Implications of Using Reinsurance Programs to Stabilize the Individual Market

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Outline

• Reinsurance overview
• Method and Data
• Results
  – Risk selection incentives
  – Premiums
  – Budgetary costs
  – Change in uninsurance
• Discussion
What is Reinsurance?

• Reimburses insurer for a portion of the costs of the most expensive enrollees

• A common proposal would reinsurance 75% of costs above the threshold for the top 1% of spenders.
  – The 1% threshold is about $35,000. This group accounts for about 25% of health spending.

• States that have public reinsurance programs include NY, AZ, CT, ID, MA, NH, NM.
Methodology

• Medical Expenditures Panel Survey
• Estimated several models to predict 2004 expenditures using 2003 demographic characteristics and medical conditions
  – Used predictions to create four risk pools
• Calculated reinsurance threshold levels using 2004 data
• Calculated average subsidy for each risk pool based on actual expenditures
  – Subsidy amount was 75% of expenditures above reinsurance threshold
Medical Conditions

• **Priority conditions**
  – Individual was asked whether he/she had ever been told by a doctor or other health care professional that they have (condition)
    • Diabetes
    • Asthma
    • High blood pressure
    • Heart disease
      – coronary
      – angina or angina pectoris
      – heart attack or myocardial infarction
      – stroke or transient ischemic attack
      – other
    • Emphysema
    • Joint pain
    • Arthritis

• **Enumerated conditions**
  – Individual lists the medical conditions they had since the last interview
  – MEPS coded the conditions using ICD-9-CM codes (235 possible conditions)
## 2004 MEPS Cross-Section Expenditure Levels

<table>
<thead>
<tr>
<th>Expenditures Levels</th>
<th>Expenditures ($2007)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>3,004</td>
</tr>
<tr>
<td>Minimum*</td>
<td>0</td>
</tr>
<tr>
<td>50th percentile</td>
<td>767</td>
</tr>
<tr>
<td>90th percentile</td>
<td>7,166</td>
</tr>
<tr>
<td>95th percentile</td>
<td>12,144</td>
</tr>
<tr>
<td>97th percentile</td>
<td>16,604</td>
</tr>
<tr>
<td>99th percentile</td>
<td>34,659</td>
</tr>
<tr>
<td>Maximum</td>
<td>272,440</td>
</tr>
</tbody>
</table>

*17.5% of sample had zero expenditures

Source: 2004 MEPS (20,197 individuals under 65 with no public insurance)
## 2003-2004 MEPS Panel Sample Size

<table>
<thead>
<tr>
<th>2003-2004 MEPS Panel</th>
<th>Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total sample</td>
<td>16,256</td>
</tr>
<tr>
<td>Under 65</td>
<td>13,786</td>
</tr>
<tr>
<td>Under 65, no public insurance</td>
<td>9,760</td>
</tr>
<tr>
<td>Under 65, no public insurance, non-missing priority conditions</td>
<td>9,589</td>
</tr>
</tbody>
</table>

Source: 2003-2004 MEPS
Expected Expenditures and Community Rated (CR) Premiums per Enrollee by Risk Group

Source: Based on 2003-2004 MEPS
Expected Expenditures and Community Rated (CR) Premiums per Enrollee by Reinsurance Threshold and Risk Group

Source: Based on 2003-2004 MEPS
Expected Profit (or Loss) per Enrollee Under No Reinsurance by Risk Group

Source: Based on 2003-2004 MEPS

DRAFT - PRELIMINARY RESULTS
Expected Profit (or Loss) per Enrollee by Reinsurance Threshold and Risk Group

Source: Based on 2003-2004 MEPS

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Expected Profit (or Loss) per Enrollee by Reinsurance Threshold and Risk Group (20 – 24 year olds only)

Source: Based on 2003-2004 MEPS

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Expected Profit (or Loss) per Enrollee by Reinsurance Threshold and Risk Group (60 – 64 year olds only)

Source: Based on 2003-2004 MEPS

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State Budget Outlays and Reduction in Uninsurance by Reinsurance Threshold

<table>
<thead>
<tr>
<th>Reinsurance Threshold</th>
<th>Budget (mn)</th>
<th>Reduction in Premium</th>
<th>Reduction in Uninsurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1%</td>
<td>$495</td>
<td>7%</td>
<td>0.7%</td>
</tr>
<tr>
<td>3%</td>
<td>$1,039</td>
<td>14%</td>
<td>1.4%</td>
</tr>
<tr>
<td>5%</td>
<td>$1,354</td>
<td>19%</td>
<td>1.9%</td>
</tr>
<tr>
<td>10%</td>
<td>$1,979</td>
<td>27%</td>
<td>2.7%</td>
</tr>
</tbody>
</table>

Assumes 2.7 million people in the individual market and a takeup factor of 0.1.

Source: Based on 2003-2004 MEPS
Study Limitations

• Do not know severity of medical conditions and how well they are managed
  – General findings should not change—more severe and less-managed conditions would increase predicted expenditure variance

• Do not exactly replicate underwriting process—insurers have more historic data and supplement quantitative approach with qualitative information
  – Again, predicted expenditure variance likely to increase
Limitations and Potential of Typical Reinsurance Programs

• Limitations
  – Insurers still have strong incentives to risk select
  – Large budgetary cost to lower premiums, inefficiently targeted by income
  – Insurers have reduced cost containment incentives…for exactly the expensive cases we worry most about

• Potential
  – May reduce risk premiums of small insurers (but even small insurers can probably diversify away much of this risk)
  – Combining reinsurance with diagnosis-based risk-adjustment programs addresses these limitations