Advanced Medical Imaging in Privately Insured Patients Recent Trends in Utilization and Payments

https://hdl.handle.net/2144/6382

Boston University
Advanced Medical Imaging in Privately Insured Patients

Recent Trends in Utilization and Payments

Michal Horný, James F. Burgess, Jedediah Horwitt, Alan B. Cohen

Introduction

- Advanced medical imaging has been identified as the key factor driving rapid cost growth in health care over the past two decades, while expenditures for medical imaging account for 7.5 to 8.0 % of total health care spending.
- Recent studies report that the utilization growth rate in non-invasive diagnostic imaging is slowing down and that there is a substantial reduction in payments for imaging procedures in Medicare Part B fee-for-service population.
- No research has focused on the corresponding trends in population with private insurance (approx. 55 % of the U.S. population).
- A change in payments for imaging procedures might have a noticeable influence on total U.S. health care spending.
- Understanding the situation of medical imaging is necessary to target health policy addressing the increasing costs.

Further, the combined CT scans of the abdomen and pelvis were previously reported and billed separately until the introduction of the new CPT codes for the combined procedures in January 2011, which have been motivated by an effort to eliminate double payments for similar procedures conducted at the same time.

Effects of the introduced policy have not yet been assessed.

Findings

- We observe utilization growth slow-down between the years of 2007 and 2009 in all four modalities, a decrease in 2010, and a subsequent return to utilization growth in 2011.

The increasing pattern in payments is even more pronounced, since the average payments per procedure increased gradually between 2007 and 2009 (see Table 1).

In 2010, we observed a dropdown in payments for CT, MRI and PET procedures, but they did not drop below the 2007 level for any of the modalities. The increase in average payment for an ultrasound procedure offset the decrease in ultrasound utilization.

Data & Methods

- We used relevant CPT codes to identify inpatient and outpatient computed tomography (CT), magnetic resonance imaging (MRI), positron emission tomography (PET), and ultrasound procedures in the Truven Health Analytics MarketScan Commercial Claims and Encounters databases of 2007 – 2011.

Findings

- In 2011, average payments per procedure went up substantially for all four modalities, and therefore growth in payments returned to the pace before 2010.
- Payments for medical imaging were growing at a similar pace as payments for health care in general.

Table 1: Average payment in $ per single procedure

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>CT</td>
<td>471</td>
<td>510</td>
<td>506</td>
<td>555</td>
<td>741</td>
</tr>
<tr>
<td>Abdomen only</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pelvis only</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sum of separate procedures</td>
<td>1,003</td>
<td>1,086</td>
<td>1,179</td>
<td>1,175</td>
<td>1,216</td>
</tr>
<tr>
<td>Combined CT of abdomen and pelvis</td>
<td>981</td>
<td>1,064</td>
<td>1,162</td>
<td>1,154</td>
<td>1,204</td>
</tr>
<tr>
<td>Difference</td>
<td>-22</td>
<td>-22</td>
<td>-17</td>
<td>-21</td>
<td>-25</td>
</tr>
<tr>
<td>MRI</td>
<td>805</td>
<td>838</td>
<td>878</td>
<td>876</td>
<td>965</td>
</tr>
<tr>
<td>PET</td>
<td>1,904</td>
<td>1,963</td>
<td>1,990</td>
<td>2,031</td>
<td>2,283</td>
</tr>
<tr>
<td>Ultrasound</td>
<td>159</td>
<td>169</td>
<td>177</td>
<td>182</td>
<td>199</td>
</tr>
</tbody>
</table>

Physicians charged only slightly less when reporting a single large payment for the combined abdomen and pelvis CT scan than when they previously charged higher payments for separate procedures.

Conclusions

- Our findings from a large sample of patients with private insurance revealed different patterns from those found within the Medicare population.
- Growth in payments for medical imaging in patients with private insurance is faster than the growth in their utilization.
- Successful policies adopted in Medicare (e.g. the Deficit Reduction Act of 2005) should be considered for general application.
- The effort to cut payments for doubled outpatient CT scans was not successful.

Acknowledgement

Funding of this research was provided by the Boston University Health Policy Institute.