Rehospitalization: From Emerging Problem to National Solution

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A Perfect Crisis

- Safety: 20% at 30 days;
- 2,500,000 a year: 500k – 1,000k preventable
- Cost: $17 billion in Medicare hospital payments
- Patient experience: poor HCAHPS scores
- Healing healthcare: part of the fragmentation that medical home, accountable care organizations, and others are keyed to.
- Roughly equal numbers and costs in non-Medicare
Plan:

• Assume general familiarity with problem. If not, see supplementary slides and NEJM.
• Review sections of recent legislation and the timeline.
• Review competing approaches to counting and measuring rehospitalizations.
• Summarize the potential for a national effort to reduce rehospitalization
Patient Protection and Affordable Care Act (PPACA)

• Sec 3025 payment penalties for excess readmissions.
• Sec 3026 funding for technical assistance
• Sec 3021 Center for Medicare & Medicaid Innovation
• Sec 3015 data collection and public reporting
• Sec 3502 community health teams to support medical home
Penalties for excessive rehospitalizations

- Starting 10/1/11, hospitals with rehospitalization rates above expectation will have overall Medicare payments reduced enough to recapture payments for excessive rehospitalizations.
- Reduction limited to 1% in FY 2012, 2% in FY 2013, and 3% thereafter.
- Measurement limited to heart attack, heart failure and stroke in first year but must expand.
Care transitions technical assistance

• $500 million over next 5 years to support entities providing community-based transition programs, especially associated with safety-net and rural hospitals.

• Program can be implemented by program instruction (i.e.: without rule-making).

• Could clearly become a benefit if it saves money.
Center for Medicare & Medicaid Innovation

- New CMS Center with mission of developing new programs that improve quality at same cost or decrease cost without decreasing quality.
- Has authority to go from demonstrations to national implementation with new law if certified to meet above standard.
- Demonstrations need not be budget-neutral.
Counting Rehospitalizations
# Four Kinds of Rehospitalization

<table>
<thead>
<tr>
<th>TYPE</th>
<th>FREQUENCY</th>
<th>EXAMPLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Related-unplanned</td>
<td>~90% by 30 days</td>
<td>Heart failure, pneumonia, stroke</td>
</tr>
<tr>
<td>Related-planned</td>
<td>~5-10% by 30 days</td>
<td>Chemotherapy, procedures to complete care</td>
</tr>
<tr>
<td>Unrelated-planned</td>
<td>uncommon by 30 days</td>
<td>Unrelated, planned procedures</td>
</tr>
<tr>
<td>Unrelated-unplanned</td>
<td>uncommon by 30 days</td>
<td>Some kinds of trauma and harm from the environment</td>
</tr>
</tbody>
</table>
Clinical Causes of Rehospitalization

• 90 percent or more appear to be the result of clinical deterioration – related to the index hospitalization and not part of a treatment plan.
• Even if some planned rehospitalizations are not necessary, improving care transitions is not an efficient solution.
• Good clinicians do not agree on which related, unplanned rehospitalizations are preventable.
Discharged patient are vulnerable

<table>
<thead>
<tr>
<th>Days after discharge</th>
<th>Percent still at risk</th>
<th>Start</th>
<th>Cumulative rehospitalizations</th>
<th>End</th>
<th>Cumulative outpatient deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-30</td>
<td>100.0%</td>
<td></td>
<td>19.6%</td>
<td></td>
<td>3.5%</td>
</tr>
<tr>
<td>31-60</td>
<td>76.9%</td>
<td></td>
<td>28.2%</td>
<td></td>
<td>4.5%</td>
</tr>
<tr>
<td>61-90</td>
<td>67.3%</td>
<td></td>
<td>34.0%</td>
<td></td>
<td>5.1%</td>
</tr>
<tr>
<td>91-180</td>
<td>60.9%</td>
<td></td>
<td>44.8%</td>
<td></td>
<td>6.0%</td>
</tr>
<tr>
<td>181-365</td>
<td>49.3%</td>
<td></td>
<td>56.1%</td>
<td></td>
<td>6.8%</td>
</tr>
<tr>
<td>&gt;365 days</td>
<td>37.1%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
A possible working rule

• Many rehospitalizations for procedures are unplanned and not gameable, but most are scheduled continuation of care and some are gameable.
• 70% of rehospitalizations after surgery are not for procedures.
• Almost all related, unplanned rehospitalizations are potentially preventable; few can be “gamed”.
• Assume rehospitalizations for procedures are planned and exclude them; count all others.
Measuring Rehospitalization Rates and Change
Available measures of rehospitalization rates: Hospital Compare (CMS)

• Will likely be basis for Medicare penalties starting next year.
• Limited to Medicare FFS discharges for heart attack, heart failure, and pneumonia.
• Sophisticated risk adjustment but requires ambulatory claims data.
• No exclusions for scheduled rehospitalizations.
• Can only change slowly with time (sample size).
• NQF endorsed.
Available measures: Potentially Preventable Readmissions (3M)

- Under consideration or adopted in several states.
- Produces rates about half of CMS and UHC.
- Many exclusions but no explicit criteria for them and many seem debatable.
- Proprietary, and the major market is hospitals, not payers or public agencies.
- NQF declined to endorse.

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Available measures of rehospitalization rates: UHC

- The simplest model.
- Almost no exclusions.
- Produces overall rates similar to CMS.
- Not in broad use, but is very similar to NEJM paper.
- NQF endorsed.
Measuring change

• If a hospital or community decreases its rehospitalizations it will generally decrease the number of discharges.
• If the numerator and the denominator of a rate both change, the result is unpredictable.
• It may be better to look for change in the actual number of rehospitalizations than change in the rate.
Time Windows and Survival Modeling
Calibration Range

- How few rehospitalizations is too few?
- Example of pneumonia?
- Calibration range is the range over which we know what the measure means – that less is better.
- Importance of balancing measures and patient reports.
Balancing Measures

- Consumer reports
- Emergency room and observation days
- Rehospitalizations in the 31-40 days window.
Preventing Rehospitalization
Targeting Prevention

- History of rehospitalization
- Longer stay than expected
- High-risk DRGs (e.g.: heart failure, psychosis)
- On dialysis
- Disabled
- Poor
Targeting Prevention – Why Not?

• The effective changes are system changes, which are often easier to implement across the board than selectively.
• Screening accurately costs resources that could be used in prevention.
• Most screening models still miss many patients who will be rehospitalized.
Basic Tools

• Framework: Checklist or other framework for delivering an agreed-upon set of transitional services
• Assessment: Patients are assessed to identify risk for rehospitalization and needs for transition support
Teaching:

- Patient and family are engaged in the plan of care
- Education supporting the plan is confirmed with “teachback”
- Patient and family are trained in self-management and in overcoming the challenges of using the care system.
- Patient and family understand and can obtain all medications to be taken and discontinued
Communication:

• Timely communication occurs with providers/practitioners in next setting of care
Teaching and Follow-up

- Patient and family understand danger signs and know who to contact
- Timely post-discharge follow-up occurs (may include hospital-based phone contact, in-home coaching, front-loaded home care services, and timely physician office visits)
- Intensive clinical follow-up is provided for patients at high risk.
A National Effort?
Framing Questions

• Most payers and plans are interested in reducing rehospitalization, not just Medicare.
• What is lost by collaborating?
• Can plausible kinds of collaboration be effective?
What steps toward a national effort?

• Define leadership
• Create a forum or meeting place/time for coordination, learning, and interested parties.
• Bring in timely data, analyze for progress, make results available to decision-makers and the public.
• Develop rapid responses to early returns in order to maintain momentum.
Summing Up
Take Home Messages

• Healthcare Reform has changed the landscape for rehospitalization efforts.
• Technical measurement problems remain incompletely resolved but should not be deal-breakers.
• There are effective interventions.
• This is a perfect crisis.
• A coordinated national effort is feasible, desirable, and a reasonable pilot for broader healthcare changes.