls
- 0-6 months, 393 TCM vs. 728 controls
- 0-12 months, 658 TCM vs. 1153 controls

TCN Visits

- Mean # of home visits = 7.26 (2-19); mean length = 50 minutes
- Mean # of MD office visits = 0.7 (0-3); mean length = 62 minutes
- Mean # of patient phone calls = 7.82; mean length = 8 minutes

Costs

Significant reductions in total health care costs through 3 months; savings continue thru 12 months

- $439 PMPM savings at 3 months
- $181 PMPM savings at 12 months

Factors Considered in Interpreting Findings

- Hospital component of TCM was not implemented in applying model with Aetna's members
- Regional variations in service use
  - Comparison group obtained from region with 20% lower utilization rate than mid-Atlantic region

High Quality
+
Satisfaction

Reductions in Acute Readmissions (Costs)

=

TCM as High Value Proposition for Aetna

Progress to Date

- TCM proposed for expansion as part of Aetna's 2009 Strategic Plan
- Kaiser enrollment complete; data analyses ongoing
- University of Pennsylvania Health System has adopted TCM; Blue Cross plans to reimburse for its members

Next Steps for Penn Team

- Continue efforts to promote widespread adoption of TCM
- Use findings to promote needed policy changes
- Continue to build the science

How can we improve post-discharge outcomes for hospitalized cognitively impaired elders?

Funding: Marian S. Ware Alzheimer Program, and National Institute on Aging (2005-2010)

How can we improve transitions of elders in LTC to and from hospitals?

Funding: Rand-Hartford Center for Interdisciplinary Geriatric Health Care Research (2005-2008); National Institute on Aging, National Institute of Nursing Research (2006-2011)

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www.transitionalcare.info