Congressional request on health care provider consolidation: Does the 340B program create incentives for participating hospitals to use more expensive drugs?

Kim Neuman, Nancy Ray, Shinobu Suzuki
January 17, 2020
August 2018 request for information on consolidation and 340B

- Request included four questions on hospital consolidation (addressed at November 2019 meeting)

- Request included question on hospital financial incentives under the 340B Drug Pricing Program
  - Can the availability of 340B drug discounts create incentives for hospitals to choose more expensive products in some cases?
  - If so, what would be the impact on Medicare patients’ cost-sharing for such drugs?
Background on 340B Drug Pricing Program

- 340B hospitals can purchase outpatient drugs at substantial discounts
- 340B ceiling price = AMP – basic rebate – inflation rebate
- Basic rebate
  - Brands: Greater of 23.1% AMP or (AMP-best price )
  - Generic: 13% AMP
- Inflation rebate
  - Difference between actual AMP and what AMP would have been if it grew at rate of CPI-U between a base year and current year

Note: AMP (average manufacturer price), CPI-U (consumer price index for urban consumers)
Background on Medicare payment for drugs

- Medicare pays for Part B drugs based on the manufacturer’s average sales price (ASP)
- Payment for Part B covered separately paid drugs
  - Before 2018: ASP+6% for 340B and non-340B hospitals*
  - 2018 onward: ASP - 22.5% for some Part B drugs furnished by 340B hospitals (excludes new drugs with pass-through status)
- Some 340B hospitals receive rebates from Part D drugs dispensed through in-house or contract pharmacies

*Note: Prior to 2013, the payment rate for separately payable drugs without pass-through status in outpatient hospitals was less than ASP+6% in some years (e.g., ASP+4% in 2009-2010, and 2012 and ASP+5% in 2011).
How might the 340B program have influenced drug spending?

- Potential incentives for selection of higher-priced drugs
  - If higher-priced products offer higher margins than lower-priced therapeutic alternatives, then 340B could create incentives for selection of higher-priced products

- Potential incentives to furnish more drugs
  - General profitability of drugs for 340B providers might encourage use of more drugs
Empirical evidence about 340B effects on drug selection is limited

- 340B prices are generally confidential
- OIG found that 340B hospitals earned high margins on Part B cancer drugs but that margins varied
- Some lower-priced drugs offered higher margins than higher-priced drugs (and vice-versa)

<table>
<thead>
<tr>
<th>Cancer drug</th>
<th>2013 Medicare payment per beneficiary</th>
<th>Amount Medicare payment exceeds 340B ceiling price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$20,517</td>
<td>$5,749</td>
</tr>
<tr>
<td>2</td>
<td>$18,506</td>
<td>$9,238</td>
</tr>
<tr>
<td>3</td>
<td>$22,573</td>
<td>$9,162</td>
</tr>
<tr>
<td>4</td>
<td>$20,044</td>
<td>$11,130</td>
</tr>
<tr>
<td>5</td>
<td>$27,207</td>
<td>$13,336</td>
</tr>
</tbody>
</table>

Other studies generally found higher cancer drug spending at 340B hospitals versus their counterparts

- GAO found per beneficiary Medicare spending in 2012 for cancer drugs was 44% greater at 340B DSH hospitals compared to non-340B DSH hospitals
- Health status and hospitals’ teaching status did not account for higher cancer drug spending by 340B DSH hospitals
- Stakeholders have critiqued studies for not sufficiently controlling for differences in mix of patients

Source: GAO June 2015.
Key features of MedPAC’s analysis about 340B effects

- Question: Has 340B status been associated with higher cancer drug spending?
- Average cancer drug spending per month
  - Parts B and D spending
  - Chemotherapy and supportive drugs
- Analyses by 5 types of cancer (breast, colorectal, prostate, lung, leukemia and lymphoma)
- Included beneficiaries treated by 340B hospitals, non-340B hospitals, and physician offices
- Analysis pre-2018 (before 340B payment change)
Factors that may affect cancer drug spending

- Type of cancer
  - Average drug spending varies by cancer type, from $1,800 (prostate) to $5,200 (leukemia and lymphoma) per month

- Location of care
  - Compared to non-340B hospitals, average spending by cancer type at 340B hospitals is 2% to 5% higher
  - Compared to physician offices, average spending by cancer type at 340B hospitals generally ranges from 1% lower to 7% higher

- 340B hospitals are more likely to be larger, teaching hospitals, and care for patients who are young, disabled, and receive Part D’s LIS

Note: LIS (low-income subsidy). Data are preliminary and subject to change.
Source: Acumen, LLC, analysis for MedPAC.
What happens when a hospital newly gains 340B status?

<table>
<thead>
<tr>
<th>By type of cancer</th>
<th>Breast</th>
<th>Colorectal</th>
<th>Prostate</th>
<th>Lung</th>
<th>Leukemia-lymphoma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of hospitals</td>
<td>1,204</td>
<td>1,116</td>
<td>1,213</td>
<td>1,184</td>
<td>1,216</td>
</tr>
<tr>
<td>Percent of hospitals by 340B status</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gained 340B status</td>
<td>11.0%</td>
<td>10.8%</td>
<td>10.6%</td>
<td>11.4%</td>
<td>10.8%</td>
</tr>
<tr>
<td>Always 340B</td>
<td>52.9</td>
<td>54.3</td>
<td>51.6</td>
<td>52.9</td>
<td>51.2</td>
</tr>
<tr>
<td>Never 340B</td>
<td>34.5</td>
<td>33.2</td>
<td>35.9</td>
<td>34.0</td>
<td>36.0</td>
</tr>
</tbody>
</table>

Increase in average cancer drug spending per beneficiary month between 2013 and 2017

<table>
<thead>
<tr>
<th></th>
<th>Gained 340B status</th>
<th>Always 340B</th>
<th>Never 340B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth in cancer drug spending at newly 340B hospitals</td>
<td>57%</td>
<td>60</td>
<td>58</td>
</tr>
<tr>
<td>No consistent pattern relative to other hospitals</td>
<td>26%</td>
<td>19</td>
<td>20</td>
</tr>
<tr>
<td>Does not suggest 340B status increased costs among hospitals that joined 340B</td>
<td>53%</td>
<td>45</td>
<td>46</td>
</tr>
<tr>
<td>Caveats: small sample sizes, period examined (2013-2017) may not have captured full effects</td>
<td>66%</td>
<td>82</td>
<td>73</td>
</tr>
<tr>
<td>39%</td>
<td>39</td>
<td>27</td>
<td></td>
</tr>
</tbody>
</table>

Note: Results are preliminary and subject to change. Source: Acumen, LLC, analysis for MedPAC.
What happens when more patients are treated at 340B hospitals?

- Regression analysis at MSA level suggests modest effect for some cancer types
  - Addresses potential patient selection by 340B status
  - 340B effects adjusted for effects of provider consolidation
- OLS regression with MSA as the unit of analysis
  - Separate regression for 5 cancer types, 5 years of data
  - Key variables: 340B market share and HOPD market share
  - Other variables:
    - General trends in oncology drug spending over time (year effects)
    - Patient demographics, other systematic difference across MSAs*

Note: MSA (Metropolitan statistical area), OLS (ordinary least squares), HOPD (hospital outpatient department). *The model included a fixed effect for each MSA, which allows us to take advantage of the changes in the 340B market share within each MSA to measure the effects of the 340B program.
340B associated with higher spending for some cancer types

<table>
<thead>
<tr>
<th>Type of cancer</th>
<th>Breast</th>
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<th>Prostate</th>
<th>Lung</th>
<th>Leukemia-lymphoma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select variables</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>340B market share</td>
<td>$256</td>
<td>$330</td>
<td>$310*</td>
<td>$313*</td>
<td>$262</td>
</tr>
<tr>
<td>As % of 2013 spending</td>
<td>9%</td>
<td>12%</td>
<td>28%</td>
<td>11%</td>
<td>7%</td>
</tr>
<tr>
<td>General trend in oncology spending (2017 relative to 2009)</td>
<td>$2,069*</td>
<td>$271*</td>
<td>$1,105*</td>
<td>$2,410*</td>
<td>$2,362*</td>
</tr>
<tr>
<td>Percent of patients under age 65</td>
<td>$2,668*</td>
<td>$1,270*</td>
<td>$1,528*</td>
<td>$679</td>
<td>$1,220*</td>
</tr>
</tbody>
</table>

- Effects of 340B market share statistically significant for 2 out of 5 cancer types (prostate and lung), effects of HOPD market share not statistically significant
- Effects of general trend in oncology spending and age (younger) were generally large and statistically significant

Note: Results are preliminary and subject to change. *Statistically significant at the 0.05 level.
Source: Acumen, LLC, analysis for MedPAC.
Reason for higher spending at 340B hospitals appears to be specific to the type of cancer

- Lung cancer
  - Higher price per unit for Part B drugs
  - Larger share of patients received new immuno-oncology therapies

- Prostate cancer
  - Higher price per unit for both Part B and Part D drugs
  - More Part D prescriptions per patient (8.1 vs. 7.5 among non-340B)

- BUT we are unable to attribute these findings to incentives created by 340B discounts
Key takeaways on effects of 340B program on spending

- Evidence of higher drug spending at 340B hospitals for some cancer types
- Effects on cancer drug spending are likely to be idiosyncratic and not generalizable to other cancers or conditions
- Overall effects on cost sharing for cancer patients is likely to be small, if any, depending on cancer and the patient’s supplemental coverage
Discussion

- Questions on material presented or revised content from November?
- Guidance on finalizing report to meet the March 2020 deadline