Harnessing the Power of Technology to Support Care Transitions

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Why Is This Important?

- About 1 in 5 Medicare beneficiaries discharged from the hospital are readmitted within 30 days
  - 34% are rehospitalized within 90 days
  - Up to 76% of these readmissions may be preventable

- Unwanted readmissions have high costs
  - financially for Medicare
  - physically and emotionally for people with Medicare and their families.

(MedPAC, 2007)
Defining care transitions

• “The movement patients make between health care practitioners and settings as their condition and care needs change during the course of a chronic or acute illness”
  (http://www.caretransitions.org/definitions.asp)

• Transitions occur:
  – between settings (e.g., from hospital or skilled nursing facility to home)
  – between levels of care (e.g., from a surgical unit to an intensive care unit within a hospital)
  – From one form of payment to another (e.g., from private pay to Medicaid waiver)
When things go wrong

- Poor care transitions can result from:
  - Inadequate medication reconciliation/management
  - Gaps in follow-up care
  - A lack of communication between providers
  - Inadequate patient/caregiver education
  - Unmet community needs

Many of these can be facilitated by technology
The Affordable Care Act

Better Health for the Population

Better Care for Individuals

Lower Cost Through Improvement
Section 3025: Hospital Readmission Reduction Program

• Authorizes the Secretary to reduce Medicare payments to hospitals with higher-than-expected readmission rates (beginning in FY 13)
  – 1 percent in 2013
  – 2 percent in 2014
  – 3 percent in 2015
Section 3026: Community-based Care Transition Program (CCTP)

• Provides funding to test models for improving care transitions for high risk Medicare beneficiaries.

• Part of larger Partnership for Patients initiative through the U.S. Department of Health & Human Services

  – **Keep patients from getting injured or sicker.** By the end of 2013, preventable hospital-acquired conditions would decrease by 40% compared to 2010.

  – **Help patients heal without complication.** By the end of 2013, preventable complications during a transition from one care setting to another would be decreased so that all hospital readmissions would be reduced by 20% compared to 2010.
CCTP Goals

- Improve transitions of Medicare fee-for-service beneficiaries from the inpatient hospital setting to home or other care settings
- Improve quality of care
- Reduce readmissions for high risk beneficiaries
- Document measurable savings to the Medicare program and expand program beyond the initial 5 years
CCTP Sites

• CCTP Participants (11/29/11 announcement)
• CCTP Participants (3/14/12 announcement)
Other public initiatives targeting care transitions

• AoA Aging & Disability Resource Centers Evidence-based Care Transitions Program
• Medicare Quality Improvement Organization 10th Scope of Work
• CMS Medicare-Medicaid Coordination Office/Innovation Center Initiative to Reduce Avoidable Hospitalizations among Nursing Facility Residents
• Health Information Technology for Economic and Clinical Health (HITECH) Act *(Beacon Communities, Health Information Exchanges, Meaningful Use)*
• ...and more!
We need your help

• Tremendous room for public-private partnership when it comes to care transitions and technology
• Innovations and solutions should be driven by the needs of the field (consumers, providers, systems)
Technologies for Improving Post-Acute Care Transitions (“Tech4Impact”)

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American Society on Aging
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Today’s Topics

- Background on Center for Technology and Aging (CTA) and CTA Tech Diffusion Grants Programs
- Discuss CTA’s Tech4Impact Grant Program
  - Technologies for Improving Post-Acute Care Transitions (“Tech4Impact”)
  - Results from CTA Tech4Impact Grantees
Established in 2009 with funding from The SCAN Foundation, located at the Public Health Institute

Mission: Accelerate diffusion of technologies that help older adults lead healthier lives and maintain independence

Independent, non-profit resource center on issues related to diffusion of technology for older adults

Technology Diffusion Grants Programs, e.g.:

- Tech4Impact Diffusion Grants Program
Purpose of Tech4Impact
(Technologies for Improving Post-Acute Care Transitions)
Diffusion Grants Program

- Advance the use of technologies that improve care transitions and reduce avoidable hospitalizations
  - Better care, better health, lower costs
  - Home and community based support
  - Better care coordination, patient engagement
  - Information and communications technologies

- Avoidable Readmissions:
  - 1 in 5 patients readmitted w/in 30 days of discharge
  - 76% of readmissions are preventable
  - $25 billion savings potential
Tech4Impact Grant Awards

- RFP released September 2010
- January 2011-March 2012 grant period
- $500,000 in grant funds
- Tech4Impact designed to complement an AoA/CMS initiative to advance care transitions among ADRCs (Aging and Disability Resource Centers)
- Grant was limited to State Units on Aging
  - Eligible states had preexisting care transitions collaborations between hospitals and ADRCs
- 16 States eligible → 12 applied → 5 selected
Tech4Impact Grant Awards

States

- California
- Indiana
- Rhode Island
- Texas
- Washington

Technology Approach

1. Personal Health Records & Info
2. Care Management Software

For more information about the 5 grant awards, see:
Tech4Impact Example: Texas Program

Innovation: Care Transitions Coaching Tool
- A Database System for Delivery of the Care Transitions Intervention® (CTI)

Need: To help CTI coaches plan and manage care
- CTI is a widely used to reduce hospital readmits by improving care transitions from hospital to home (and other settings)
- Coaches support many patients in many locations (home, hospital, doctor office). IT tool needed.

Results:
- Use of the tool saved time and money, e.g., at one site the tool saved 20 hours/week of coach time and 19 hours/week of supervisor time, which translated into a savings of approximately $969/week in personnel costs
- Shared with 35 sites in 21 states
Tech4Impact Example: Washington

Innovation: Personal Health Record (PHR)

- Supporting Care Transitions through Expanded Use of an Electronic PHR: the Shared Care Plan Health Record Bank

Need: To improve patient/caregiver engagement and increase informed decision making

- CTI is widely used . . . One of 4 pillars: “patient understands and manages a PHR”
- Paper based PHR vs. electronic

Results:

- 47 CTI patients agreed to assistance with PHR (paper or electronic)
- 1 CTI patient successfully created an ePHR
- Survey finding: positive about paper PHR, not so about electronic.
- ePHR feedback: “Found tool confusing, no access to computer, concern for privacy, do not understand computers”
Other CTA Diffusion Grants Programs

- Four in various stages of development
  1. Medication Optimization Technologies
  2. Remote Patient Monitoring Technologies
  3. Technologies for Improving Post-Acute Care
  4. Mobile Health Technologies
- 22 grantees: “learning laboratories”
- Lessons Learned, Best Practices, Tools
- Foundation for CTA mission and role
  - Collaborate, Demonstrate, Educate, Advocate
ADOPT for Aging Services
Accelerating Diffusion Of Proven Technologies

- Design User-Friendly, Relevant Technology
- Establish Technology Value
- Create Business Model
- Promote Technology
- Form Partnerships
- Identify Technology Champions
- Coach Users
- Context
- Older Adults
- Collaborators
- Improved Outcomes

To Learn More. . .

- [www.techandaging.org](http://www.techandaging.org)
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Putting the IT in TransITions: An Update from the Office of the National Coordinator for Health IT

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March 31, 2012
In Summary ... the HITECH Story

**Why** does America need to modernize using Health IT?

- Enable providers to securely and efficiently exchange patient health information.
- Give providers the right information, at the right time to offer their patients the right care.
- Give consumers tools to know their health information so that they can improve their health.
- Foundational to building a truly 21st century health system where we pay for the right care, not just more care.

**What** is America doing to modernize its Healthcare System through Health IT?

- Promoting Standards & Interoperability (HIE)
- Stimulation Innovation (Beacon, Sharp)
- Helping Providers Adopt (REC, Workforce)

**How** is ONC helping America modernize?

- Showing Outcomes
- Engaging Consumers
- Promoting Exchange
- Keeping Patients Safe
- Protecting Privacy and Security
- Accelerating Meaningful Use

2012
### Better healthcare
- Improving patients’ experience of care within the Institute of Medicine’s 6 domains of quality: Safety, Effectiveness, Patient-Centeredness, Timeliness, Efficiency, and Equity.

### Better health
- Keeping patients well so they can do what they want to do. Increasing the overall health of populations: address behavioral risk factors; focus on preventive care.

### Reduced costs
- Lowering the total cost of care while improving quality, resulting in reduced monthly expenditures for Medicare, Medicaid, and CHIP beneficiaries.

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**Health Information Technology**
– 52% percent of office-based physicians intend to take advantage of EHR incentives

– The percentage of primary care providers who have adopted EHRs in their practice has doubled from 20% to 40% between 2009 to 2011

– ONC’s Regional Extension Centers (RECs) have signed up more than 100,000 primary care providers

– This means that roughly one third of the nation’s primary care providers have committed to meaningfully using EHRs by partnering with their local REC. Momentum is building!

– Hospital adoption has more than doubled since 2009, increasing from 16% to 35%

– Most (85%) of hospitals intend to attest to Meaningful Use by 2015
Key points – in one year, from 2010 to 2011:
• Hospitals increased their use of Basic EHRs from 19% to 35% (84%)
• Hospitals doubled their use of Comprehensive EHRs from 4% to 9% (125%)
Exchange is Turning the Corner in 2012

– Little exchange is occurring, but early trends are promising

  • 34% of hospitals are electronically exchanging lab results with ambulatory providers outside their system; 19% are exchanging clinical care records
  • E-prescribing rates nearly doubled in the last year
  • Challenges: Cost of exchange high, time to develop is long, payment models will reward exchange (but are still forthcoming)
  • LTPAC focus is beginning to take hold (ONC Challenge grantees, LTPAC Collaborative, AoA grantees, foundation investments, GIH)

– Patient care is at stake

  • 1 in 5 discharged Medicare enrollees are readmitted within a month
  • More than 40 percent of outpatient visits involve a transition
  • Referring physicians receive feedback from consultants 55 percent of time
  • Physicians make purpose of referral clear 74 percent of time
When will we see this Curve for Transition of Care Summaries or Lab Exchange?
Hospital Exchange Activity with Ambulatory Care Providers

Proportion of U.S. Hospitals

- **Patient Demographics**: 51.9% (Within system 2010), 28.5% (Outside system 2010)
- **Radiology Reports**: 53.1% (Within system 2010), 33.7% (Outside system 2010)
- **Lab Results**: 54.0% (Within system 2010), 34.3% (Outside system 2010)
- **Medication History**: 40.7% (Within system 2010), 18.0% (Outside system 2010)
- **Clinical Care Records**: 42.0% (Within system 2010), 19.4% (Outside system 2010)
## Receipt of Discharge Information by PCPs

### Time Frame (n=1,442)

- Less than 48 Hours: 27%
- 2 to 4 Days: 29%
- 5 to 14 Days: 26%
- 15 to 30 Days: 6%
- More than 30 Days: 1%
- Rarely/Never Receive Adequate Support: 6%
- Not Sure/Decline to Answer: 4%

### Delivery Method (n=1,290)*

- Fax: 62%
- Mail: 30%
- Email: 8%
- Remote Access: 15%
- Other: 11%


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19 percent of hospitals are electronically exchanging clinical care records with ambulatory providers outside system (2010)
Innovators are Talking about Transitions of Care

Last year: Safe Transitions from Hospital to Home
Update: Axial Exchange, Inc. announced that its award-winning care transition products are now available for cloud deployment. The private cloud infrastructure scales to thousands of hospitals and clinics and millions of patients, and already has been validated by multi-hospital health systems as well as Emergency Medical Service (EMS) providers. By embracing a private cloud infrastructure, Axial Exchange is helping providers to build a bridge toward the future of health IT where care transition data is simple, interactive, readily accessed, and secure.

This year: Discharge follow-up appointment challenge (closes April 30)
“Simple IT-enabled processes and tools can help make transitions easier and safer for providers, patients and care givers by addressing the gaps in and burdens of coordination to effect and better care, better health and lower cost. Scheduling follow-up appointments and post-discharge testing before leaving the hospital helps ensure safer and more effective transitions. Unfortunately, most patients across the country continue to leave the hospital without confirmed appointments and many providers remain frustrated by a highly manual and unreliable system.”

This year: Connected Care Challenge (closed)

Connected Care Challenge: Providing awards totaling $250,000 to inspire and nurture the best solutions to improve patient transitions from hospital to home (closed)
Beacon Community Aims & The Transitions Stories

17 grantees each funded ~$12-15M over 3 yrs to:

**Build and strengthen** health IT infrastructure and exchange capabilities - positioning each community to pursue a new level of sustainable health care quality and efficiency over the coming years.

**Improve** cost, quality, and population health - *translating investments in health IT in the short run to measureable improvements in the 3-part aim.*

**Test innovative approaches** to performance measurement, technology integration, and care delivery - *accelerating evidence generation for new approaches.*
17 Beacon Communities

- Beacon Community of Inland Northwest
  Spokane, WA
- Southeastern Minnesota
  Beacon Community
  Rochester, MN
- Central Indiana
  Beacon Community
  Indianapolis, IN
- Colorado Beacon
  Community
  Grand Junction, CO
- Great Tulsa Health Access
  Network Beacon
  Community
  Tulsa, OK
- Hawaii County Beacon
  Community
  Hilo, HI
- Crescent City Beacon Community
  New Orleans, LA
- Western New York
  Beacon Community
  Buffalo, NY
- Southeast Michigan
  Beacon Community
  Detroit, MI
- Rhode Island Beacon
  Community
  Providence, RI
- Keystone Beacon
  Community
  Danville, PA
- Greater Cincinnati
  Beacon Community
  Cincinnati, OH
- Southern Piedmont
  Beacon Community
  Concord, NC
- Delta BLUES Beacon
  Community
  Stoneville, MS
- Utah Beacon
  Community
  Salt Lake City, UT
- San Diego Beacon
  Community
  San Diego, CA
- Bangor Beacon
  Community
  Brewer, ME
- Central Indiana
  Beacon Community
  Indianapolis, IN

Build and Strengthen: More Exchange Partnerships = Better (and Fewer) Transitions

Build

Hospitals
Lab Companies
Physician Practices
Pharmacies

Strengthen

Home health
Nursing Homes
Public Health Agencies
FQHCs
Patients and Caregivers
EMS
Schools

Build and Strengthen: More Exchange Partnerships = Better (and Fewer) Transitions

Putting the I in Health IT
www.HealthIT.gov
**Improve: Unleashing actionable data at the point of care**

EHR is data used to:
- populate quality dashboards...
- inform care providers of individual patient needs...
- and support IT-enabled care management (i.e., CDS, risk stratification, med mgmt)

which help leadership identify improvement needs and...

required clinical transformation...

Goal: **to achieve better health, better care, at lower cost.**
Improve: Early Results

Keystone Beacon
All-cause 30-day Readmissions for CHF Patients

Keystone Beacon Community
All-cause 30-day Readmissions for COPD Patients

Lower costs

- Avoidable readmissions by condition

Note: Catchment area data from hospital billings for all patients eligible for care management services at Beacon-participating hospitals. Intervention group data for patients receiving care management services through Beacon; quarterly admissions for CHF and COPD ranges from 143-315.

Note: Catchment area data from hospital billings for all patients eligible for care management services at Beacon-participating hospitals. Intervention group data for patients receiving care management services through Beacon; quarterly admissions for COPD patients in intervention group range from 222-302.
Beacon Innovation Headlines – Test Beds for the Most Promising New Technologies

“Futuristic Clinical Decision Support Tool Catches On” Information Week, January 2012

“Oklahoma Beacon Community Picks Archimedes for Decision Support” CMIO, January 2012

“The Southwest Ohio Care Transitions Collaborative awarded funding in first round CMMI 3026 Community-Based Care Transitions funding. HealthBridge named as key partner. November 2011

“Nursing Home Data Exchange Puzzle Solved: Keystone Beacon Community Finds a Way to Extract Nursing Home and Home Care Data from Medicare Forms” Informationweek, January 2012

“Telemedicine Pilot Could be National Model for Diabetes Management” FierceHealthcare September 2011

“San Diego Beacon Project Delivers Real-Time Patient Data” Journal of Emergency Medical Services, January 2012

“Indiana HIE, AT&T Partnership Could Serve as National Model” FierceHealthIT, February 2012
Where do we go from here?
Let’s go back to October

Putting the IT in TransITions


Media Partners: Health Affairs and Health 2.0
Washington DC and Online (#ITrans)
October 14, 2011 8am-3pm EST
Kaiser Permanente Center for Total Health
TransITions Agenda

• Remarkable convergence from stakeholders around top priorities for an IT-Transitions agenda
  – Vision of a **plan of care**, that spans time and setting, incorporates social and medical factors, reflects patient goals and is accessible to all care team members
  – Effective and efficient **medication reconciliation** continues to evade even the most sophisticated providers
  – **IT-enabled feedback loops** are underdeveloped, and are critical to ensure safe care and self management
  – **Shifting from the hospital centric model** is the most important enabler for spread and uptake

Of the **priority problem statements** that emerged from the break out sessions, the **three most important are**:

- “There is no care plan...” 56.4%
- “...provider ability to inform/see plan...” 51.5%
- “...effective feedback loops” 36.8%

Of the **innovation opportunities** that would address the most difficult challenges in care transitions discussed in the break out sessions, the **THREE that will likely yield the most impact are**:

- “Feedback loops...” 69.3%
- “...merged medication record...” 47.5%
- “...optimization of existing technologies” 34.7%
Thank you!

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