Association between CMS Price Transparency Compliance and Hospital Characteristics

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Introduction

- Total healthcare spending amounts to ~19% of U.S. GDP, projected to grow at average annual rate of 5.4%
- Centers for Medicare and Medicaid Services (CMS) introduced price transparency regulations effective January 1, 2021
- Require machine-readable file listing payer-specific negotiated prices, discounted cash prices, and standard charges for all inpatient service
- Penalties for non-compliance: $300 per day for small hospitals with a bed count of 30 or fewer, and $10 per bed per day for hospitals with a bed count greater than 30, maximum daily amount $5,500
- Previous studies have found low compliance (~40%) associated with IT-preparedness, for-profit status, hospital system affiliation, size
- Coronavirus Aid, Relief, and Economic Security (CARES) Act Provider Relief Fund provided $175 billion to reimburse hospitals of COVID-19 related costs
- We connect compliance with federal funding and hospital for-profit status to investigate impact of compliance on hospital financials

Objectives

- Evaluate overall rate of compliance across states and hospital categories
- Investigate association with compliance: federal funding, financial, and operational features

Methods

- Cross-sectional retrospective study of short-term acute care hospitals
- HCRIS reports and publicly available data used to compile hospital-specific features including for-profit status, teaching status, bed size, wage index, total margins, employee FTEs, and CARES Act payment standardized by patient days.
- State fixed-effects and stratified (hospital for-profit status) logistic regression were used to evaluate the association between compliance and hospital financial and operational characteristics
- Marginal Effects (at mean)

<table>
<thead>
<tr>
<th>Compliant</th>
<th>Non-Compliant</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2064</td>
<td>62.41%</td>
<td>1243</td>
</tr>
<tr>
<td>Teaching Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>1415</td>
<td>68.56%</td>
</tr>
<tr>
<td>No</td>
<td>649</td>
<td>31.44%</td>
</tr>
<tr>
<td>Hospital Category</td>
<td></td>
<td></td>
</tr>
<tr>
<td>For-Profit</td>
<td>452</td>
<td>21.90%</td>
</tr>
<tr>
<td>Government</td>
<td>379</td>
<td>18.36%</td>
</tr>
<tr>
<td>Non-Profit</td>
<td>1233</td>
<td>59.74%</td>
</tr>
</tbody>
</table>

Of 3,307 short term acute care hospitals,
- 2,055 (62.41%) were compliant
- 1,243 (37.59%) were non-compliant

For-profit hospitals are more compliant than non-profit (p<0.01) and government (p<0.01) hospitals

Price Transparency Rule Compliance

Three states had 100% compliance
- (Rhode Island, Hawaii, and Washington D.C.)
Two states had lower than 40% compliance
- (Washington and Maryland)

Association of Hospital Characteristics with Compliance

VARIABLES | Marginal Effects (at mean) | Government | For-Profit | Non-Profit |
-----------|---------------------------|------------|------------|------------|
log CARES Act Payment Per Patient Days* | 0.009 | 0.032*** | 0.011 |
| (0.033) | (0.012) | (0.013) |
Total Margin | 0.011 | -0.317** | -0.218** |
| (0.033) | (0.136) | (0.106) |
1000 Employee FTEs* | -0.015 | 0.033 | 0.003 |
| (0.016) | (0.033) | (0.007) |
Teaching Status | 0.238** | -0.077 | -0.019 |
| (0.962) | (0.056) | (0.026) |
Observations | 581 | 667 | 2019 |

Standard errors in parentheses.
* p < 0.1 ** p < 0.05 ***p < 0.01

Lower compliance was strongly associated with:
- Higher margins—non-profit and for-profit hospitals and as a whole

Compliance was not associated with:
- CARES Act Funding—across all hospitals
- Teaching Status—across all hospitals

- ~62% of hospitals were compliant with price transparency regulations
- Strong association between profitability and compliance
- Price transparency may be an important mechanism for less costly and equitable healthcare
- Using CARES Act funding as a proxy, compliance does not seem to affect the level of federal funding hospitals receive
- Need for higher penalties for noncompliance

References
