The Healthcare Trilemma

Amitabh Chandra
HARVARD and the NBER
• Uninsurance

• Provider Incentives
  • Misalignment of Quality and Costs
  • Adoption of low value technologies

• Incomplete Institutions
  • Tradeoff between whom to cover and what to cover
Relationship Between Quality And Medicare Spending, As Expressed By Overall Quality Ranking, 2000–2001

Overall quality ranking

1

11

21

31

41

51

Annual Medicare spending per beneficiary (dollars)
Patients Receiving Procedure

Benefit from Procedure

Angioplasty within 2 hours of AMI

Angioplasty within 2 days of AMI

Angioplasty for Stable Coronary Disease
A Comparison of Coronary Angioplasty with Fibrinolytic Therapy in Acute Myocardial Infarction


ABSTRACT

BACKGROUND
For the treatment of myocardial infarction with ST-segment elevation, primary angioplasty is considered superior to fibrinolysis for patients who are admitted to hospitals with angioplasty facilities. Whether this benefit is maintained for patients who require transportation from a community hospital to a center where invasive treatment is available is uncertain.

CONCLUSIONS
A strategy for reperfusion involving the transfer of patients to an invasive-treatment center for primary angioplasty is superior to on-site fibrinolysis, provided that the transfer takes two hours or less.
CONCLUSIONS

PCI did not reduce the occurrence of death, reinfarction, or heart failure, and there was a trend toward excess reinfarction during 4 years of follow-up in stable patients with occlusion of the infarct-related artery 3 to 28 days after myocardial infarction. (ClinicalTrials.gov number, NCT00004562.)
Optimal Medical Therapy with or without PCI for Stable Coronary Disease

William E. Boden, M.D., Robert A. O'Rourke, M.D., Koon K. Teo, M.B., B.Ch., Ph.D., Pamela M. Hartigan, Ph.D., David J. Maron, M.D., William A. Kostuk, M.D., Merrill Knudtson, M.D., Marcin Dada, M.D., Paul Casperson, Ph.D., Crystal L. Harris, Pharm.D., Bernard R. Chaitman, M.D., Leslee Shaw, Ph.D., Gilbert Gosselin, M.D., Shah Nawaz, M.D., Lawrence M. Title, M.D., Gerald Gau, M.D., Alvin S. Blaustein, M.D., David C. Booth, M.D., Eric R. Bates, M.D., John A. Spertus, M.D., M.P.H., Daniel S. Berman, M.D., G.B. John Mancini, M.D., and William S. Weintraub, M.D., for the COURAGE Trial Research Group

ABSTRACT

BACKGROUND
In patients with stable coronary artery disease, it remains unclear whether an initial management strategy of percutaneous coronary intervention (PCI) with intensive pharmacologic therapy and lifestyle intervention (optimal medical therapy) is superior to optimal medical therapy alone in reducing the risk of cardiovascular events.

CONCLUSIONS
As an initial management strategy in patients with stable coronary artery disease, PCI did not reduce the risk of death, myocardial infarction, or other major cardiovascular events when added to optimal medical therapy. (ClinicalTrials.gov number, NCT00007657.)
Effect of PCI on Quality of Life in Patients with Stable Coronary Disease

William S. Weintraub, M.D., John A. Spertus, M.D., M.P.H., Paul Kolm, Ph.D., David J. Maron, M.D., Zefeng Zhang, M.D., Ph.D., Claudine Jurkovitz, M.D., M.P.H, Wei Zhang, M.S., Pamela M. Hartigan, Ph.D., Cheryl Lewis, R.N., Emir Veledar, Ph.D., Jim Bowen, B.S., Sandra B. Dunbar, D.S.N., Christi Deaton, Ph.D., Stanley Kaufman, M.D., Robert A. O’Rourke, M.D., Ron Goeree, M.S., Paul G. Barnett, Ph.D., Koon K. Teo, M.D., and William E. Boden, M.D., for the COURAGE Trial Research Group*

ABSTRACT

BACKGROUND
It has not been clearly established whether percutaneous coronary intervention (PCI) can provide an incremental benefit in quality of life over that provided by optimal medical therapy among patients with chronic coronary artery disease.

CONCLUSIONS
Among patients with stable angina, both those treated with PCI and those treated with optimal medical therapy alone had marked improvements in health status during follow-up. The PCI group had small, but significant, incremental benefits that disappeared by 36 months. (ClinicalTrials.gov number, NCT00007657.)
Patients Receiving Procedure

0

Benefit from Procedure

100 percent

Angioplasty within 2 hours of AMI

OVERUSE?

Angioplasty within 2 days of AMI

Angioplasty for Stable Coronary Disease

Patients Receiving Procedure

0

100 percent
• Uninsurance
• Provider Incentives
  • Misalignment of Quality and Costs
  • Adoption of low value technologies
• Incomplete Institutions
  • Tradeoff between whom to cover and what to cover
Cost: $90,000 per year
Benefit: < 3 months
### Table 1. Annual Cost of Expanded Insurance Coverage, According to the Amount of the Annual Premium.*

<table>
<thead>
<tr>
<th>No. of Insured People</th>
<th>$2,800 Premium (10th Percentile)</th>
<th>$3,500 Premium (25th Percentile)</th>
<th>$4,200 Premium (Median)</th>
<th>$5,100 Premium (75th Percentile)</th>
<th>$6,000 Premium (90th Percentile)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 million</td>
<td>28</td>
<td>35</td>
<td>42</td>
<td>51</td>
<td>60</td>
</tr>
<tr>
<td>20 million</td>
<td>56</td>
<td>70</td>
<td>84</td>
<td>102</td>
<td>120</td>
</tr>
<tr>
<td>30 million</td>
<td>84</td>
<td>105</td>
<td>126</td>
<td>153</td>
<td>180</td>
</tr>
<tr>
<td>40 million</td>
<td>112</td>
<td>140</td>
<td>168</td>
<td>204</td>
<td>240</td>
</tr>
<tr>
<td>50 million</td>
<td>140</td>
<td>175</td>
<td>210</td>
<td>255</td>
<td>300</td>
</tr>
</tbody>
</table>

*Data regarding annual premiums are from the 2008 Medical Expenditure Panel Survey (conducted by the Agency for Healthcare Research and Quality), which reports premiums for individual health insurance coverage through an employer with at least 50 workers.*

Tradeoff between whom to cover and what to cover.
Social Security is Grenada. Medicare is Vietnam.

Douglas Holtz-Eakin
• Measurement matters
• Quality
• Costs
• Value
• We cannot cover everything and everyone
• Controlling ‘grey area’ usage is key for managing cost-growth