Listen to Your Patients
They Are Telling You How to Improve the Quality of their Transitional Care

Eric A. Coleman, MD, MPH
Professor of Medicine
Director, Care Transitions Program
University of Colorado Health Sciences Center
www.caretransitions.org
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Session Objectives

- Understand how common care transitions are
- Recognize the serious quality and safety problems
- Articulate the challenges to improving quality
- Become aware of promising new innovations
- Gain insight into how to leverage national initiatives
Inadequately prepared for next setting
Conflicting advice for illness management
Inability to reach the right practitioner
Repeatedly completing tasks left undone
Four Key Domains

- Information transfer
- Patient and caregiver preparation
- Self-management support
- Empowerment to assert preferences

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Information Transfer

“They overmedicated me like you wouldn’t believe [in the NH]. All they had to do was make one call to my primary care doctor”

- Poor inter-professional and inter-institutional communication
“The doctor did not know that there was no way my wife could take care of me”

- Family and caregiver needs often overlooked or expectations for care provision unrealistic
Self-Management

“A lot of times the questions don’t come until you get home”

- Often did not know the questions to ask or the person to direct them to
Empowerment

“You know, we’re responsible for our own healthcare and it’s our fault if we fall through the cracks”

- Need for an advocate
Care Transitions Are Common…
Figure 1. HEALTH CARE TRANSITION PATTERNS AFTER DISCHARGE FROM HOSPITAL

Diagram showing the flow of healthcare transitions post-hospital discharge.
Evidence of Serious Safety Problems
Medication Errors
Medication Errors

- In 46% of hospitalized patients, 1+ regularly taken medications are omitted without explanation.

Potential for harm estimated for 39% cases

*Cornish Arch Int Med 2005 (165) 424-9*

- Transfers NH=> hospital, average 3 medications changes; 20% lead to ADE

*Boockvar Arch Int Med 2004 (164) 545-50*
Adverse Events after Discharge

- Defined as an injury resulting from medical management rather than underlying disease
- 19% had 1+ adverse events within 3 weeks
- Many were preventable
- Adverse drug events most common (66%)

Information Transfer

- Discharge/transfer information inadequate or not conveyed to next setting (*TNTC*)
- Hospital => NH Transfer, documentation was not legible 28% of time (Foley et al.)
10. Diet: [ ] Regular [ ] Other
11. Activity: [ ] No Restrictions [ ] As Tolerated [ ] Other: No activity limitation

<table>
<thead>
<tr>
<th>Medication</th>
<th>Dose</th>
<th>Instructions (Do not use Med. Abbrev.)</th>
<th>Times</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Tylox</td>
<td>1-2 tabs q6h prn</td>
<td>1-2 tabs q6h prn</td>
<td>Pain</td>
<td></td>
</tr>
<tr>
<td>2. Colace</td>
<td>100 mg 1 tab 2x PM</td>
<td>1 tab 2x PM</td>
<td>Stool Softener</td>
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<td>3.</td>
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Additional instructions per physician (i.e., home oxygen, dressing changes, etc.):
- Foley leg bag care
- JP line
- Only go shower (no baths, soak, soak), change dress once per day

Additional instructions per nurse:

**Sign here if you understand the above instructions and have been given a copy of these instructions:**

Patient's Significant Other's Signature:

**Sign here if the above instructions are correct:**

Patient's Signature:

**Please bring this form with you to your appointments:**

Chart Copy = White  Patient Copy = Yellow  Agency Copy = Pink

NR28. 11H74 Fp. (8999)
Ultimately Higher Health Care Costs

- Inefficiencies/duplication of services
- Greater hospital and ED use
- Litigation/negative press
Challenges to Improving Quality
Challenges Occur at Multiple Levels

- Patient
- Practitioner
- Health care institution
- Information technology
- Payment
- Performance measurement

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Patient Level

- Institutions fosters dependency and complacency
- This changes **abruptly** on transfer when expected to assume major role in self-care
- Rising prevalence of cognitive impairment intensifies this challenge
P inaccurate.

SORRY. THIS ISN'T MY TABLE.
Practitioner Level

- Rare for one clinician to orchestrate care across multiple settings
- Many practitioners have never practiced in settings to which they transfer patients
Information Technology

- Health Information Technology infrequently extends from hospital or clinic into post-acute care settings and long-term care settings
- Widespread interoperability worthy goal but remains on the horizon
Payment

- Perceived as providing little financial incentive for collaboration across settings
- Most prevailing payment approaches do not exact financial penalties for poorly executed transfers
Performance Measurement

- Lack of quality measures for transitional care is a significant barrier to quality improvement
- Majority of hospitals receive JCAHO’s highest rating for continuity and discharge measures
The “Silent” Care Coordinators

- By default, older patients and family caregivers function as their own care coordinators.
- Model explicitly recognizes their role as integral members of the interdisciplinary team.
The Care Transitions Intervention:

Would an intervention designed to encourage older patients and their caregivers to assert a more active role during care transitions reduce rates of re-hospitalization?
Mapping the Care Transitions Intervention to the CCM

Community Resources and Policies
Linkages to Relevant Agencies

Health System Organization of Health Care
Self-Management Support
Decision Support
Delivery System Design
Clinical Information Systems

Four Pillars
Home visits; Telephone Follow-up
Personal Health Record

Informed, Activated Patient
Empowered patients facilitate their care transitions

Prepared, Proactive Practice Team
Engaged team; information and goals available across care sites

Productive Interactions

Functional and Clinical Outcomes
Improved self-efficacy with care transitions
Reduced re-hospitalization and associated costs
Personal goal achievement
Key Elements of Intervention

- “Transition Coach” (Nurse or Nurse Practitioner)
  - Prepares patient for what to expect and to speak up
  - Provides tools (Personal Health Record)
- Follows patient to nursing facility or to the home
  - Reconcile pre- and post-hospital medications
  - Practice or “role-play” next encounter or visit
- Phone calls 2, 7 and 14 days after discharge
  - Single point of contact; reinforce, ensure follow up
**My Medications are:**

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<thead>
<tr>
<th>Medication</th>
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**Reason**

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<tr>
<th>Side Effects</th>
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**Allergies:** _____________________

**Remember**

- To take this Record with you to all of your doctor visits.

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**Personal Health Record**

The Personal Health Record of: Josephine Patient

**Personal Information:**

- Address:
- Home Phone#:
- Birth Date:
- Patient ID#:
- PCP Name:
- Advanced Directives?:

**Hospitalization Information:**

- Admitted: __/__/__
- Discharged: __/__/__
- Reason for Hospitalization: 

**Caregiver Information:**

- Name:
- Phone #:
- Relation to Patient:

**Personal History**

Please check any illnesses or health problems listed below that you have ever experienced.

- Arthritis
- Abnormal Heart Rhythm
- Cancer
- Diabetes
- Hardening of the Arteries
- Heart Disease
- Heart Failure
- High Blood Pressure
- Hip Fracture
- Lung Disease
- Medical/Surgical Back conditions
- Pneumonia
- Stroke
- Other: ____________________

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**Before I leave the hospital…**

- I have the instructions I need to keep my health condition from becoming worse.
- I know what symptoms to watch out for.
- I know the name and phone number of who to call if I see any of these symptoms.
- My family or someone close to me knows what I will need once I leave the hospital.
- I know what medications to take, how to take them, and possible side effects.
- I will schedule a follow up appointment with my primary care doctor.
- I will have a clear and complete copy of my discharge instructions.

**After I leave the hospital…**

1. I will write down questions I have about my condition.
2. I will take all bottles of medicine I am using to each doctor visit.
3. I will call ______________ immediately at (XXX) XXX-XXX if I experience any of the following:
   - Temperature above 101° F
   - Uncontrollable pain
   - Increased confusion
   - Increased redness or drainage around wound
   - Questions about which medications to take
<table>
<thead>
<tr>
<th>Variable</th>
<th>Intervention</th>
<th>Control</th>
<th>P-Value</th>
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</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td>76.0</td>
<td>76.4</td>
<td>0.52</td>
</tr>
<tr>
<td>Female (%)</td>
<td>48.2</td>
<td>52.3</td>
<td>0.26</td>
</tr>
<tr>
<td>Married (%)</td>
<td>58.2</td>
<td>53.8</td>
<td>0.23</td>
</tr>
<tr>
<td>Lives alone (%)</td>
<td>30.9</td>
<td>30.8</td>
<td>0.99</td>
</tr>
<tr>
<td>Sad or Blue (%)</td>
<td>30.3</td>
<td>26.4</td>
<td>0.24</td>
</tr>
<tr>
<td>CHF (%)</td>
<td>16.5</td>
<td>12.9</td>
<td>0.17</td>
</tr>
<tr>
<td>COPD (%)</td>
<td>17.0</td>
<td>18.5</td>
<td>0.61</td>
</tr>
<tr>
<td>Arrhythmia (%)</td>
<td>12.8</td>
<td>19.0</td>
<td>0.02</td>
</tr>
<tr>
<td>CAD (%)</td>
<td>14.1</td>
<td>13.5</td>
<td>0.81</td>
</tr>
<tr>
<td>Chronic Disease Score</td>
<td>6.8</td>
<td>7.1</td>
<td>0.31</td>
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</table>

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<table>
<thead>
<tr>
<th>Variable</th>
<th>Intervention</th>
<th>Control</th>
<th>P-Value</th>
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</thead>
<tbody>
<tr>
<td>Prior Hosp (%)</td>
<td>29.3</td>
<td>26.1</td>
<td>0.36</td>
</tr>
<tr>
<td>1+ past 6 mo</td>
<td></td>
<td></td>
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<tr>
<td>Prior ED (%)</td>
<td>40.3</td>
<td>38.9</td>
<td>0.69</td>
</tr>
<tr>
<td>1+ past 6 mo</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variable</td>
<td>Intervention</td>
<td>Control</td>
<td>Adjusted P-value</td>
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<td>------------------</td>
</tr>
<tr>
<td>Re-hospitalized w/in 30 days</td>
<td>8 %</td>
<td>12 %</td>
<td>0.048</td>
</tr>
<tr>
<td>Re-hospitalized w/in 90 days</td>
<td>17 %</td>
<td>23 %</td>
<td>0.04</td>
</tr>
<tr>
<td>Re-hospitalized w/in 180 days</td>
<td>26 %</td>
<td>31 %</td>
<td>0.28</td>
</tr>
<tr>
<td>Variable</td>
<td>Intervention</td>
<td>Control</td>
<td>Adjusted P-value</td>
</tr>
<tr>
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<td>---------</td>
<td>------------------</td>
</tr>
<tr>
<td>Readmit for Same Dx w/in 30 days</td>
<td>3 %</td>
<td>5 %</td>
<td>0.18</td>
</tr>
<tr>
<td>Readmit for Same Dx w/in 90 days</td>
<td>5 %</td>
<td>10 %</td>
<td>0.04</td>
</tr>
<tr>
<td>Readmit for Same Dx w/in 180 days</td>
<td>9 %</td>
<td>14 %</td>
<td>0.046</td>
</tr>
</tbody>
</table>
Anticipated Cost Savings

For 350 chronically ill older adults with an initial hospitalization, anticipated costs savings over 12 months:

US$ 295,594
Goal Attainment

“What is one personal goal that is important for you to achieve one month after you get home?”
Findings

Patients who worked with the Transition Coach were more likely to achieve their goals around symptom control and functional status.
Dissemination Partners

- California Health Care Foundation
- Community Health Foundation New York
- United Health Care National Roll Out
- CMS Special Study with Colorado Foundation for Medical Care (CFMC)
- Health Dialog Medicare Health Support 721
- Rosalyn Carter Caregiving Institute

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The lack of quality measures for care transitions remains a significant barrier to quality improvement.
Brief History of the Care Transitions Measure (CTM)

- Qualitative studies shaped items
- Items discriminate among facilities
- CTM endorsed by NQF in May 2006
CTM Items

- The hospital staff took my preferences and those of my family or caregiver into account in deciding what my health care needs would be when I left the hospital.
- When I left the hospital, I had a good understanding of the things I was responsible for in managing my health.
- When I left the hospital, I clearly understood the purpose for taking each of my medications.
## Relationship Between CTM scores and Return to the ED

<table>
<thead>
<tr>
<th></th>
<th>F statistic</th>
<th>Significance</th>
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</thead>
<tbody>
<tr>
<td><strong>Model</strong></td>
<td>3.040</td>
<td>.013</td>
</tr>
<tr>
<td><strong>Intercept</strong></td>
<td>.166</td>
<td>.685</td>
</tr>
<tr>
<td><strong>Co-morbidity Score (Deyo)</strong></td>
<td>1.486</td>
<td>.225</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td>.045</td>
<td>.833</td>
</tr>
<tr>
<td><strong>CTM Score</strong></td>
<td>4.679</td>
<td><strong>.004</strong></td>
</tr>
</tbody>
</table>

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Demand for the CTM

- Over 2400 requests for permission to use from 15 Countries
- Adopted by WHO multi-national (Europe) hospital quality collaborative
- Highmark Blue Cross Blue Shield P4P
- Maine has passed statewide legislation that requires public reporting of CTM scores
Medication Reconciliation

- Avoid garbage in garbage out scenario
- Strive for correct info in, correct info out
Introducing the Medication Discrepancy Tool (MDT)

- Patient-centered
- Applicable across a variety of health settings
- Identify patient- and system-level factors
MEDICATION DISCREPANCY TOOL (MDT)

MDT is designed to facilitate reconciliation of medication regimen across settings and prescribers

Medication Discrepancy Event Description: Complete one form for each discrepancy

✓ Causes and Contributing Factors :: Check all that apply

Patient Level

1. □ Adverse Drug Reaction or side effects
2. □ Intolerance
3. □ Didn’t fill prescription
4. □ Didn’t need prescription
5. □ Money/financial barriers
6. □ Intentional non-adherence
   "I was told to take this but I choose not to."
7. □ Non-intentional non-adherence (e.g., knowledge deficit)
   "I don’t understand how to take this medication."
8. □ Performance deficit
   "Maybe someone showed me, but I can’t demonstrate to you that I can."

System Level

9. □ Prescribed with known allergies/intolerances
10. □ Conflicting information from different informational sources.
   *For example, discharge instructions indicate one thing and pill bottle says another.*
11. □ Confusion between brand & generic names
12. □ Discharge instructions incomplete/inaccurate/illegal
    *Either the patient cannot make out the hand-writing or the information is not written in lay terms.*
   "Taking multiple drugs with the same action without any rationale."
14. □ Incorrect dosage
15. □ Incorrect quantity
16. □ Incorrect label
17. □ Cognitive impairment not recognized
18. □ No caregivers/need for assistance not recognized
19. □ Sight/dexterity limitations not recognized

✓ Resolution :: check all that apply

- □ Advised to stop taking/start taking/change administration of medications
- □ Discussed potential benefits and harm that may result from non-adherence
- □ Encouraged patient to call PCP/specialist about problem
- □ Encouraged patient to schedule an appointment with PCP/specialist to discuss problem at next visit
- □ Encouraged patient to talk to pharmacist about problem
- □ Addressed performance/knowledge deficit
- □ Provided resource information to facilitate adherence
- □ Other ____________________________
# Patient-Level Contributing Factors

<table>
<thead>
<tr>
<th>Factor</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Non-intentional non-adherence</td>
<td>34%</td>
</tr>
<tr>
<td>Money/financial barriers</td>
<td>6%</td>
</tr>
<tr>
<td>Intentional non-adherence</td>
<td>5%</td>
</tr>
<tr>
<td>Didn’t fill prescription</td>
<td>5%</td>
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<tr>
<td>Other</td>
<td>1%</td>
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<tr>
<td>Subtotal</td>
<td>51%</td>
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# System-Level Contributing Factors

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<tr>
<th>Factor</th>
<th>Percentage</th>
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<tr>
<td>D/C instructions incomplete/illegible</td>
<td>16%</td>
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<tr>
<td>Conflicting info from different sources</td>
<td>15%</td>
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<tr>
<td>Duplicative prescribing</td>
<td>8%</td>
</tr>
<tr>
<td>Incorrect label</td>
<td>4%</td>
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<tr>
<td>Other</td>
<td>7%</td>
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<tr>
<td><strong>Subtotal</strong></td>
<td><strong>49%</strong></td>
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# 30-Day Hospital Re-Admit Rate

<table>
<thead>
<tr>
<th>Patients with identified med discrepancies</th>
<th>14.3%</th>
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<tbody>
<tr>
<td>Patients with <strong>no</strong> identified med discrepancies</td>
<td>6.1%</td>
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P=0.041
Conclusion

- New insights into types of medication problems that occur during transitions
- Important implications for patient safety, quality of care, and cost containment
- National patient safety efforts should extend to patients receiving care across settings
Winds of Change:
National Transitional Care Initiatives
Confluence of National Attention
Institute of Medicine

- 2005 Report “Accelerating Improvement”
- Identified Transitional Care as one of three priority areas for performance measurement
National Quality Forum

- Has focused on care coordination measures:
  - Out of the hospital
  - In the ambulatory arena
- Has endorsed hospital discharge safe practices
- Next: measure quality over episodes of care
Medicare Payment Advisory Commission (MedPAC)

2-step policy to incentivize reduced readmissions

1) Public disclosure of hospital 30-day (risk-adjusted) readmission rates.
2) Change in payment -- hospitals with higher readmission rates receive lower payments.

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American Board of Internal Medicine Foundation

- Launched a new initiative in early 2007 entitled, “Stepping Up To The Plate”
- Aims to engage health care professionals and patients in practical approaches to improve care
- Practice Improvement Modules developed
American College of Physicians
Society for General Internal Medicine
Society for Hospital Medicine

- Consensus conference held in July 2007
- Statement of recommended standards of practice
- Focus on accountability
The Joint Commission

- Handoff Communication to next care team
- Tracer Methodology extends to discharge
- Speak Up Campaign for consumers
- Electronic Health Record Standards to promote interoperability
Continuity Assessment Record and Evaluation (CARE)

- CMS tasked to create under Deficit Reduction Act
- Initiate upon hospital discharge to post-acute care
- Single comprehensive assessment tool that follows the patient across post-acute care settings
Quality Improvement Organizations

- 9th Statement of Work will include explicit focus on care coordination
- The 9th SoW will likely encourage community level cross setting collaboration
National Transitions Of Care Coalition (NTOCC)

- NTOCC was formed to bring together stakeholders to improve care coordination
- www.NTOCC.org includes resources, tools, measures, bank of presentation slides, & more
Society for Hospital Medicine

- Grant from John A. Hartford Foundation to develop a discharge toolkit
- Scripts for getting buy-in from leadership (the “C-Suite”—CEO, CFO, CMO, CNO, etc)
- Will recruit 100 hospitals to use toolkit and evaluate effectiveness
Institute for Healthcare Improvement

- Toolkit for ideal transition home for patients hospitalized with heart failure
- Available on website
www.caretransitions.org

- Care Transitions Measure (CTM)
- Care Transitions Intervention
  - Manual
  - Video clips/ Order DVD
  - Tools for patients and caregivers
- Medication Discrepancy Tool (MDT)
- Much much more…. 

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How to Pay for the Transition Coach?

- Under capitation, incentives are aligned and Transition Coach pays for her/himself.
- Under DRG payment, hospitals may invest: 1) to improve JCAHO accreditation scores 2) to better transition “complex older patients (AKA “DRG Losers”)” making more capacity for higher revenue patients.
- Clinics may invest to improve efficiency.
- In some states, APN Transition Coaches can bill for their visits.