A unified payment system for post-acute care

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Concerns about post-acute care

- Overlap in the patients treated in SNFs, HHAs, IRFs, and LTCHs
- Separate payment systems can result in quite different payments for similar patients
- Lack of evidence to guide decisions about PAC
- Lack of uniform patient assessment information
Reports on a PAC PPS mandated in the IMPACT Act of 2014

- MedPAC report June 2016
  - Recommend features of a PAC-PPS
  - Estimate impacts
- Secretary’s report due 2022
  - Prototype design
- MedPAC report due 2023
  - Prototype design
Broad approach to designing a uniform PPS

- Establish a common unit
- Develop a common case-mix adjustment
- Predict the cost of a stay using information about the patient and the stay
  - Modeled nontherapy ancillary service costs separate from routine + therapy costs
  - Included an adjuster for HHA stays
- Predicted costs would form basis for payments
Approach to test feasibility of a PAC PPS and estimate impacts

1. **Mandate**
   Evaluate and recommend features of a PAC PPS using data from the PAC-PRD

2. **Mandate**
   Estimate the impacts of implementing a unified PAC PPS

**Methodology**

- "Full" model uses data from PAC-PRD sample to predict the relative costs of PAC-PRD stays (n=6,400)
- "Administrative" model to predict the relative costs of PAC-PRD stays
- Compare the accuracy of models using same stays
- If equally accurate, estimate "administrative" model using 2013 PAC stays (n= 8.9 million)

**Purpose**

- Test feasibility of a PAC PPS
- Assess the accuracy of using readily available administrative data to establish payments
- Estimate impacts using 2013 stays
Factors used to predict the cost of a PAC stay

<table>
<thead>
<tr>
<th>Predictors</th>
<th>“Full” model</th>
<th>Administrative model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age and disability</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Primary reason to treat</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Comorbidities and severity</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Special treatments</td>
<td>X</td>
<td>Some proxies</td>
</tr>
<tr>
<td>Impairments</td>
<td>X</td>
<td>Some proxies</td>
</tr>
<tr>
<td>Functional status</td>
<td>X</td>
<td>No</td>
</tr>
<tr>
<td>Cognitive status</td>
<td>X</td>
<td>Proxies</td>
</tr>
<tr>
<td>Routine (nursing) resources</td>
<td>X</td>
<td>Estimated</td>
</tr>
<tr>
<td>Home health care adjuster</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
Criteria used to evaluate the models predicting cost per stay

- Compare predicted costs per stay to the actual costs of stays
  - All stays
  - By different types of stays
- Share of differences in costs across stays explained by the model (r-squared)
Patient groups examined to evaluate our results

**Clinical condition**
- 24 clinical groups

**Impairment and severity**
- Cognitively impaired
- Frailty
- Highest severity of illness
- Chronically critically ill

**Other:**
- High therapy
- Low therapy
- Community-admitted
- Disabled
- Dual-eligible
- Very old (85+ yrs old)
- ESRD
- Short stays
Results of analysis of PAC-PRD stays

- Full and administrative models accurately predict the cost of stays
  - Ratio of predicted to actual costs = 1.0 or close to it for most patient groups
  - Explained high share of the variation in costs

- Conclusions
  - Can use administrative data to: (a) establish accurate payments for most groups and (b) estimate impacts
  - PAC PPS design could move forward; incorporate function into risk adjustment when uniform data are available
Analysis of 2013 PAC stays

- Re-estimated model: Confirmed that patient characteristics can accurately predict cost of stays
- All stays: Ratio of predicted to actual costs =1.0
- Patient groups: Ratio of predicted to actual costs close to 1.0 for most groups, including:
  - Severely ill
  - Ventilator care and ESRD
  - Serious mental illness
  - Most frail
  - Disabled, dual-eligible, and very old beneficiaries
Expected differences between predicted costs and actual costs

- Low therapy share of costs
- High therapy share of costs

- Stays treated in IRFs
- Stays treated in LTCHs

Actual costs reflect current therapy practices

Many similar stays are treated in lower-cost settings
Evaluate the need for additional payment adjusters

- Results support an adjustment for
  - Unusually short stays
  - High-cost outliers
- Results did not support an adjustment for
  - Rural location
  - IRF teaching
- Further study
  - High shares of low-income patients
  - Highest acuity patients
Estimates of impacts

- Assumed budget neutrality
- Did not consider changes in provider behavior
- Our estimates indicate the direction of impacts
A PAC PPS would redistribute payments across stays

- Payments would:
  - Increase for medical and medically complex stays
  - Decrease for rehabilitation care unrelated to a patient’s characteristics
- A PAC PPS would result in more uniform profitability across different types of stays
  - Would decrease incentive to prefer to treat certain patients over others
Estimated percent change in average payments under a PAC PPS for select conditions

Analysis based on 8.9 million 2013 PAC stays, with payments and costs updated to 2017. The estimates are for a fully implemented PAC PPS.
A PAC PPS would redistribute payments across settings and providers

**Payments would increase for:**
- SNFs (7%)
- Hospital-based (11%)
- Nonprofit (9%)
- Rural (3%)
- Frontier (10%)

**Payments would decrease for:**
- IRFs and LTCHs (-15%)
- Freestanding (-1%)
- For-profit (-3%)
- Urban (-1%)

Analysis based on 8.9 million 2013 PAC stays, with payments and costs updated to 2017. The estimates are for a fully implemented PAC PPS.
Impacts on an individual provider will reflect many factors

- Mix of patients treated
- The setting’s current PPS design and incentives
- Provider’s practice patterns
  - Services provided are unrelated to a patient’s care needs
- Ability to reduce costs to match payments
Implementation issue: Transition to a PAC PPS

- Transition would blend current setting-specific payments with PAC PPS rates
- Gives providers time to adjust their costs to payments but delays redistributions
- Variation in the average change in payments indicates need for a transition
  - Across stays: Wide range in change in payments
  - Across providers: Much less variation in impacts on payments
Viability of a short transition

- Inverse relationship between changes in payments and relative profitability
  - Majority of providers that would experience large decreases in payments had above-average profitability
  - Majority of providers that would experience large increases in payments had below-average profitability
- A short transition would give time for providers to adjust to new payment system yet begin redistributing payments
Implementation issue: Aggregate level of payment

- Estimated payments were 14% higher than the cost of stays, indicating the need to consider the level of payments.
- Commission recommended lowering the level of payments by 5% at the beginning of the PAC PPS.
- The average payments would remain 9% higher than the cost of all stays and 7-9% higher for most patient groups we examined.
Concurrent with a PAC PPS, align regulatory requirements for providers

- With payments based on patient characteristics, setting-specific regulations are less important
- Near-term: Begin alignment of regulations
  - Give providers flexibility to treat a broad mix of patients
- Longer-term: condition-based requirements
  - A common core set of requirements that define a baseline competency
  - Additional requirements for providers opting to treat patients with highly specialized needs
Additional policy considerations

- Companion policies to dampen FFS incentives
  - Value-based purchasing that includes quality and resource use measures
  - Readmission policy
- Define when a stay begins and ends for patients treated in place by one provider
- Standardize beneficiary cost-sharing
## Monitor provider responses and the impacts of the PAC PPS

| Quality of care | - Potentially avoidable hospital use  
|                 | - Discharge to community  
|                 | - Potentially avoidable complications, observation stays, and ED visits |
| Patient selection | - PAC use by condition or reason to treat  
|                  | - Mix of patients across providers  
|                  | - Length of stay of preceding hospital stay |
| Over or under use | - Trends in PAC use |
Periodic refinements to the PAC PPS as needed

- Practice patterns and costs are likely to change in response to PAC PPS
- Refinements over time:
  - Revise the case-mix groups and their relative weights
  - Rebase payments if the costs of care change
  - Are part of the on-going maintenance of any payment system
Conclusions

- A design based on patient characteristics is feasible
- A PAC PPS can be implemented sooner than contemplated in the IMPACT Act
- Would increase the equity of payments across different types of stays
Conclusions: Design features

- Uniform unit of service
- Uniform risk adjustment method
- Two payments for each stay that are added
  - Routine + therapy services
  - Nontherapy ancillary services
- Adjustment for home health stays
- Short-stay and high-cost outlier policies
- Uniform application of payment adjusters
Implementation: Commission recommendation

- Begin implementation in 2021 with a 3-year transition
- Incorporate functional assessment into the risk-adjustment when it becomes available
- Lower the aggregate level of payments by 5% absent prior reductions
- Concurrently, begin to align setting-specific regulatory requirements
- Periodically revise and rebase payments to keep payments aligned with costs of care
The recommendation reflects the Commission’s concern that payment reforms in PAC settings have been too slow.

The Commission continues its work on PAC-PPS:
- Align regulatory requirements
- Sequential PAC stays