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**Healthcare Transitions and Coordination:  
Early Readmission, Effectiveness, Economics**

**Part 1: Transitions in Patient Care**

The project was supported by Award Number RC2NR011946 from the National Institute of Nursing Research. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institute Of Nursing Research or the National Institutes of Health.

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This seminar series is supported in part by a grant from the Dean's Scholarly Project Award Program: Scholarship of Teaching Award from the University of Texas Health Science Center San Antonio School of Nursing.

**Moderator**

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**Carole White, PhD, RN**  
Associate Professor, Department of Health Restoration and Care Systems Management, University of Texas Health Science Center San Antonio

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**Healthcare Transitions and Coordination:  
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**Part 1: Transitions in Patient Care**

**Mary D. Naylor, PhD, FAAN, RN**  
Marian S. Ware Professor in Gerontology and Director of  
the NewCourtland Center for Transitions and Health,  
University of Pennsylvania School of Nursing



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**Presenter**



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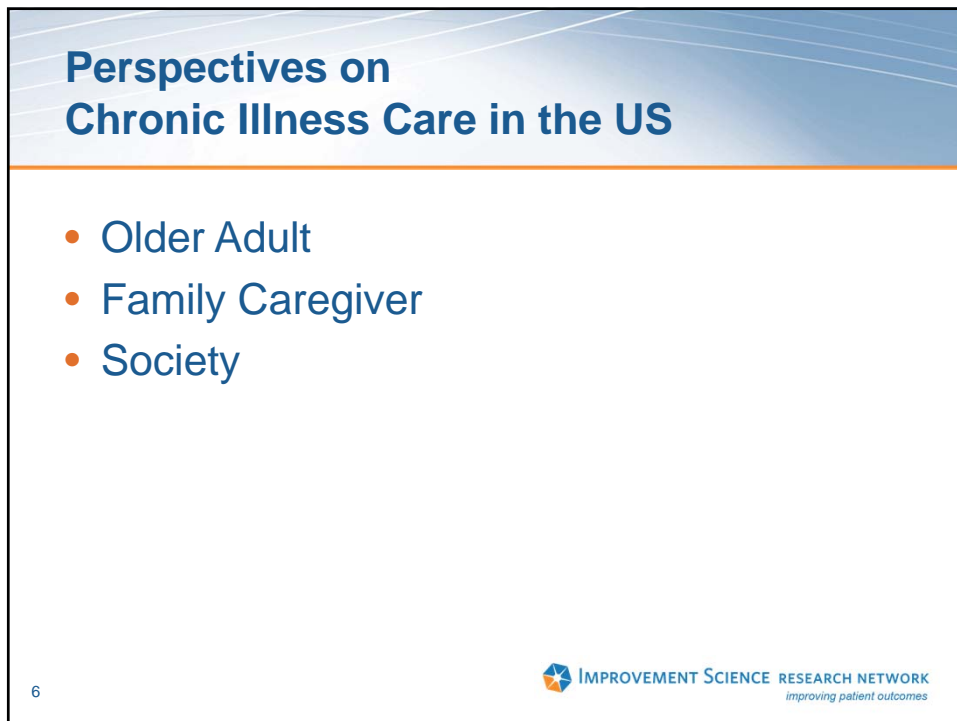
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**Perspectives on  
Chronic Illness Care in the US**

- Older Adult
- Family Caregiver
- Society

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## Transitional Care

**Transitional care** – range of *time limited* services and environments that *complement primary care* and 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 providers and across settings.

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## 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

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## Major Affordable Care Act Provisions

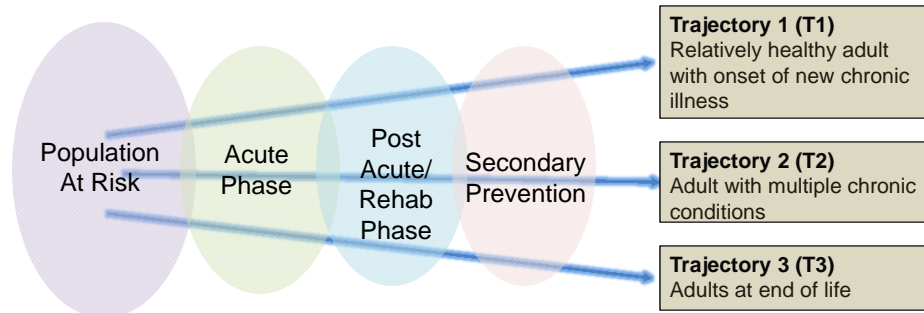
- Center for Medicare and Medicaid Innovation
- Community-Based Care Transitions Program
- Patient Centered Medical Homes
- Shared Savings Program (ACOs)
- Federal Coordinated Health Care Office
- Payment Innovation (Bundled Payments)

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## Context: Acute Care Episode



**Adapted from the National Quality Forum (NQF) steering committee on Measurement Framework: Evaluating Efficiency Across Patient-Focused Episodes of Care.** The committee's report presents the NQF-endorsed measurement framework for assessing efficiency, and ultimately value, associated with the care over the course of an episode of illness and sets forth a vision to guide ongoing and future efforts.

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## Published Evidence

- 21 RCTs of diverse “hospital to home” innovations targeting primarily chronically ill older 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 MD, Aiken LH, Kurtzman ET, Olds DM, & Hirschman KB. (2011). THE CARE SPAN -- The Importance of Transitional Care in Achieving Health Reform. *Health Affairs*, 30(4):746-754.

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## Recommended Approach

- Stratify population based on needs/risk & apply EB interventions
  - Lower risk groups (T1) – improve “hand-offs”
  - Higher risk groups (T2) – interrupt current trajectory/focus on long-term outcomes
  - Adults at end of life (T3) – transition to palliative care/hospice

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## 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

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## Transitional Care Model (TCM)



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## Unique Features

### Care is delivered and coordinated

- ...by same APN supported by team
- ...in hospitals, SNFs, and homes
- ...seven days per week
- ...using evidence-based protocol
- ...with focus on *long term* outcomes



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## Core Components

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

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## Results

### Better Care

- Enhanced access
- Reduced errors
- Increased satisfaction

}

### Better Health


- Decreased symptoms
- Improved function
- Enhanced quality of life

}

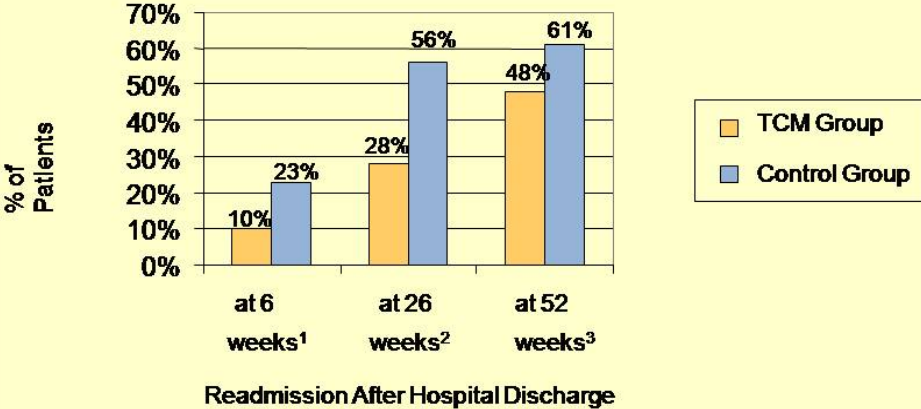
### Reduced Costs

- Decreased all-cause rehospitalizations
- Reduced ED visits
- Total cost savings

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### TCM's Impact on Readmission Rates After Index Hospitalization




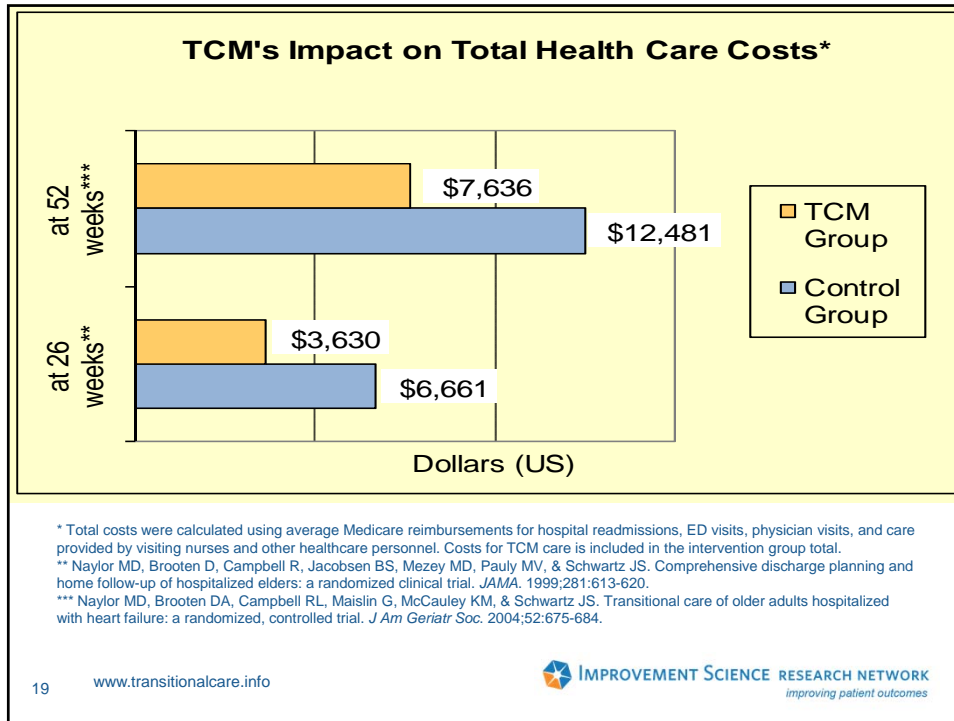
Time Point	TCM Group (%)	Control Group (%)
at 6 weeks <sup>1</sup>	10%	23%
at 26 weeks <sup>2</sup>	28%	56%
at 52 weeks <sup>3</sup>	48%	61%

**Readmission After Hospital Discharge**

<sup>1</sup> Naylor MD, Brooten D, Jones R, Lavizzo-Mourey R, Mezey M, & Pauly MV. Comprehensive discharge planning for the hospitalized elderly. *Ann Intern Med.* 1994;120:999-1006.  
<sup>2</sup> Naylor MD, Brooten D, Campbell R, Jacobsen BS, Mezey MD, Pauly MV, & Schwartz JS. Comprehensive discharge planning and home follow-up of hospitalized elders: a randomized clinical trial. *JAMA.* 1999;281:613-620.  
<sup>3</sup> Naylor MD, Brooten DA, Campbell RL, Maislin G, McCauley KM, & Schwartz JS. Transitional care of older adults hospitalized with heart failure: a randomized, controlled trial. *J Am Geriatr Soc.* 2004;52:675-684.

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- ## Barriers to Widespread Adoption
- Organization of care
  - Regulatory challenges
  - Quality and financial incentives
  - Culture of caring
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## 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 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)

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## National Advisory Committee



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## Project Goals (Aetna)

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

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## Tools of Translation

- Patient screening and recruitment
- Orientation of nurses (web-based modules)
- Documentation and quality monitoring (clinical information system)
- Quality improvement (case conferences grounded in root cause analysis)
- Evaluation

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## 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

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$$\text{Value} = \frac{\text{[Improved] Quality/Satisfaction}}{\text{[Relative to] Health Resource Utilization (Costs)}}$$

Environment: Extant comprehensive system of geriatric telephonic care management

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

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## Findings

- Improvements in all quality measures
- Increased patient and physician satisfaction
- Reductions in rehospitalizations through 3 months
- Cost savings of \$2170 per member through one year

All significant at  $p < 0.05$

Naylor, MD, et al. (2011). High-value transitional care: translation of research into practice. *Journal of Evaluation in Clinical Practice*. doi: 10.1111/j.1365-2753.2011.01659.x.

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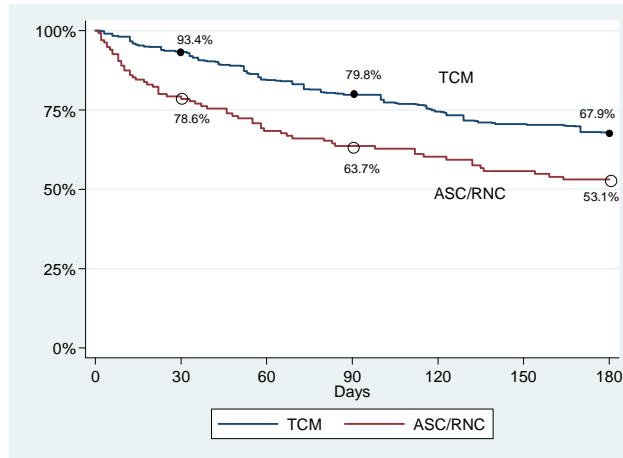


*Would cognitively impaired hospitalized older adults and their caregivers benefit from TCM?*

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

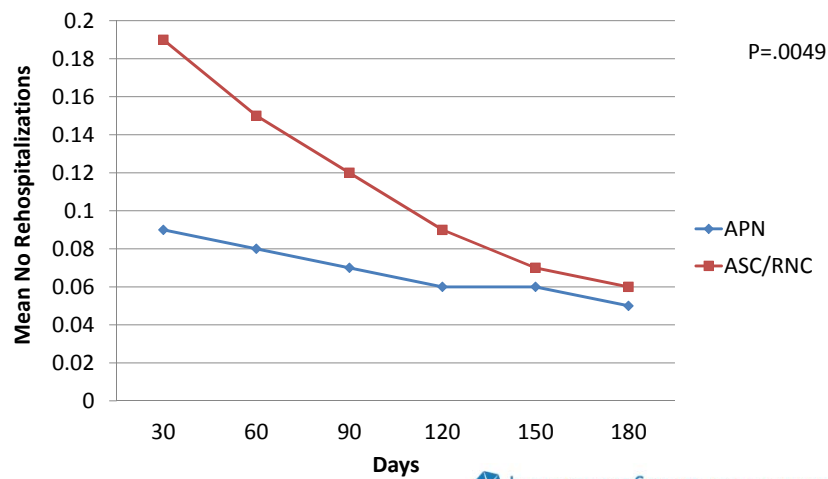
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## Time to First Readmission



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## Mean Number of All-Cause Rehospitalizations Through Six Months

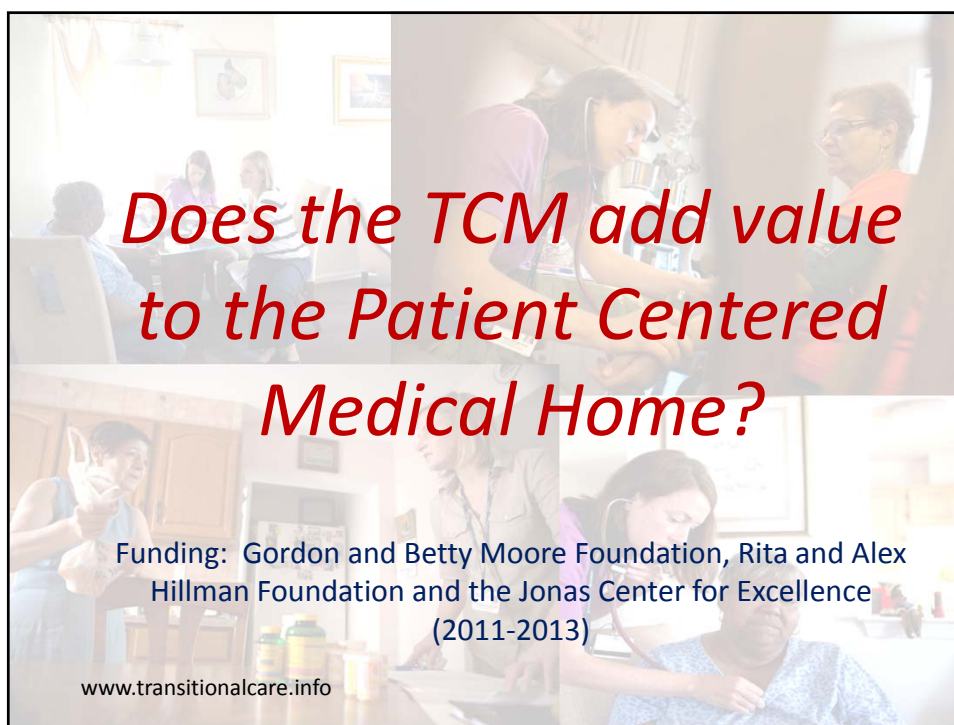


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*What do we know about effects of transitions among elderly long-term care recipients over time?*

Funding: National Institute on Aging, National Institute of Nursing Research, R01AG025524, (2006-2011)  
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*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 Excellence (2011-2013)  
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## The TCM...

- Focuses on transitions of high-risk cognitively intact and impaired older adults across multiple 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

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## Implementation Progress

- **Aetna** – expansion of TCM proposed as part of Aetna’s Strategic Plan
- **University of Pennsylvania Health System** – adopted TCM (Aetna and Blue Cross reimbursing)
- **Other healthcare systems/communities adapting**
- **Informing implementation of ACA**

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## 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 people they support
- Overcoming inertia requires substantial force

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## Pay it Forward

### Scale TCM Across Systems

- Patients/Public-Private Community Partners
- Primary Care + TCM
- Technology
- Data-Driven Quality Improvement

### Deploy TCM Workforce

- New Roles
- TCM Teams
- Competencies
- Learning Communities

### Improve & Sustain

- Quality Measures
- Accrediting, Credentialing Standards
- Innovative Payment Models

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**SENIORS**  
SPECIAL ISSUE

## Getting Patients Back on Their Feet Faster

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

By JUDY LICHT  
*Special to The Washington Post*

**C**lifford Lynd Sr. is breathing easier these days. In the heat of the summer, he's feeling strong enough to paint a booster 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 readmitted 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' families.



PHOTO BY NIKKILA JARROLD FOR THE WASHINGTON POST

**Clifford Lynd Sr. says the home care he received after hospital treatment for congestive heart failure enabled him to resume tackling projects in his garage workshop.**

...of these individuals are as stressed

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## Improvement Science Summit



- July 17 – 18, 2012
- Grand Hyatt Riverwalk, San Antonio, TX

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## Next ISRN Web Seminar



**Gerri Lamb, PhD, FAAN, RN**

Title and Organization

**Part 2: Coordination in Care**

August 22, 2012

1:00 PM CST

Visit [www.ISRN.net](http://www.ISRN.net) to register.

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## Closing Remarks

- ISRN Mission
  - To enhance the scientific foundation for quality improvement, safety, and efficiency through transdisciplinary research addressing healthcare delivery, patient-centeredness, and integration of evidence into practice.
- Join Us!
  - For information on the ISRN or to become a member please visit our website: [www.ISRN.net](http://www.ISRN.net)

The screenshot shows the website for the Improvement Science Research Network. At the top, it says 'IMPROVEMENT SCIENCE RESEARCH NETWORK ... improving patient outcomes' and 'SCHOOL OF NURSING UT HEALTH SCIENCE CENTER AGE - ACADEMIC CENTER FOR EVIDENCE-BASED PRACTICE'. The main content area has a navigation menu on the left with items like Home, Mission Statement, About Us, Research Priorities, Improvement Studies, Events, Resources, Newsletter, Website Citation, Join Us at the ISRN, and Contact Us. The main content area features a large image of four people and a headline: 'ISRN Submits Comments to Patient Centered Outcomes Research Institute's Draft National Priorities for Research'. Below this is a 'MEMBER CENTER' section with a 'Become a member today!' link, a 'Join Us!' button, and a 'LOGIN' button. The main content area also includes a 'What is the Improvement Science Research Network?' section and a 'What is Improvement Science?' section.

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The slide features the Improvement Science Research Network logo and tagline 'improving patient outcomes'. The main title is 'Healthcare Transitions and Coordination: Early Readmission, Effectiveness, Economics'. Below the title is the subtitle 'Part 1: Transitions in Patient Care'. A portrait of Mary D. Naylor, PhD, FAAN, RN is shown on the right side of the slide. Below the portrait is the text: 'Mary D. Naylor, PhD, FAAN, RN, Marian S. Ware Professor in Gerontology and Director of the NewCourtland Center for Transitions and Health, University of Pennsylvania School of Nursing'. The bottom left corner features the logo for the School of Nursing, UT Health Science Center, and the Academic Center for Evidence-Based Practice.