Generosity of Drug Benefits and Essential Cardiovascular Medication Use among Medicare Retirees

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Retiree Drug Coverage

- Provides drug insurance for one third of elderly Medicare beneficiaries
- Coverage sponsored by own/spouse’s former employer
- Typically more generous than the new Medicare standard drug plan (Medicare Part D)
- Trend of employers scaling back or terminating retiree drug benefits

Retiree Drug Coverage: Post Part D

- Medicare Part D may accelerate reductions in retiree drug coverage
- May reduce political resistance for employers considering dropping coverage
- Part D may now serve as a concrete example of a “floor” or minimum level of generosity for retiree drug benefits for employers planning to continue offering benefits
  - MMA includes tax free subsidy to employers who continue to offer retiree drug coverage which is, at a minimum, actuarially equivalent to standard Part D

Implications of Potential Reductions in Retiree Drug Coverage

- Sizeable savings for employers
- Increased out-of-pocket drug costs for many retirees
  - How would an increase in out-of-pocket share for prescription expenditures impact essential medication use in Medicare retirees?

Objective

- Project how a change in drug coverage generosity may impact medication use in Medicare retirees
  - Use existing variation in retiree drug benefits
  - Focus on those eligible for recommended chronic medications
    - statin use in retirees with coronary heart disease and hyperlipidemia (CHD/lipid)
    - angiotensin converting enzyme (ACE) inhibitor or angiotensin receptor blocker (ARB) use in retirees with congestive heart failure (CHF)

Methods: Data Source

- 1997-2000 Medicare Current Beneficiary Survey
  - Nationally representative survey of Medicare beneficiaries
  - Linked to Medicare claims data (Part A & B)
- Prescription drug data are based on self-reports of prescriptions filled and refilled during the thrice-yearly interviews
Methods: Study Sample

- Study sample frame:
  - Community-dwelling FFS Medicare beneficiaries
  - Aged 65 years or older
  - Supplemental health insurance from own/spouse’s former employer
  - 1997 to 2000

- Two disease groups studied:
  - CHD/lipid [N=1,220]
  - CHF [N=1,147]

Methods: Variables

- Dependent variables
  - For CHD/lipid group: Any statin use
  - For CHF group: Any ACE-inhibitor/ARB use

- Independent variable of interest
  - Generosity of drug coverage
    - Percentage of beneficiary’s annual drug expenditure paid by employer
    - 4 categories: 0%, 1-50%, 51-75%, 76-100%

Methods: Variables

- Control variables
  - Age, gender, race, income
  - Geographic region and metropolitan status
  - Smoking status
  - Any cardiologist visit
  - Contraindications to drug therapy
  - Cardiovascular risk factors (e.g. hypertension, diabetes)
  - Other chronic conditions
  - Number of disease-related physician visits
  - Any disease-related hospitalization
  - Self-reported health status
  - Survey year of observation

Methods: Analysis

- Estimated logistic regression in each disease group

- Projected change in recommended medication use for a hypothetical change of generosity levels to Medicare Part D levels
  - Projected annual drug spending to 2006
  - Imposed the Part D benefit structure on these spending estimates to compute the new levels of drug coverage generosity

Distribution of Retirees by Generosity of Drug Coverage

<table>
<thead>
<tr>
<th>Generosity of Drug Coverage</th>
<th>CHD/lipid group (N=1,120)</th>
<th>CHF group (N=1,147)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td>28.2</td>
<td>32.6</td>
</tr>
<tr>
<td>1%-50%</td>
<td>7.1</td>
<td>12.2</td>
</tr>
<tr>
<td>51%-75%</td>
<td>9.9</td>
<td>11.3</td>
</tr>
<tr>
<td>76%-100%</td>
<td>44.6</td>
<td>54.8</td>
</tr>
</tbody>
</table>

Adjusted Odds Ratios for Recommended Cardiovascular Medication Use

<table>
<thead>
<tr>
<th>Generosity of Drug Coverage</th>
<th>CHD/lipid group</th>
<th>CHF group</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td>0.34</td>
<td>0.35</td>
</tr>
<tr>
<td>1%-50%</td>
<td>0.44</td>
<td>0.51</td>
</tr>
<tr>
<td>51%-75%</td>
<td>0.48</td>
<td>0.63</td>
</tr>
<tr>
<td>76%-100%</td>
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</tbody>
</table>

Reference category: 76%-100%
Predicted Statin Use in CHD/Lipid Group

Mean Generosity Levels in CHD/Lipid Group

<table>
<thead>
<tr>
<th>Baseline Generosity Group</th>
<th>Under existing retiree benefit structure</th>
<th>Under standard Part D like structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td>0.0</td>
<td>40.0</td>
</tr>
<tr>
<td>1-50%</td>
<td>33.6</td>
<td>48.5</td>
</tr>
<tr>
<td>51-75%</td>
<td>65.9</td>
<td>49.3</td>
</tr>
<tr>
<td>76-100%</td>
<td>85.0</td>
<td>49.7</td>
</tr>
<tr>
<td>Overall</td>
<td>68.4</td>
<td>48.8</td>
</tr>
</tbody>
</table>

Predicted ACE-I/ARB Use in CHF Group

Conclusions and Policy Implications

- Only half to two-thirds of eligible retirees used recommended cardiovascular medications
- The rates of use varied substantially based on the generosity of drug benefits among retirees
  - Retirees with no drug benefits had the lowest rates of use followed by those with limited/moderate drug benefits
  - Only those with the most generous drug benefits had substantially higher rates of use

Limitations

- Generosity of drug coverage measure
  - Ex post rather than an ex ante measure
- Potential for selection bias
- Modeling exercise assumptions
Conclusions and Policy Implications

- Higher rates of use projected for the retirees who currently have poor drug benefit coverage
  - A small group of retirees

- Lower rates of use projected for retirees who currently have generous drug benefits
  - The great majority of retirees

- On average, we project Part D generosity levels could lead to a reduction in use of recommended medications for retirees in these vulnerable disease groups

Conclusions and Policy Implications

- The MMA does encourage continued employer coverage of retiree health benefits
  - Two recent surveys indicate that many employers will continue to provide coverage and take advantage of MMA subsidies in 2006

- However, one survey also indicated that although employers “did not anticipate reducing their drug coverage in view of new coverage offered through the MMA, increasing health care costs might cause them to do so in the future.”

Conclusions and Policy Implications

- How employers will ultimately behave will only become clear over the next few years.

- It will be critical to monitor employer response to Part D over the coming years and determine the extent to which access to effective medications and potentially the health of the nation’s retired seniors may be adversely affected