Transitional Care and Rehospitalization: Challenge and Opportunity

Stephen F. Jencks, M.D., M.P.H.
Consultant in Healthcare Safety and Quality
410-708-1134  443-801-8348
steve.jencks@comcast.net

Rehospitalization is the symptom

• Many rehospitalizations result from care system failures in the transition from hospital to the next source of care.
• These care failures allow, and sometimes cause, the clinical deterioration that leads to rehospitalization.
• The failures reflect a lethal system design flaw.
• Our aim is to fix the system to prevent these care failures so the patient does not deteriorate and need rehospitalization.
Rehospitalization as a perfect crisis

• Safety
• Cost
• Patient experience
• Urgency (trust fund bankrupt 2017)
• Growing momentum for change

Safety: A population at high risk

• 19.6% of live Medicare fee-for-service discharges are rehospitalized within 30 days.
• Two-thirds of Medicare fee-for-service medical discharges are rehospitalized or dead within a year.
• Half of surgical discharges are rehospitalized or dead within a year.
Cost

- At 30 days: about $17.4 billion trust fund dollars in 2004.
- Roughly 90% of 30-day rehospitalizations are unplanned and acute and therefore are targets for prevention.
- Achievable savings extremely uncertain, but clinical trials suggest 20-50% preventability.

Patient Experience

- Discharge-related elements get terrible scores on patient surveys.
- These reports do not tell us exactly what happened, but they do tell us what the patient experienced.
Evidence of growing momentum

• 250-400 hospitals engaged in projects to reduce rehospitalization
• 14 communities
• 3 states
• High likelihood of payment changes in Medicare to reward lowering rehospitalization rates.
• Growing recognition that this is not just a Medicare problem.

Rehospitalization as an opportunity

• Fragmentation of care lies behind many failed transitions.
• Improving transitions will necessarily reduce fragmentation.
• If we succeed we have established a precedent for fixing other broken parts of the health care system.
• If we fail, not so good.
Clinical Causes of Rehospitalization

• About 90 percent of all rehospitalizations seem to
  – result from clinical deterioration,
  – be related to the index hospitalization, and
  – not be part of a treatment plan.

• 70 percent of post-surgical hospitalizations are for medical reasons – largely conditions like pneumonia, heart failure, and gastrointestinal that cause most hospitalizations in the elderly.
Patterns of Rehospitalization for Different Causes

- ALL REHS
- PNEUMONIA
- RENAL FAILURE

Days after index discharge vs. percent of total 90-day rehospitalizations.
Patterns of Rehospitalization for Different Causes

PERCENT OF TOTAL 90-DAY REHOSPITALIZATIONS

DAYS AFTER INDEX DISCHARGE

ALL REHS
PNEUMONIA
RENAL FAILURE
CHEMOTHERAPY
PLACE STENT

Measurement
Issues for Measurement

• What are the purposes of measurement?
• What time window?
• What risk adjustment?
• What processes of care do we measure?
• What “balancing” measures may be useful?

Purposes and methods

• Improvement: raw rates are probably sufficient except for selecting benchmark systems.
• Public information: risk adjustment is useful.
• Payment: risk adjustment is very important.
15- v. 30-Day Rehospitalization Rates

Risk Adjustment

- Most risk adjustment systems were built to predict mortality, not rehospitalization.
- Adjustment using DRGs is a relatively powerful predictor variable for the hospital-level rehospitalization \((R^2=0.27)\) rate. However:
  - The correlation of adjusted and unadjusted rates is >0.95.
  - Evidence and logic suggest that a large part of case mix variation is the result of recycling.
Balancing measures

Purpose: measure possible unintended effects
- Observation days
- ED return rate
- 31-35 days rehospitalization rate

What changes in care?
Four Goals:
At discharge:
1. Every patient/family knows what medication to take and can get it.
2. Every patient/family knows the signs of danger and who to call if they occur.
3. Every patient/family has a prompt follow-up appointment and can keep it.
4. Every patient/family understands and can follow diet and activity limitations.

Managing the transition:
A few examples

- Project RED (ReEngineering Discharge) -- Jack
- Transitional Care Model -- Naylor
- Care Transitions Program -- Coleman
- Evercare Model
- Community Care of North Carolina
Processes believed to be effective

- Family involvement
- Coaching/Care Transition Management
- Contact point/follow-up call.
- Follow-up appointments/visits
- Family and patient education with teachback
- Prompt information forwarding
- Medication reconciliation
- Physician outreach
- Nursing home protocols
- Risk screening
- Coordination among sequential providers

### Person-level Predictors of Medicare Rehospitalization

<table>
<thead>
<tr>
<th>Variable</th>
<th>Hazard Ratio (p&gt;0.95 CI)</th>
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<th>Hazard Ratio (p&gt;0.95 CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital Observed/Expected Ratio</td>
<td>1.096-1.098**</td>
<td>ESRD</td>
<td>1.409-1.425*</td>
</tr>
<tr>
<td>National Rehospitalization Rate for DRG</td>
<td>1.267-1.270**</td>
<td>SSI</td>
<td>1.113-1.122*</td>
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<tr>
<td>Previous hospitalizations in last 6 mo</td>
<td></td>
<td>Male</td>
<td>1.053-1.059*</td>
</tr>
<tr>
<td>1</td>
<td>1.374-1.383*</td>
<td>Age 55-64</td>
<td>0.978-0.988*</td>
</tr>
<tr>
<td>2</td>
<td>1.746-1.759*</td>
<td>Age 65-69</td>
<td>0.989-1.009</td>
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<tr>
<td>3 or more</td>
<td>2.495-2.513*</td>
<td>Age 70-74</td>
<td>1.012-1.035*</td>
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<tr>
<td>Stay &gt;2 X expected for DRG</td>
<td>1.261-1.272*</td>
<td>Age 75-79</td>
<td>1.059-1.084*</td>
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<tr>
<td>Stay &lt;0.5 X expected for DRG</td>
<td>0.872-0.877*</td>
<td>Age 80-84</td>
<td>1.089-1.113*</td>
</tr>
<tr>
<td>African-American</td>
<td>1.053-1.061*</td>
<td>Age 85-89</td>
<td>1.111-1.136*</td>
</tr>
<tr>
<td>Disabled</td>
<td>1.119-1.141*</td>
<td>Age &gt;89</td>
<td>1.105-1.131*</td>
</tr>
</tbody>
</table>

Relative risk from proportional hazards model.
Identifying high-risk patients

- History of rehospitalization
- Failed teach-back
- Longer stay than expected
- High-risk conditions
- Poor, disabled, or on dialysis

But the resources used in screening might be better spent on systems change.

Exception: expensive interventions.

Propelling Change
Payment Reform

• Reward low rehospitalization rates or penalize high rates.
• Generally directed at hospitals, but other providers and practitioners are vital partners.
• Medicare is the most likely immediate major change agent, but a number of other payers seem to be considering joining.

Payment Reform – Intended effects

• Incentive:
  – Creates the financial case that hospitals and improvement advocates have said is necessary.
• Message
  – This matters
  – We no longer penalize you for doing it right
  – We reward, or at least prevent penalties, if you succeed
Payment reform – Risks

• Access barriers
  – Diversion of recently-hospitalized patient in the ER into extended ER stays or observation stays.
  – Delays of rehospitalization by physicians called for advice or disposition
  – Damage to safety net providers because the poor are at higher risk.

Some promising strategies to supplement payment reform

• Leadership
• Technical assistance
• Community partnerships
• Measure standardization
• Rapid data availability
• Patient/family empowerment
• Accreditation, licensure, and survey/certification
Community partnerships

• Patients, practitioners, providers, and community social agencies comprise an often-dysfunctional social system.
• Payment reform can make the efforts of post-hospital providers to keep the patient healthy valuable to the hospital.
• The value of coffee, donuts, and the mayor.

How Do We Start?
Acknowledge the problem:

• Rehospitalization is not a data error: it is a danger to patients and to the economic viability of health care.
• Clinical trials suggest that 20%-50% of these rehospitalizations are preventable.
• Most of us have contributed to this problem by letting fee-for-service build silos and by not facing up to the results.
• It is not someone else’s problem: it is ours.

Framing the issue:

• This is an accountable executive decision, whether taken by a CEO or a Board or both.
  – “We’re always told to keep beds filled.”
  – “Our responsibilities end at the sidewalk.”
• Tomorrow. Many approaches work well and waiting for the “best” approach is just procrastination.
• We will need to adjust as we learn. We will monitor process in real time and rehospitalization in near real time.
Cultural Issues in the system

Medication reconciliation and emergency numbers will be easier than information sharing, handoffs, follow-up appointments.
• Are the needs of patients or providers to take priority?
• Are we responsible for adequately educating the patient and the patient’s family.
• Rehospitalization is a symptom of a community problem. Effective transition management is a team sport.

Cultural issues in hospitals

• “We have too many noncompliant patients.”
• “We can’t control what care patients get after they leave.”
• “Nursing homes and home health agencies just send the patient to the emergency room because they don’t want to do the hard work.”

These are issues of knowledge, imagination, and will.
Take home messages

• This is a big, expensive issue.
• There are effective interventions.
• If we do it right we set a precedent for how to fix healthcare.
• Already there is real momentum for change: it is up to us to lead.

Building on strength

• One hospital will focus on heart failure because there is a clinical champion.
• Another will choose medication reconciliation because it is already a priority.
• Another will choose to work with other providers because those providers are ready.
• BUT let the data, not just the strengths, tell you where the opportunities are.
Table Exercise: Setting your priorities for Friday, December 11.

- Groups of 3-5
- Preliminary lists have been distributed.
- Feel free to add items.
- Identify top 3 for your hospital or office (3 minutes).
- Go around the group, each member explaining the reason for 1 choice. Ask each other questions.
- Ponder your priorities throughout the day.