Performance Payment: Never Pay for Never Events: Including Readmissions in Medicare’s (non-payment for) Hospital Acquired Conditions Policy

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Palo Alto Medical Foundation Research Institute
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Thank you
Agenda

- Funding policy – incentives
- Hospital Acquired Conditions (HAC) policy background
- Review of the limited financial impact of the current HAC policy
- Impact of non-payment for readmissions
- Policy implications
Aims of funding policy

- Allocative efficiency
  - Right resources, right place, right time.
  - Activity based funding (casemix) policies do this well

- Technical efficiency
  - More bang for your buck;
  - Use incentives to drive change
Getting more bang for your buck

- Doing less unnecessary work
- E.g. reducing complications
- Improving quality may reduce care costs
- Change / transition is expensive
- Cost reduction - rarely demonstrated
Aligning MD’s & administrators

■ MDs have incentives for good care
  – They care for patients
  – Self-esteem = good clinical outcomes
  – Poor patient outcomes – threaten credentials

■ Administrators tend to focus on cost
  – Usually working to keep MDs onside
  – Tenure hinged on financial outcomes
HAC policy attempts to create incentives that engage administrators in quality improvement.
Hospital Acquired Conditions Policy

- Implemented in 2008
- Cost cutting measure (DRA)
- Initial proposal non-payment for 8 HAC
- HAC - proven to be preventable
- Implemented using 10 HAC
- Huge media attention
HACs (never events?)

- Foreign objects retained after surgery
- Air emboli (arising from a medical or surgical procedure)
- Incompatible blood transfusions
HACs (Nursing sensitive?)

- Pressure (decubitus) ulcers stages III & IV (DU)
- Catheter-associated urinary tract infections (CAUTI)
- Vascular catheter-associated infections
- Fractures and other physical injuries sustained during inpatient care
HACs (MD sensitive?)

- Poor (inpatient) glycemic control
- DVT or PE following orthopedic surgery
- Surgical site infections
  - mediastinitis following CABG surgery
  - infections from specific orthopedic or bariatric surgery
IPPS pays by cost weight

- Payment by relative resource use
- Logical calculation
  - Coronary bypass (CW = 3.6151)
  - Appendectomy (CW = 0.8929)
Medicare’s IPPS payments

Two main steps:
- Setting relative cost weights
- Allocating payments using:
  
  \[ \text{cost weight} \times \text{hospital-specific price} \]
Cost weights

- Group admissions into diagnosis related groups (DRGs) based on Dx & Procs
- Hospital cost estimated for each admission based on charges
- Cost weight:
  
  average cost of DRG admissions
  average cost of all admissions

- A cost weight is a measure of relative resource use by hospitals
Cost weight examples

■ DRG 550 - Coronary bypass w/o cardiac cath w/o major CV (3.6151)
■ DRG 167 - Appendectomy w/o cc (0.8929)
■ DRG 166 - Appendectomy with cc (1.4521)
Medicare’s (Non-)payment strategy

- Delete HAC diagnosis codes
- Aim to reallocate admission from DRG+CC to DRG-CC
- Results in payment reduction?
Method – HAC impact model

- Use 2006 California OSHPD data
- Includes Dx, Proc & POA codes
- Calculate the HAC policy payment change
- Modeled 8 HAC (current panel)
Results

- HAC in 0.11% of discharges (potential impact)
- Only 0.003% of discharges actually impacted
- Nationwide impact
  - 0.001% - 0.003% of payments ($1.1 - $2.7m)
- Average per hospital
  - << 1 HAC discharge
  - < $500
Impact

- CMS: Yr 1 = $20m; Yr 2 = $50m
- Our calculated impact – much smaller
- Irrespective, small financial impact (~0.001% of $106bn)
- Costs exceed payments in HAC discharges (>30%)
- Policy adds insult to injury
MarketWatch

Medicare’s Policy Not To Pay For Treating Hospital-Acquired Conditions: The Impact

The financial impact of the policy so far is small, but the public attention it has attracted may lead to improved quality.

by Peter D. McNair, Harold S. Luft, and Andrew B. Bindman

ABSTRACT: In 2008 Medicare stopped reimbursing hospitals for treating eight avoidable hospital-acquired conditions. Using 2006 California data, we modeled the financial impact of this policy on six such conditions. Hospital-acquired conditions were present in 0.11 percent of acute inpatient Medicare discharges; only 3 percent of these were affected by the policy. Payment reductions were negligible (0.01 percent, or $2.1 million, equivalent to...
And in addition ...

**PERSPECTIVE**

The Policy On Paying For Treating Hospital-Acquired Conditions: CMS Officials Respond

Medicare payment reductions for these cases are only one way in which the agency is influencing the quality of care.

by Barry Straube and Jonathan D. Blum

**ABSTRACT:** Policies that decline payment in the event of hospital-acquired conditions have generated considerable public attention. Although the projected payment reductions
The perfect paper tiger?

- High outrage => high attention => high clinical awareness
- Small financial impact => limits risk for vulnerable (small rural) hospitals
- Cost - predominantly political capital for CMS
- True savings - HAC prevented rather than reduced payments
- Will the HAC policy provide the impetus for a long-term reduction in HAC?
- Are more robust incentives required?
HAC policy incentive

Mediastinitis finding

- Nine admissions with CABG and mediastinitis
- No HAC policy impact
- 28 (re)admissions for mediastinitis probably post CABG

How many HAC’s are missed because they arise after discharge?
Incidence of readmissions

- 22% of Medicare hospitalizations readmitted within 60 days (1974-7 data; Anderson et al)
- 19.4% admissions followed by a preventable readmission within 6 months (1999 data; Friedman et al)
- 19.6% of acute hospital discharges readmitted within 30 days (2003-4 data; Jencks et al)
- 1.5% of admissions treat direct complications of clinical care (2.5% of acute inpatient funding)
- Flagged as a priority by MedPAC
Define and quantify acute inpatient readmissions that directly arise from, or complete the definition of, a HAC.

- That is, expand the period over which HAC are detected without expanding the clinical definitions of HAC.
Method

- 2006 & 2007 OSHPD PDD
- Index admissions: 1Jul06- 30Jun07 (4.0m)
- No admission in previous 6 months
- SSN based RLN to identify readmissions
- All 10 HACs (outer-bound - VasCath and DU)
- Estimate cost using cost-to-charge ratio
- Estimate payment using previous model
- Exclude cases <$100 from cost/payment analysis
HAC readmission definitions

Same day readmission or transfer
- Acute complications of diabetes management

Seven day readmission or transfer
- Air Embolism (arising from a procedure)
- Incompatible blood transfusion, age > 1 yr
- CAUTI
- VasCath Infection (+Sepsis)

30 day readmission or transfer
- Orthopedic DVT/PE (no SNF transfers)
HAC readmission definitions

183 day readmission
- Mediastinitis following CABG
- Foreign object retained after surgery (sepsis with a retained foreign body code)
- In-hospital falls and trauma
- Orthopedic infection
- Bariatric infection
- Decubitus ulcer (stage I-IV) where DU arose during previous admission (not transferred from SNF)
## Results

<table>
<thead>
<tr>
<th></th>
<th>All HAC</th>
<th>Medicare</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cases meeting current HAC policy</td>
<td>4,761</td>
<td>7,363</td>
<td></td>
</tr>
<tr>
<td>Additional readmission cases</td>
<td>647</td>
<td>1,411</td>
<td></td>
</tr>
<tr>
<td>Readmissions to another hospital</td>
<td>194</td>
<td>396</td>
<td></td>
</tr>
<tr>
<td>Additional Medicare payments ($m)</td>
<td>$11.4</td>
<td>$25.8</td>
<td></td>
</tr>
<tr>
<td>Estimated total cost ($m)</td>
<td>$24.2</td>
<td>$62.9</td>
<td></td>
</tr>
</tbody>
</table>

- 4,007,791 index admissions
- RLN for 76%
- Findings varied dramatically by HAC
Few readmissions detected

- Incompatible blood transfusion (0)
- Bariatric infection (0)
- CAUTI (0)
- Air embolism (5)
- Orthopaedic DVT/PE (6)
- VasCath infection (6)
VasCath Infection

- 344 records (182) where VasCath infection is reason for admission - no admission in previous seven days.
- Excludes sepsis+Vascath readmits
- Estimated payment is $5.3m ($2.9m).
- Estimated cost is $6.1m ($3.2m).
- Community care or ambulatory care acquired?
Results - Complication of diabetes management

<table>
<thead>
<tr>
<th>Poor glycemic control</th>
<th>Medicare</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cases meeting current HAC policy</td>
<td>80</td>
<td>221</td>
</tr>
<tr>
<td>Additional readmission cases</td>
<td>4</td>
<td>32</td>
</tr>
<tr>
<td>Readmissions to another hospital</td>
<td>4</td>
<td>29</td>
</tr>
<tr>
<td>Additional Medicare payments ($m)</td>
<td>$0.02</td>
<td>$0.2</td>
</tr>
<tr>
<td>Estimated total cost ($m)</td>
<td>$0.03</td>
<td>$0.2</td>
</tr>
</tbody>
</table>
## Results - DU

<table>
<thead>
<tr>
<th>Decubitus ulcer</th>
<th>Medicare</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cases meeting current HAC policy</td>
<td>2,899</td>
<td>4,361</td>
</tr>
<tr>
<td>Additional readmission cases</td>
<td>30</td>
<td>37</td>
</tr>
<tr>
<td>Readmissions to another hospital</td>
<td>23</td>
<td>24</td>
</tr>
<tr>
<td>Additional Medicare payments ($m)</td>
<td>$0.5</td>
<td>$0.6</td>
</tr>
<tr>
<td>Estimated total cost ($m)</td>
<td>$1.3</td>
<td>$1.6</td>
</tr>
</tbody>
</table>
More DU results

- 1,296 readmissions to treat a DU that arose on the same body area in a previous admission
- DU rarely reason for readmission
- 391 cases - DU not POA -> current policy. Of these:
  - 65 are same day readmissions (transfers)
  - 26 are readmissions within 7 days.
Results - Foreign object retained after surgery

<table>
<thead>
<tr>
<th>Retained foreign object</th>
<th>Medicare</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cases meeting current HAC policy</td>
<td>45</td>
<td>145</td>
</tr>
<tr>
<td>Additional readmission cases</td>
<td>21</td>
<td>87</td>
</tr>
<tr>
<td>Readmissions to another hospital</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Additional Medicare payments ($m)</td>
<td>$0.3</td>
<td>$1.4</td>
</tr>
<tr>
<td>Estimated total cost ($m)</td>
<td>$0.7</td>
<td>$3.1</td>
</tr>
</tbody>
</table>

Reason for (re)admission:
- Removal of foreign body (proc) – 9 (4)
- Sepsis - 3 (1)
- Post-operative infection – 8 (5)
Results – Mediastinitis

<table>
<thead>
<tr>
<th>Mediastinitis post CABG</th>
<th>Medicare</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cases meeting current HAC policy</td>
<td>8</td>
<td>15</td>
</tr>
<tr>
<td>Additional readmission cases</td>
<td>29</td>
<td>46</td>
</tr>
<tr>
<td>Readmissions to another hospital</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td>Additional Medicare payments ($m)</td>
<td>$1.2</td>
<td>$1.7</td>
</tr>
<tr>
<td>Estimated total cost ($m)</td>
<td>$3.0</td>
<td>$4.4</td>
</tr>
</tbody>
</table>

- Two admissions for Mediastinitis and CABG are readmissions post CABG
- 41 patients; 3 admitted twice; 1 admitted 3 times within 183 days
- 40/41 initial readmissions are within 60 days
Results - In-hospital falls and trauma

<table>
<thead>
<tr>
<th>In-hospital falls and trauma</th>
<th>Medicare</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cases meeting HAC policy definition</td>
<td>1,126</td>
<td>1,529</td>
</tr>
<tr>
<td>Cases that are likely readmissions</td>
<td>92</td>
<td>119</td>
</tr>
<tr>
<td>Readmissions to another acute hospital</td>
<td>44</td>
<td>60</td>
</tr>
<tr>
<td>Medicare equivalent payments ($m)</td>
<td>$1.5</td>
<td>$1.9</td>
</tr>
<tr>
<td>Estimated total cost ($m)</td>
<td>$3.4</td>
<td>$4.5</td>
</tr>
</tbody>
</table>

Note: cases detected where inpatient injury = principal readmission diagnosis

- Eighty-two percent (97/119) same day readmissions (i.e. transfers) to other acute care
### Results - Orthopedic infection

<table>
<thead>
<tr>
<th>Orthopedic infection</th>
<th>Medicare</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cases meeting current HAC policy</td>
<td>57</td>
<td>157</td>
</tr>
<tr>
<td>Additional readmission cases</td>
<td>464*</td>
<td>1,073**</td>
</tr>
<tr>
<td>Readmissions to another hospital</td>
<td>117</td>
<td>262</td>
</tr>
<tr>
<td>Additional Medicare payments ($m)</td>
<td>$7.8</td>
<td>$19.6</td>
</tr>
<tr>
<td>Estimated total cost ($m)</td>
<td>$15.5</td>
<td>$48.8</td>
</tr>
</tbody>
</table>

* Twenty cases - subsequent orthopedic procedure
** Sixty cases - subsequent orthopedic procedure
- 175 cases (74) involve prosthesis infection (osteomyelitis).
Results - Summary

- Nationwide* impact:
  - $232m ($103m; Medicare) reduced payments
  - $565m ($203m) in costs for hospitals

- Larger Medicare impact (50-100 fold; $103m/106bn)

- ~80% impact ($21m/$26m; $9m/$11m) is mediastinitis or orthopedic infection

- How often across all orthopedics?

- Role for orthopedic (not just joint) registry
Study limitations

- Does not include readmissions arising from same day admissions
- Hampered by coding accuracy and capacity
  - DU & VasCath definitions
  - POA
  - Left versus right
  - Emergency surgical closure?
- Subject to perverse incentives
Never pay for never events?

- If never events should never happen then why should we pay for them?
- Hospital (non-community) acquired conditions should trigger payment modification (or exclusion)
- Initiating health care organisations take responsibility for never events.
HAC of ambiguous etiology

- Poor glycemic control
- Decubitus ulcer
- Catheter associated UTI
- Falls & injuries

- Current coding elements limit capacity to link readmission to care related event
- No ambiguous etiology for transfers
Nosocomial events

Conditions that are rarely, if ever, community acquired include:

- foreign object retained after surgery;
- incompatible blood transfusion;
- air embolism arising from a medical or surgical procedure;
- vascular catheter infection;
- mediastinitis following CABG surgery; and
- infection following joint replacement or bariatric surgery.
Potential barriers

- Medicare has monopsony power; private insurers can’t lead but could adopt Medicare policies
- Clawing back cost of (re)admissions to different hospital – difficult but not impossible
- Clinical coding standards are problematic; targeted auditing will be required
The policy challenge

- It’s about reducing unnecessary complications
- It’s about improving outcomes for patients
- Financial disincentives for bad behavior may not be the best strategy
- Look to engage professionalism
A way forward

- Non-payment for HAC related readmissions
- Claw-back DRG equivalent payments for readmissions & transfers for HAC treatment
- Reinforce with notification to CEO
- Move never event responsibility to initiating healthcare organisation, irrespective of setting
An alternative way forward

- Build on Geisinger’s Provencare Process (global fee)
- Focus on joint replacement and mediastinitis
  - Preventable
  - Frequent
  - High $$$ and patient cost
  - Limits fall-out to orthopedic & CT surgeons
- No payment for ‘never event’ readmissions
And the PR war

- Commit political capital to bringing about this reduction in HAC (if you’re not upsetting anyone …)

- Focus publicly on
  - Preventable complications are identified by clinical champions (MDs)
  - Healthcare providers must take responsibility for their actions
  - What is best for patients (complication reduction rather than cost reduction)
Acknowledgments

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- Palo Alto Medical Foundation
Thank you

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