REDUCING READMISSIONS
A Comprehensive Approach to Reducing Costs and Improving Quality

Harold D. Miller
President and CEO
Network for Regional Healthcare Improvement
and
Executive Director
Center for Healthcare Quality and Payment Reform
Why All the Interest in Hospital Readmissions?

• We started measuring them
  – You don’t manage what you don’t measure
  – You don’t care about problems you don’t know about

• It’s a way to reduce costs without rationing

• High rates of readmissions mean there are significant savings opportunities if they can be reduced

• Readmissions affect most types of patients, so all payers are interested

• Some projects have shown significant reductions in readmissions can be achieved at low cost

• Savings can be achieved quickly
A Good Formula for Healthcare Reform

• We started measuring them
  – You don’t manage what you don’t measure
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The Challenges

• Not all readmissions are preventable, and we don’t have good measures for which are and aren’t
• A wide range of factors cause readmissions, so no single intervention can address them all
• Since multiple providers are involved, it’s not clear who should be held accountable
• Current healthcare payment systems don’t support or reward providers’ efforts to reduce readmissions
What is Currently Being Done to Reduce Readmissions?

- Primary focus is on improving care transitions
  - Evidence that there are weaknesses in hospital discharge
  - Evidence that there is lack of coordination during transition between hospital and post-acute care
  - Several projects have reduced readmissions through relatively simple interventions focused on improving transitions from hospital to community
### Examples of Projects With Published Evidence of Success

<table>
<thead>
<tr>
<th>PROJECT</th>
<th>WHEN</th>
<th>WHAT</th>
<th>HOW</th>
<th>WHO</th>
<th>WHICH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transitional Care (Naylor)</td>
<td>During stay + Post-Discharge (up to 12mo.)</td>
<td>Patient Education &amp; Self-Mgt Support</td>
<td>Hospital visits + Home visits + Phone calls</td>
<td>Advanced Practice Nurse</td>
<td>65+ 65+ with CHF</td>
</tr>
<tr>
<td>Care Transitions (Coleman)</td>
<td>Pre-Discharge + 1 Mo. Post-Discharge</td>
<td>Self-Mgt Support</td>
<td>Hospital visit + Home visit + 3 phone calls</td>
<td>Nurses or Lay Coaches</td>
<td>All</td>
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<td>Project RED (Jack)</td>
<td>Discharge + Immediate Post-Discharge</td>
<td>Patient Education + Medication Assistance</td>
<td>Hospital visit + Phone call</td>
<td>Nurse (or simulation) + Pharmacist</td>
<td>All</td>
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Extensive Efforts at Replication Nationally

- Project BOOST (Better Outcomes for Older Adults through Safe Transitions)
  - Toolkit, training, and mentoring for improved discharge planning
    - [http://www.hospitalmedicine.org/ResourceRoomRedesign/RR_CareTransitions/html_CC/project_boost_background.cfm](http://www.hospitalmedicine.org/ResourceRoomRedesign/RR_CareTransitions/html_CC/project_boost_background.cfm)

- QIO Care Transitions Initiative for Medicare Beneficiaries
  - CMS project to improve transitions in 14 communities led by QIOs

- CMS Community-Based Care Transitions Program for High-Risk Medicare Beneficiaries
  - $500 million, 5 year program
  - Partnerships of hospitals with high readmission rates and community based organizations delivering care transition services

*Most efforts are primarily focused on seniors/Medicare beneficiaries, even though high rates of readmissions occur at all ages*
Improving Transitions Seems Like It’s Addressing The Problem…

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Except That Many Readmissions Occur Well After 30 Days…

Source: Pittsburgh Regional Health Initiative Analysis of Pennsylvania Health Care Cost Containment Council Data
...Many Readmissions Are for Different Issues...

- COPD (37%)
- Other Lung Condition (21%)
- Non-Pulmonary Diagnosis (42%)

30-Day Readmission Rate for Patients Discharged After Hospitalization for COPD

Source: Pittsburgh Regional Health Initiative Analysis of Pennsylvania Health Care Cost Containment Council Data

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...And Many Readmissions Aren’t Caused by Problems in Transitions

• 88 Year Old Woman Admitted to Hospital for UTI/Sepsis (7/2)
  – IV antibiotics and fluids administered, rapid improvement
  – Kept in hospital 4 days, deconditioned, admitted to rehab facility (7/6)
  – Discharged and returned to assisted living facility (7/17)

• Rehospitalized in 14 days with another UTI (7/20)
  – Administered antibiotics and fluids, good improvement
  – Kept in hospital for 3 days, returned to rehab facility (7/23)
  – Developed UTI in rehab facility; nurse practitioner said policy was not to treat “asymptomatic UTIs”
  – Developed sepsis and taken to ER (8/11)

• Rehospitalized in 19 days with UTI/Sepsis (8/11)
  – Administered IV antibiotics; slow improvement
  – Family demanded that hospital develop plan for preventing UTIs
  – Physician prescribed ongoing prophylactic antibiotic regime
  – Kept in hospital for 6 days; discharged to new rehab facility (8/17)
  – No longer able to walk independently; returned home in wheelchair (9/9)

• No Further Readmissions for 14 months
Improvements in Post-Discharge Care Also Needed

- Hospital
- Home Health
- Rehab
- Home + PCP
- Long Term Care

Improve Post-Acute Care
Improve Long-Term Care Mgt

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Some Initiatives Focusing on Changing Post-Acute Care

- INTERACT (Interventions to Reduce Acute Care Transfers)
  - Developed by Georgia Medical Care Foundation (QIO)
  - Provides tools for nursing homes/long term care facilities to use to monitor and redesign care to reduce readmissions
  - [http://interact2.net/](http://interact2.net/)
Hospitals Need to Address Root Causes of Readmits If Possible
Different Causes for Readmission, Not All Controllable by Hospital

- Problem Caused in Hospital (e.g., infection)
- Admission Problem Treated, Not Resolved
- Failure to Coordinate Transition from Hospital
- Inadequate Delivery of Post-Acute Care
- Inability to Afford Medications
- Problem Unrelated to Initial Admission
Most Readmissions Are Not A Hospital-Caused “Problem”

Readmissions in Western Pennsylvania, 2007
(All Payers, All Ages, All Hospitals)

- Average Readmission Rate: 18%
- 24% of Readmissions Due to Complications or Infections

Source:
Pittsburgh Regional Health Initiative Analysis of Pennsylvania Health Care Cost Containment Council Data
Hospitals Could Address More Root Causes Than They Do Now

• Earlier transition to post-discharge medications
• Better patient education about post-discharge medications during stay (not just at discharge)
• Testing alternative medications to address problematic side effects or affordability that led to non-adherence prior to admission
• Better education, physical therapy, occupational therapy, etc. to support better self-care and condition management after discharge
Improving Ability of ERs to Treat and Release, Not Admit

ER Treat & Release

Home + PCP
Long Term Care
ER
Hospital
Home + PCP
Home Health
Rehab
Long Term Care
“Asthma Lounge”

- Highland Hospital in Alameda California created an "asthma lounge" within its emergency department.
- Nurses in the ER immediately move patients experiencing asthma exacerbations to the asthma lounge, which is staffed 24 hours a day by nurses and respiratory therapists who follow treatment protocols to expedite care, stabilize patients, and provide education on their condition.
- Nurses phone patients within 48 hours of ER discharge to check on them and reinforce the educational information.
- Since the lounge opened, waiting times and the frequency of return visits decreased significantly among asthma patients, while patient satisfaction levels have increased.
Don’t Wait for Hospitalization: 
PCMH To Prevent Initial Admission

-365  -6  -5  0  +15  +30  +365

Home + PCP
Long Term Care
Prevention + Proactive Intervention

ER → Hospital

Home + PCP
Home Health
Rehab
Long Term Care
Significant Reduction in Rate of Hospitalizations Possible

Examples:

• 40% reduction in hospital admissions, 41% reduction in ER visits for exacerbations of COPD using in-home & phone patient education by nurses or respiratory therapists
  

• 66% reduction in hospitalizations for CHF patients using home-based telemonitoring
  
  M.E. Cordisco, A. Benjaminovitz, et al, “Use of Telemonitoring to Decrease the Rate of Hospitalization in Patients With Severe Congestive Heart Failure,” *American Journal of Cardiology* 84(7), 1999

• 27% reduction in hospital admissions, 21% reduction in ER visits for COPD through self-management education
  
A Truly Comprehensive Solution

-365 -6 -5 0 +15 +30 +365

- Home + PCP
- Long Term Care
- ER
- Hospital
- Home Health
- Rehab
- Long Term Care

Prevention + Proactive Intervention
ER Treat & Release
Treat + Address Root Causes
Transition Support
Improve Post-Acute Care
Improve Long-Term Care Mgt
A COPD Example from the Pittsburgh Regional Health Initiative

HOSPITAL

Treat Exacerbation

COMMUNITY CARE

ER Used As Solution to Problems

MD Treatment When/If Office Visit Occurs

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What We Tried to Fix: Better Discharge/Transition PLUS..

- Treat Exacerbation
- Improved Patient Education
- ER Used As Solution to Problems
- MD Treatment When/If Office Visit Occurs

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What We Tried to Fix:
Improved Care in Hospital

**CARE PROTOCOL**
- Treat Exacerbation
- Address Root Causes:
  - medication skills
  - smoking cessation
  - other

**HOSPITAL**
- Identify as COPD Patient
- Improved Patient Education

**COMMUNITY CARE**
- ER Used As Solution to Problems
- MD Treatment When/If Office Visit Occurs

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What We Tried to Fix:
Expanded PCP/Care Mgr Support

**HOSPITAL**
- Identify as COPD Patient
- Treat Exacerbation
- Address Root Causes:
  - medication skills
  - smoking cessation
  - other
- Improved Patient Education

**COMMUNITY CARE**
- ER Used As Solution to Problems
- MD Treatment
  - RN Care Manager
  - Medication Access
  - Prompt Follow-up:
    - Home Visit
    - PCP Visit

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What We Tried to Fix:
Non-Hospital Solution to Problems

**HOSPITAL**

**CARE PROTOCOL**

Identify as COPD Patient

Treat Exacerbation

Address Root Causes:
- medication skills
- smoking cessation
- other

Improved Patient Education

**COMMUNITY CARE**

**CARE PROTOCOL**

Prompt Response to Exacerbations:
- Action Plan
- 24/7 Phone Support

MD Treatment

RN Care Manager

Medication Access

Prompt Follow-up:
- Home Visit
- PCP Visit

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Goal: To Prevent Readmissions, But Also...

**CARE PROTOCOL**
- Identify as COPD Patient
- Treat Exacerbation
- Address Root Causes:
  - medication skills
  - smoking cessation
  - other

**Improved Patient Education**

**HOSPITAL**

**COMMUNITY CARE**

**CARE PROTOCOL**
- Prompt Response to Exacerbations:
  - Action Plan
  - 24/7 Phone Support
- MD Treatment
- RN Care Manager
- Medication Access
- Prompt Follow-up:
  - Home Visit
  - PCP Visit

Admission

Discharge

Readmission

Transition
... Ultimately to Prevent Initial Admissions

**COMMUNITY CARE**

- MD Treatment
- RN Care Manager
- Medication Access

**CARE PROTOCOL**

- Prompt Response to Exacerbations:
  - Action Plan
  - 24/7 Phone Support

**HOSPITAL**

- Improved Patient Education

**CARE PROTOCOL**

- Treat Exacerbation
- Address Root Causes:
  - medication skills
  - smoking cessation
  - other

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Did It Work?
Dramatic Results in One Year

% of Patients Admitted for COPD Exacerbation and Readmitted within 30 Days for COPD or Pneumonia
UPMC St. Margaret, 2008-2009

- 30 Readmissions Prevented
- $160,000+ Saved
- Net Savings of $80,000+ After Cost of Care Mgr

44% Reduction
More on the Pittsburgh Readmission Reduction Project

PRHI Readmission Reduction Guide: A Manual for Preventing Hospitalizations
January 2011

www.PaymentReform.org    www.PRHI.org

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Common Elements of Most Readmission Reduction Initiatives

- **Provider Coordination**
  - e.g., medication reconciliation, fax or EHR connection

- **Patient Education**
  - e.g., why/how to take medications, proper wound care

- **Self-Management Support**
  - e.g., coaching, smoking cessation, Rx financial assistance

- **Reactive Intervention**
  - e.g., support hotline, same-day appointment scheduling, on-site non-hospital care (e.g., in home or nursing home)

- **Proactive Intervention**
  - e.g., home visits, phone calls, remote monitoring
Will This Be Patient-Centered, Coordinated Care?

Diagram showing relationships between various healthcare professionals and patient services:
- Hospital Staff
- Discharge Planner
- Transition Coach
- Home Health
- Health Plan Care Mgt
- PCP
- Rehab Staff

Incorporating patient-centric care, these professionals are interconnected to ensure coordinated care.
How Do We Coordinate Multiple Efforts?

• Option 1: Everybody Works for the Same Corporation
How Do We Coordinate Multiple Efforts?

- Option 1: Everybody Works for the Same Corporation
  – Yeah, right, like that ensures coordination…
How Do We Coordinate Multiple Efforts?

• Option 1: Everybody Works for the Same Corporation
• Option 2: Everybody Coordinates With Each Other
How Do We Coordinate Multiple Efforts?

- Option 1: Everybody Works for the Same Corporation
- Option 2: Everybody Coordinates With Each Other
  - Data analysis to identify where problems exist
  - Mechanisms to coordinate multiple programs
  - Information exchange about individual patients
  - Real-time feedback on performance
How Do We Coordinate All Of This?

- Option 1: Everybody Works for the Same Corporation
- Option 2: Everybody Coordinates With Each Other
  - Data analysis to identify where problems exist
    - A common database covering all patients and providers
  - Mechanisms to coordinate multiple programs
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Chronic Diseases Are Largest Categories of Readmissions

Readmissions in Western PA, 2005-06

Diagnosis at Initial Admission
Initial Focus: COPD is 4th Highest Volume & 25% Readmission Rate
Analysis Showed 40% of Pneumonia Readmits Had COPD

Readmissions in Western PA, 2005-06

Diagnosis at Initial Admission

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So COPD Patients are Actually the 2nd Highest Volume of Readmits

Readmissions in Western PA, 2005-06 (Adjusted)
COPD Readmissions Affected Commercial/Medicaid Payers, Too

Readmission Rate Similar for All Ages

COPD Admissions/Readmissions by Age

Age Group

<table>
<thead>
<tr>
<th>Age Group</th>
<th># Admits</th>
<th>% Readmitted</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-49</td>
<td>200</td>
<td>15%</td>
</tr>
<tr>
<td>50-59</td>
<td>1,000</td>
<td>10%</td>
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<tr>
<td>60-69</td>
<td>2,000</td>
<td>8%</td>
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<tr>
<td>70-79</td>
<td>2,500</td>
<td>6%</td>
</tr>
<tr>
<td>80+</td>
<td>2,000</td>
<td>5%</td>
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• Option 1: Everybody Works for the Same Corporation
• Option 2: Everybody Coordinates With Each Other
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    • A neutral convener, e.g., California Quality Collaborative
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  - Information exchange about individual patients
    - Protocols to transfer information or an HIE
  - Real-time feedback on performance
    - “Real time” reports on readmissions and root cause analysis
Examples of Techniques Used in Pittsburgh’s Project

• **Outcome Measurement:**
  – Monthly hospital-generated reports on readmission rates
    • All-payer claims data indicated that for these hospitals, 80-90% of readmissions return to the same hospital
  – Tracking of individual patients in registry by Care Manager

• **Causal Analysis:**
  – Special questionnaire in hospital to all readmitted patients
  – Care manager recorded reasons for hospitalization and identified any weaknesses in community support

• **Chart (EHR) Review:**
  – Assessment of whether all recommended elements of care were actually delivered
Are Readmission Reduction Projects Sustainable?

- We don’t pay for things that we know will reduce readmissions
  - E.g., care transitions coaches to assist patients returning home after a hospitalization
  - E.g., having a nurse care manager visit chronic disease patients to provide education and self-management support
  - E.g., using telemonitoring to identify patient problems before admissions are necessary
  - E.g., having a physician answer a phone call with a patient who is confused about their treatment plan or experiencing a potential problem
Will Hospitals Provide Ongoing Financial Support?

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  – E.g., using telemonitoring to identify patient problems before admissions are necessary
  – E.g., having a physician answer a phone call with a patient who is confused about their treatment plan or experiencing a potential problem

• Hospitals and doctors lose money if they reduce readmissions
  – Hospitals are paid based on the number of times they admit patients
  – Physicians are paid based on the number of times they see patients and they see patients more often when patients are in the hospital
Five Basic Approaches to Payment Reform

1. Don’t pay providers (hospitals and/or docs) for readmissions
2. Pay a provider more to implement programs believed to reduce readmissions
3. Pay providers bonuses/penalties based on readmission rates
4. Pay for care with a limited warranty from the provider (i.e., provider does not charge for readmissions meeting specific criteria)
5. Make a comprehensive care (global) payment to a provider for all care a patient needs (regardless of how many hospitalizations or readmissions are needed)
A Blunt Approach: Don’t Pay for Readmissions at All

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Refusing to Pay for Readmissions Has Undesirable Consequences

• The hospital and/or physicians could legitimately refuse to treat the patient needing readmission, if the payer won’t pay for their services

• The patient may be readmitted to a hospital other than the one where the initial care was given, or the patient may be treated by physicians other than the ones which provided the care on the initial admission

• Hospitals/physicians may refuse to admit patients in the first place if they feel the patients are at high risk for readmission after discharge

• Not all readmissions may be preventable
A More Positive Approach: Paying for What Works

1. Don’t pay providers (hospitals and/or docs) for readmissions
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Two Dilemmas

• **Dilemma #1: Who to Pay?**
  – Hospitals, PCPs, Nursing Homes, Home Health Agencies, Area Agencies on Aging, etc., could all implement programs that could reduce readmissions
  – Funding them all will reduce the return on investment

• **Dilemma #2: No Guarantee of Results**
  – Although it’s been demonstrated that many different types of programs have been able to reduce readmissions, none of them are guaranteed to work, and those who want to replicate them aren’t guaranteeing results
  – So how does the payer (Medicare, Medicaid, or a commercial health plan) know that providing additional funding for a program will reduce readmissions by more than the cost of the program, or even reduce readmissions at all?
  – Result: payers are reluctant to fund such programs on a broad scale
Creating Incentives for Performance

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P4P Programs Don’t Offset the Underlying FFS Incentives
P4P Programs Don’t Offset the Underlying FFS Incentives

- **Example:** A pay-for-performance (P4P) program that reduces a hospital’s payment rate by 5% if its readmission rate is higher than average

- **Scenario:** Hospital has 25% readmission rate for a particular condition; the average for all hospitals is 18%

<table>
<thead>
<tr>
<th>Initial Admits</th>
<th>Readmit Rate</th>
<th>Total Admits</th>
<th>Payment Per Admit</th>
<th>Revenues</th>
</tr>
</thead>
<tbody>
<tr>
<td>500</td>
<td>25%</td>
<td>625</td>
<td>$5,000</td>
<td>$3,125,000</td>
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P4P Hurts the Hospital If It Doesn’t Reduce Readmissions

- **Example:** A pay-for-performance (P4P) program that reduces a hospital’s payment rate by 5% if its readmission rate is higher than average.

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<td>500</td>
<td>25%</td>
<td>625</td>
<td>$5,000</td>
<td>$3,125,000</td>
<td></td>
</tr>
<tr>
<td>500</td>
<td>25%</td>
<td>625</td>
<td>$4,750 (-5%)</td>
<td>$2,968,750</td>
<td>($156,250)</td>
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But the Hospital May Be Hurt More If It Does Reduce Readmits

• **Example:** A pay-for-performance (P4P) program that reduces a hospital’s payment rate by 5% if its readmission rate is higher than average

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<tr>
<td>500</td>
<td>18%</td>
<td>590</td>
<td>$5,000</td>
<td>$2,950,000</td>
<td>($175,000)</td>
</tr>
</tbody>
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The P4P penalty actually costs the hospital less than reducing readmissions, particularly if additional costs must be incurred for readmission reduction programs.

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The Problems With P4P
Bonuses/Penalties Alone

- The P4P penalty has to be very large to overcome the very large underlying disincentive in the DRG/FFS payment system against reducing readmissions.

- The P4P penalty has to be even larger if reducing readmissions means the hospital will need to incur extra costs for readmission reduction programs *in addition* to reducing its revenues.

- The larger the P4P penalty, the closer it comes to looking like non-payment for readmissions, i.e., the hospital or physician may be deterred from admitting the patient in the first place if the patient is viewed as a high risk for readmission after discharge.

- There is no incentive to do *better* than the performance standard which is set in the P4P program.
Medicare’s Complex Workaround

- Hospital Readmissions Reduction Program (§3025 of PPACA)
  - All DRG payments reduced up to 1% in 2013, 2% in 2014, 3% in 2015+
  - Actual reduction based on number of “excess” risk-adjusted readmissions for heart attack, heart failure, and pneumonia
  - Additional conditions to be added in 2015
It Will Provide Stronger Incentives Than Some P4P Programs…

• Hospital Readmissions Reduction Program (§3025 of PPACA)
  – All DRG payments reduced up to 1% in 2013, 2% in 2014, 3% in 2015+
  – Actual reduction based on number of “excess” risk-adjusted readmissions for heart attack, heart failure, and pneumonia
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• Why this *theoretically* works “better” than other P4P programs:
  – Magnifies the penalty for high readmission rates for targeted conditions
  – Continues to pay (almost) the same for readmissions when they occur
...But That Doesn’t Mean It’s a Good Idea

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  - All DRG payments reduced up to 1% in 2013, 2% in 2014, 3% in 2015+
  - Actual reduction based on number of “excess” risk-adjusted readmissions for heart attack, heart failure, and pneumonia
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- Why this *theoretically* works “better” than other P4P programs:
  - Magnifies the penalty for high readmission rates for targeted conditions
  - Continues to pay (almost) the same for readmissions when they occur

- Why it’s not good policy in *reality*:
  - Reduces the hospital’s payment for *all* admissions to the hospital, regardless of whether there is any problem with other admissions
  - Creates the largest penalties for hospitals that have relatively few patients with the target conditions (since the penalty is a percentage of revenues for *all* patients, not just the patients with those conditions)
  - Creates no incentive to reduce readmissions for any other conditions or to reduce rates below average
  - Only affects the hospital, not physicians & not community programs
A Better Idea: Paying for Care With a Warranty

1. Don’t pay providers (hospitals and/or docs) for readmissions
2. Pay a provider more to implement programs believed to reduce readmissions
3. Pay hospitals bonuses/penalties based on readmission rates
4. Pay for care with a limited warranty from the provider (i.e., provider does not charge for readmissions meeting specific criteria)
5. Make a comprehensive care (global) payment to a provider or group of providers for all care a patient needs (regardless of how many hospitalizations or readmissions are needed)
Yes, a Health Care Provider Can Offer a Warranty

Geisinger Health System ProvenCare℠

– A single payment for an ENTIRE 90 day period including:
  • ALL related pre-admission care
  • ALL inpatient physician and hospital services
  • ALL related post-acute care
  • ALL care for any related complications or readmissions

– Types of conditions/treatments currently offered:
  • Cardiac Bypass Surgery
  • Cardiac Stents
  • Cataract Surgery
  • Total Hip Replacement
  • Bariatric Surgery
  • Perinatal Care
  • Low Back Pain
  • Treatment of Chronic Kidney Disease
Readmission Reduction: 44%

ProvenCare® CABG Quality Clinical Outcomes - (18. mos)

<table>
<thead>
<tr>
<th></th>
<th>Before ProvenCare (n=132)</th>
<th>With ProvenCare (n=181)</th>
<th>% Improvement/Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>In hospital mortality</td>
<td>1.5%</td>
<td>0%</td>
<td>21%</td>
</tr>
<tr>
<td>Patients with any complication (STS)</td>
<td>38%</td>
<td>30%</td>
<td>28%</td>
</tr>
<tr>
<td>Patients with &gt;1 complication</td>
<td>7.6%</td>
<td>5.5%</td>
<td>17%</td>
</tr>
<tr>
<td>Atrial fibrillation</td>
<td>23%</td>
<td>19%</td>
<td>60%</td>
</tr>
<tr>
<td>Neurologic complication</td>
<td>1.5%</td>
<td>0.6%</td>
<td>43%</td>
</tr>
<tr>
<td>Any pulmonary complication</td>
<td>7%</td>
<td>4%</td>
<td>22%</td>
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<tr>
<td>Blood products used</td>
<td>23%</td>
<td>18%</td>
<td>55%</td>
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<tr>
<td>Re-operation for bleeding</td>
<td>3.8%</td>
<td>1.7%</td>
<td>25%</td>
</tr>
<tr>
<td>Deep sternal wound infection</td>
<td>0.8%</td>
<td>0.6%</td>
<td>44%</td>
</tr>
<tr>
<td>Readmission within 30 days</td>
<td>6.9%</td>
<td>3.8%</td>
<td>44%</td>
</tr>
</tbody>
</table>
What a Single Physician and Hospital Can Do

• In 1987, an orthopedic surgeon in Lansing, MI and the local hospital, Ingham Medical Center, offered:
  – a fixed total price for surgical services for shoulder and knee problems
  – a warranty for any subsequent services needed for a two-year period, including repeat visits, imaging, rehospitalization and additional surgery

• Results:
  – Surgeon received over 80% more in payment than otherwise
  – Hospital received 13% more than otherwise, despite fewer rehospitalizations
  – Health insurer paid 40% less than otherwise

• Method:
  – Reducing unnecessary auxiliary services such as radiography and physical therapy
  – Reducing the length of stay in the hospital
  – Reducing complications and readmissions
A Warranty is Not an Outcome Guarantee

• Offering a warranty on care does not imply that you are guaranteeing a cure or a good outcome
• It merely means that you are agreeing to correct avoidable problems at no (additional) charge
• Most warranties are “limited warranties,” in the sense that they agree to pay to correct some problems, but not all
Example: $5,000 Procedure, 20% Readmission Rate

<table>
<thead>
<tr>
<th>Cost of Success</th>
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<th>Rate of Readmits</th>
</tr>
</thead>
<tbody>
<tr>
<td>$5,000</td>
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<td>20%</td>
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</table>
### Average Payment for Procedure is Higher than the Official “Price”

<table>
<thead>
<tr>
<th>Cost of Success</th>
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</table>
Starting Point for Warranty Price: Actual Current Average Payment

<table>
<thead>
<tr>
<th>Cost of Success</th>
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<th>Price Charged</th>
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Limited Warranty Gives Financial Incentive to Improve Quality

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<tr>
<td>$5,000</td>
<td>$5,000</td>
<td>15%</td>
<td>$5,750</td>
<td>$6,000</td>
<td>$250</td>
</tr>
</tbody>
</table>

Reducing Adverse Events... ...Reduces Costs... ...Improves The Bottom Line
## Higher-Quality Provider Can Charge Less, Attract Patients

<table>
<thead>
<tr>
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<td>$5,000</td>
<td>15%</td>
<td>$5,750</td>
<td>$5,900</td>
<td>$150</td>
</tr>
</tbody>
</table>

...Enables Lower Prices...  
Better Quality...  
...Still With Better Margin...
### A Virtuous Cycle of Quality Improvement & Cost Reduction

<table>
<thead>
<tr>
<th>Cost of Success</th>
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<tr>
<td>$5,000</td>
<td>$5,000</td>
<td>10%</td>
<td>$5,500</td>
<td>$5,900</td>
<td>$400</td>
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</tbody>
</table>

Reducing Adverse Events...

...Reduces Costs...

...Improves The Bottom Line
Win-Win-Win Through Appropriate Payment & Pricing

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<td>$5,900</td>
<td>$400</td>
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<tr>
<td>$5,000</td>
<td>$5,000</td>
<td>10%</td>
<td>$5,500</td>
<td>$5,700</td>
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<td>$5,000</td>
<td>$5,000</td>
<td>5%</td>
<td>$5,250</td>
<td>$5,700</td>
<td>$450</td>
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</tbody>
</table>

Quality is Better...

...Cost is Lower...

...Providers More Profitable
In Contrast, Non-Payment Alone Creates Financial Losses

<table>
<thead>
<tr>
<th>Cost of Success</th>
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<th>Payment</th>
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<tbody>
<tr>
<td>$5,000</td>
<td>$5,000</td>
<td>20%</td>
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<td>$ 0</td>
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<tr>
<td>$5,000</td>
<td>$5,000</td>
<td>20%</td>
<td>$6,000</td>
<td>$5,000</td>
<td>-$1,000</td>
</tr>
<tr>
<td>$5,000</td>
<td>$5,000</td>
<td>10%</td>
<td>$5,500</td>
<td>$5,000</td>
<td>-$ 500</td>
</tr>
<tr>
<td>$5,000</td>
<td>$5,000</td>
<td>0%</td>
<td>$5,000</td>
<td>$5,000</td>
<td>$0</td>
</tr>
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</table>

Non-Payment for Readmits Causes Losses While Improving

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Warranty Pricing Should Capture Costs of New Programs
Warranty Pricing Should Capture Costs of New Programs

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<td>20%</td>
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<td>$6,000</td>
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Better-Quality Care May Cost More Initially

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<tr>
<td>$5,200</td>
<td>$5,200</td>
<td></td>
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</tr>
</tbody>
</table>

Higher Cost to Reduce Readmits
Small Outcome Improvements May Not Offset Higher Costs

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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$5,200</td>
<td>$5,200</td>
<td>16%</td>
<td>$6,032</td>
<td>$6,000</td>
<td>-$32</td>
</tr>
</tbody>
</table>

Higher Cost to Reduce Readmits
Even If Somewhat Successful
Means Losses
Option 1: Improve Performance Enough to Justify Higher Costs

<table>
<thead>
<tr>
<th>Cost of Success</th>
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<td>$6,000</td>
<td>-$32</td>
</tr>
<tr>
<td>$5,200</td>
<td>$5,200</td>
<td>10%</td>
<td>$5,720</td>
<td>$6,000</td>
<td>+$280</td>
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</tbody>
</table>

Better Results Means Better Margins
### Option 2: Reduce Costs of Interventions

<table>
<thead>
<tr>
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<td>$6,000</td>
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</tr>
<tr>
<td>$5,200</td>
<td>$5,200</td>
<td>10%</td>
<td>$5,720</td>
<td>$6,000</td>
<td>$+280</td>
</tr>
<tr>
<td>$5,050</td>
<td>$5,050</td>
<td>16%</td>
<td>$5,858</td>
<td>$6,000</td>
<td>$+142</td>
</tr>
</tbody>
</table>

Lower Program Costs Means Better Margins
Then Offer the Payer Some Savings

<table>
<thead>
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<tr>
<td>$5,200</td>
<td>$5,200</td>
<td>10%</td>
<td>$5,720</td>
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<td>$180</td>
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<td>$5,050</td>
<td>$5,050</td>
<td>16%</td>
<td>$5,858</td>
<td>$5,900</td>
<td>$42</td>
</tr>
</tbody>
</table>
Warranty Enables the Right Balance of Cost & Performance

- Providers have an incentive to reduce readmissions as much as possible
- Providers have an incentive to find the lowest cost way to do that
To Make It Work: Shared, Trusted Data for Pricing

- **Hospital/Health System** needs to know what its current readmission rates (or other complications) are and how many are preventable to know whether the warranty price will cover its costs of delivering care.

- **Purchaser/Payer** needs to know what its current readmission rates, preventable complication rates, etc. are to know whether the warranty price is a better deal than they have today.

- **Both** sets of data have to match in order for both providers and payers to agree!
Who Gives the Warranty?

• Hospital?
• PCP?
• Home Health?
• Rehab?
• LTC Facility?
• Patient/Family?

Which readmissions are they each taking accountability for?
Comprehensive Payment for Comprehensive Services

1. Don’t pay providers (hospitals and/or docs) for readmissions
2. Pay a provider more to implement programs believed to reduce readmissions
3. Pay providers bonuses/penalties based on readmission rates
4. Pay for care with a limited warranty from the provider (i.e., provider does not charge for readmissions meeting specific criteria)
5. Make a comprehensive care (global) payment to a provider or group of providers for all care a patient needs (regardless of how many hospitalizations or readmissions are needed)
A Comprehensive or “Global” Payment

PAYER

Hospital

Home + PCP
Home Health
Rehab
Long Term Care
New “Bundling” Initiatives From CMS Innovation Center

• **Model 1 (Inpatient Gainsharing)**
  – Hospitals can share savings with physicians
  – No actual change in the way Medicare payments are made

• **Model 2 (Virtual Episode Bundle + Warranty)**
  – Budget for Hospital+Physician+Post-Acute+Readmissions
  – Medicare pays bonus if actual cost < budget
  – Providers repay Medicare if actual cost > budget

• **Model 3 (Virtual Post-Acute Bundle + Warranty)**
  – Budget for Post-Acute Care+Physicians+Readmissions
  – Bonuses/penalties paid based on actual cost vs. budget

• **Model 4 (Inpatient Bundle, No Warranty)**
  – Single Hospital + Physician payment for inpatient care
One Payer Changing Isn’t Enough

Provider is only compensated for changed practices for the subset of patients covered by participating payers
Payers Need to Align to Enable Providers to Transform
A Simple Starting Point: Coordinate Payment Reform Silos

SILO #1

Implementing Medical Home/Chronic Care Model

Pay More to Physicians For Being Certified As a Medical Home With No Focus on Readmissions

SILO #2

Reducing Hospital Readmissions

Penalize Hospitals for Readmissions Even If the Cause is Inadequate Primary Care

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Marrying the Medical Home and Hospital Readmissions

Reducing Hospital Readmissions

- Improving Community Care to Reduce Hospital Readmissions
- Lower Hospital Readmissions Provides ROI for Chronic Care Investment

Implementing Medical Home/Chronic Care Model

- Better Payment Strengthens Community Care

Reforming Payment for Primary/Chronic Care

Better Payment Strengthens Community Care

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Benefit Design Changes Are Also Critical to Success

Ability and Incentives to:
- Improve health
- Take prescribed medications
- Allow a provider to coordinate care
- Choose the highest-value providers and services

Ability and Incentives to:
- Keep patients well
- Avoid unneeded services
- Deliver services efficiently
- Coordinate services with other providers
Example: Coordinating Pharmacy & Medical Benefits

High copays & deductibles to reduce pharmacy spending…

…Are likely contributing to high rates of readmission

**Pharmacy Benefits**

- Drug Costs
  - High copays for brand-names when no generic exists
  - Doughnut holes & deductibles

**Medical Benefits**

- Hospital Admissions
- Hospital Readmissions
- ER Visits

*Principal treatment for most chronic diseases involves regular use of maintenance medication*
A Comprehensive, Data-Driven Approach to Reducing Readmits

• Analyze data to determine where the biggest opportunities for reducing readmissions exist
  – Which conditions (e.g., CHF and COPD), which patients (age, geography, etc.), which settings (home, rehab, LTC)?

• Identify the (many) root causes of readmissions and redesign care in the settings where those root causes occur and/or can be most effectively addressed
  – Transitional interventions should address the problems with transitions, not try to fix problems that should have been addressed earlier
  – Patients should not have to be hospitalized to get better ambulatory care; design/coordinate efforts around a strong PCMH base

• Create a business case to support sustainable funding
  – Savings have to exceed costs – increase impact or reduce costs
  – Coordinate efforts to avoid duplication and gaps

• Monitor performance and continuously adjust
  – Just because it’s “proven” in the literature doesn’t mean it will automatically work well in every setting with every patient
  – Ask patients and family how well it’s working, not yourselves!
For More Information:

Harold D. Miller
Executive Director, Center for Healthcare Quality and Payment Reform
and
President & CEO, Network for Regional Healthcare Improvement

Miller.Harold@GMail.com
(412) 803-3650

www.CHQPR.org
www.NRHI.org
www.PaymentReform.org