United States Senate Committee on Finance
Roundtable on Delivery System Reform
Statement of Mary D. Naylor, RN, PhD, FAAN

Health Care Needs of Chronically Ill Older Americans: The Challenge.

Elder's Perspective: More than 20% of older Americans suffer from five or more chronic conditions.[1] Age related changes, complicated by multiple, progressive physical, cognitive and emotional health problems contribute to accelerated functional decline, poorer quality of life, and decreased survival rates among these elders.[2] The chronic illness trajectory among this group is characterized by frequent changes in health status. As a result, these elders typically require health care services from numerous providers across several care settings each year.[3] Yet, multiple studies reveal that the health care needs of these older adults are poorly managed, often with devastating consequences.[3] Insufficient communication among older adults, family caregivers and health care providers about critical aspects of elders' care, poor continuity of care, and inadequate preparation of these elders to manage their changing health care needs are the norm, contributing to high rates of medical errors and preventable hospital readmissions.[1,3] Researchers estimate that one-quarter to one-third of hospitalizations among these elders are avoidable.[4]

Family Caregiver's Perspective: Family caregivers, the spouses, children and friends who are the primary providers of services to these elders, also face tremendous challenges.[5] Available research suggests that family caregivers lack the knowledge, skills and resources to effectively address the complex needs of elders coping with multiple coexisting conditions. Studies also reveal that the stress and burden associated with the care giving experience contribute to substantially higher rates of chronic illness among family caregivers.[6,7]

Societal Perspective: In addition to the human burden, societal costs associated with caring for this group of older adults are enormous. In 2005, health care services for Medicare beneficiaries with five or more chronic conditions accounted for 75% of total Medicare spending.[8] The vast majority of these costs were due to high rates of hospital admission and readmission. In 2007, the Medicare Payment Advisory Commission (MedPAC) estimated that nearly one in five Medicare beneficiaries admitted to a hospital were readmitted within 30 days of discharge, with an even higher rate among beneficiaries with multiple chronic conditions.[9] These findings were reinforced by a recent study reported in the *New England Journal of*

Medicine.[10] MedPAC calculated that this "churning" of patients accounts for an estimated $15 billion annually in Medicare spending.[11] In addition to the impact of caring for older adults with multiple chronic conditions on health care spending, American businesses lose an estimated $34 billion each year due to employees' need to care for loved ones.[12]

Given the expected growth of older adults coping with multiple chronic conditions, and increasing evidence of significant lapses in quality and rapidly rising costs, improving the health care and outcomes of this patient group is considered a national priority by the Institute of Medicine (IOM) and leaders of other national health care groups.[3,13,14] Health care leaders agree that a core strategy in response to this challenge is the identification of the most cost-effective interventions to enhance the care management of these elders and reduce their rates of avoidable hospitalizations.

The Transitional Care Model: An Evidence-Based Solution

Until recently, few rigorous studies of interventions designed to improve the care and outcomes of chronically ill older adults have included those with multiple coexisting conditions. For the past 20 years, this group of elders has been the exclusive focus of a multidisciplinary team at the University of Pennsylvania and the architects of the Transitional Care Model (TCM). The TCM is among the very few care management interventions that have been associated in multiple randomized clinical trials (RCTs) with significant improvements in health outcomes and reductions in health care costs among at risk, chronically ill elders.

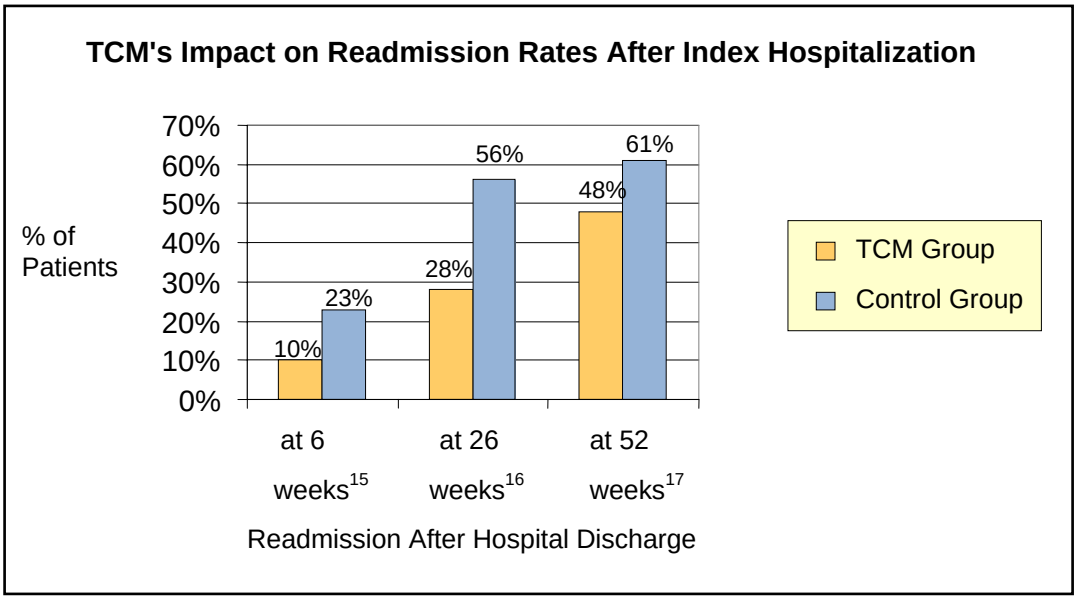
For the millions of older Americans who suffer from multiple chronic conditions, the TCM emphasizes identification of patients' health goals, coordination and continuity of care throughout acute episodes of illness, development of a streamlined plan of care to prevent future hospitalizations, and preparation of the older adult and family caregivers to implement this care plan—all accomplished with the active engagement of patients and their family caregivers and in collaboration with the patient's physicians and other health care providers. Unlike other interventions that focus on addressing gaps in care, the major goal of the TCM is to interrupt cycles of avoidable hospitalizations among these elders and promote longer-term positive health outcomes.

The TCM targets older adults with two or more risk factors, including a history of recent hospitalizations, multiple chronic conditions and poor self-health ratings. The essential elements of the model are as follows:

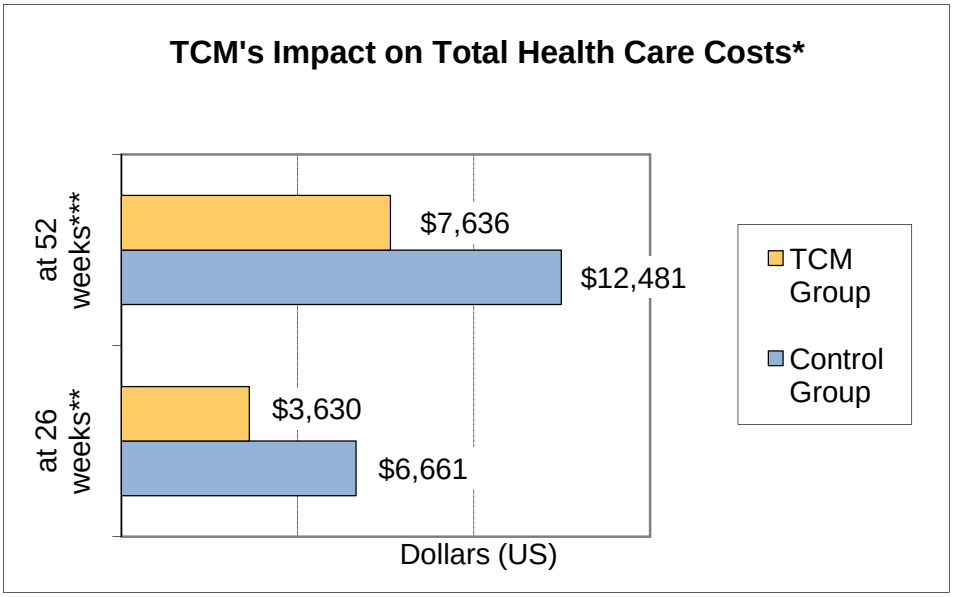
1. Identification of each elder's and family caregiver's health goals;
2. The transitional care nurse (TCN), a master's prepared nurse with advanced knowledge and skills in the care of this population, as the primary coordinator of care to assure continuity throughout acute episodes of care;
3. In-hospital assessment, collaboration with team members to reduce adverse events and prevent functional decline while hospitalized, and preparation and development of a streamlined, evidenced-based plan of care;
4. Regular home visits by the TCN with available, ongoing telephone support (seven days per week) through an average of two months post-discharge to implement the care plan;
5. Continuity of medical care between hospital and primary care providers facilitated by the TCN accompanying patients to the first follow-up visit;
6. Comprehensive, holistic focus on each patient's goals and needs including the reason for the primary hospitalization as well as other complicating or coexisting health problems and risks;
7. Active engagement of patients and family caregivers with focus on meeting their goals;
8. Emphasis on patients' early identification and response to health care risks and symptoms to achieve longer term positive outcomes and avoid adverse and untoward events that lead to readmissions;
9. Multidisciplinary approach that includes the patient, family caregivers and health care team;
10. Ongoing communication among the patient, family caregivers, and health care providers.

Effects on Healthcare Quality and Costs. Across three National Institute of Nursing Research (NINR)-funded RCTs completed to date,[15,16,17] the TCM has demonstrated improved quality and cost outcomes for at risk, older adults when compared to standard care.

- ✓ *Reductions in preventable hospital readmissions for both primary and co-existing health conditions.* Additionally, among those patients who are rehospitalized, the time between their index hospital discharge and readmission has been increased and the total number of inpatient days decreased.



- ✓ *Improvements in health outcomes.* In the most recently reported RCT,[17] for improvements in physical health and quality of life were reported by patients who received TCM.
- ✓ *Enhancement in patient satisfaction.* Overall patient satisfaction has increased among patients receiving TCM.
- ✓ *Reductions in total health care costs.* After accounting for the cost of TCM, mean per patient savings in total health care costs have been consistently demonstrated.[16,17]



** 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 are included in the intervention group total.*
*** Naylor et al., JAMA, 1999.*
**** Naylor et al., JAGS, 2004.*

Translating Research Into Practice

Despite the evidence establishing the linkage between TCM and enhanced value, a number of organizational, regulatory, and financial barriers have prevented widespread adoption of the model. In response to these challenges and with the support of a number of foundations,[18] the Penn team formed partnerships with leaders of the Aetna Corporation (Aetna) and Kaiser Permanente Health Plan (KP) to translate and integrate the TCM for use in everyday practice and assess its effectiveness among at risk, chronically ill older adults. The findings of this translational research effort have resulted in TCM being identified as a "high value" proposition by Aetna leaders. The project with KP is ongoing. Based on the improvements in health outcomes, member and physician satisfaction and the reductions in rehospitalizations and total health care costs observed in the Aetna project, the University of Pennsylvania Health System (UPHS) has adopted TCM as a service and local insurers will begin to reimburse UPHS for delivery of TCM to their members later this month.

Principles for Delivery System Reform

The research findings on the TCM, combined with the growing body of evidence from related studies, yield the following principles to inform the redesign of the health care system for older Americans coping with multiple chronic conditions.

Principle 1: High quality health care ensures "the right care at the right time" for each chronically ill elder and their family caregivers but "one size does not fit all." The Penn team's work has shown the TCM to be cost-effective among at risk, chronically ill older adults. A recently published study underscored the value of multidisciplinary teams and in-person contact as core elements in the success of care management interventions targeting at risk chronically ill elders.[19] However, the 80% of older Americans coping with at least one chronic condition represent a wide range of health care needs and risks.[20,21] Alternative models of care are more appropriate for lower risk groups experiencing fewer, less severe chronic conditions and health risks. Findings from a 2009 evaluation study of the Centers for Medicare and Medicaid (CMS) Coordinated Care Demonstration sites[22] suggests that, with appropriate screening and risk adjustment, chronically ill elders could be stratified and matched with a set of services aligned with individual needs and risks. Authors of this report also concluded that higher risk groups will need evidence-based transitional care to achieve substantial Medicare savings.

Principle 2: The right skill set and support is essential to build person-and family-centered, team-based programs of transitional care for the chronically ill older adults. Both family caregivers and health care professionals lack the knowledge, skills and resources to address the complex needs of elders with multiple chronic conditions.[23]. AARP and the United Hospital Fund are among a number of advocacy organizations that have highlighted the family caregivers' need for information and support, especially as their loved ones experience critical health care transitions.[1,5] The IOM's recent report on the geriatric workforce, acknowledged the need to build the capacity and competence of all individuals involved in the delivery of care to elders, including family caregivers and community workers.[24] Health professionals, especially nurses who have been demonstrated over multiple rigorous studies to play a leadership role in transitional care, need increased preparation to deliver person- and family-centered, longitudinal, team-based care.

Principle 3: Existing performance measurement and reporting systems do not capture the quality and costs of an episode of care for chronically ill older adults. Significant progress has been made in measuring and reporting processes of care and outcomes for a number of high-prevalence and high-cost chronic conditions. Ongoing investments should be made to enable transparency of both quality and cost information for older adults coping with *multiple* chronic conditions across an entire episode of care. An acute episode of chronic illness for this patient group spans hospital, post-acute and primary care settings and interactions with multiple providers. Measures are needed that reflect the complexity of health needs among these elders and are more closely aligned with their health care experience throughout such an episode. The National Quality Forum has provided a measurement framework for assessing value associated with the care of people over the course of a chronic episode of illness.[25] Ongoing efforts to design and implement robust measures consistent with this framework must resolve issues related to shared accountability for clinical and economic outcomes. Additionally, standard metrics are needed that assess care delivered to vulnerable populations including older adults representing diverse racial and ethnic minorities, living in rural settings, and those with low socioeconomic status, language barriers, poor health literacy and inadequate social support. Systems that publicly report performance data also must be designed to produce minimal

provider burden. To achieve these goals, fully accessible, electronic health records from which data elements are automatically drawn to generate the measures are essential.

Principle 4: Investments in comparative effectiveness research are needed to identify high value practices with proven results. Although a growing body of evidence exists that supports specific models of care for the chronically ill older population, including models of transitional care, comparative effectiveness research is needed to identify the most effective and efficient core elements of these multifaceted interventions, and to compare their benefits and costs. A federally sponsored, independent review body should be established to critically evaluate evidence, compare scientific results, and convey the relative value of specific models of care to payers, providers, and the public.

Principle 5: Translational tools that enable swift application of evidence-based transitional care are a high priority. Tools that enable the rapid dissemination and implementation of best practices at a national-level are needed. Clinical information systems that house evidence-based assessment tools and intervention protocols, foster information exchange, provide just-in time data for quality monitoring and improvement among all providers and across all settings throughout episodes of care are important. Web-based modules that prepare providers to deliver evidence-base care also are needed.

Principle 6: Regulatory barriers, including payment policies that prevent the delivery of transitional care, must be eliminated. The delivery of high quality transitional care is contingent on a workforce of skilled multidisciplinary providers, in partnership with older adults and their family caregivers, delivering a range of comprehensive services across episodes of care. Currently, health care is oriented to the delivery, monitoring, and payment of acute care services within separate and distinct settings including hospitals, home health care agencies and skilled nursing facilities. Little attention has been paid to care that crosses settings or involves multidisciplinary teams of providers. State and federal laws, financing models, eligibility rules, and quality monitoring systems are not uniform and often create confusion and conflict for providers and consumers. Furthermore, existing payment systems impede the delivery of

transitional care. Adoption of innovations in chronic care management and transitional care, in particular, is dependent on greater flexibility in regulation and payment policies.

Policy Recommendations to Assure High-Value Transitional Care

Policy recommendations that hold great promise for improving the care and outcomes of at risk, chronically ill older Americans and decreasing health care costs are described below.

Transitional Care Benefit

A program of transitional care should be available for all at-risk, chronically ill Medicare beneficiaries as a covered service during a beneficiary's first hospitalization each year. CMS would define criteria specifying the eligible population. Required program components would include:

- A transitional care nurse (TCN) who is prepared to deliver and coordinate services for at risk chronically ill elders throughout acute episodes of illness (substituting for traditional visiting nurse services):
- A comprehensive assessment of each elder's goals and needs within 24 hours of hospital admission;
- A transitional plan of care developed by the TCN in collaboration with each elder, family caregiver (if available), physicians and other health team members within 48 hours of hospital admission;
- A home visit by the TCN within 24 hours of hospital discharge;
- The TCN accompanying the elder to the first visit to the primary care provider following the hospital discharge;
- At least weekly home visits by the TCN during the first month after hospital discharge to implement the plan of care (e.g., monitoring and managing symptoms, teaching elders and family caregivers to promote self-management; offering counseling and support to assure elders' adherence to medications and other therapies; promoting elders' access to primary care and community-based services; coordinating the care provided by others; and, if appropriate, facilitating transitions to palliative or hospice care);

- Seven day per week telephone availability during daytime hours of TCN for elders' or family caregivers' questions or concerns with plan for emergency backup during evening and night hours; and,
- A written summary of each elder's progress in meeting goals distributed to the elder, physicians and other relevant team members within 36 hours of completion of intervention.

Payment for Transitional Care

Payment for transitional care services will require significant reform of current models. Payment made to any designated entity providing transitional care services would be structured to explicitly recognize transitional care as an episode of services that crosses multiple settings and providers. The payment would cover transitional care services for the first index hospitalization each year and include services throughout the index hospitalization and post-discharge period for an average of 60 days following the index hospitalization discharge (range 30- 90 days).

Accountability for Outcomes

Entities providing transitional care services would be held accountable for process and outcome performance measures that have been endorsed by the National Quality Forum and specified by the CMS. Payment would be linked to performance on these measures. CMS would establish a mechanism to publicly report such measures, benchmarking high performers to identify practices that contribute to lower hospital readmission rates. Best practices would be disseminated through existing federal structures and programs including, but not limited to, Medicare's Conditions of Participation, the Quality Improvement Organization (QIO) Program, and public-private quality alliances (e.g., Hospital Quality Alliance).

Conclusion

A rigorous body of evidence has consistently demonstrated the capacity of the TCM to improve the quality of care and outcomes for the growing population of older adults coping with multiple chronic conditions and to decrease total health care costs. Additionally, this approach to care has been successfully translated in the "real world" of clinical practice and, based on findings with a major insurance organization, has been identified as a 'high value' proposition. The proposed

transitional care benefit would accelerate the adoption of evidence-based models of care such as the TCM that would enhance the health care experience for millions of older Americans and their family caregivers, improve their health outcomes and achieve substantial health care savings for the Medicare program

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