The paradox of plenty
*Inefficiency in U.S. health care -- and what we can do about it*

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How can the best medical care in the world cost twice as much as the best medical care in the world?

Uwe Reinhardt
# The paradox of plenty

*What do higher spending regions -- and systems -- get?*

| Content / Quality of Care<sup>1,2</sup> | Technical quality worse  
| No more elective surgery  
| More supply-sensitive care | More hospital stays, visits, specialist use, tests  
| Health Outcomes<sup>1,2</sup> | No better, possibly higher mortality  
| No better function  
| Physician’s perceptions<sup>5</sup> | Worse communication among physicians  
| Greater difficulty ensuring continuity of care  
| Greater difficulty providing high quality care  
| Patient-perceived quality<sup>1,3</sup> | Lower satisfaction with hospital care  
| Worse access to primary care  
| Trends over time<sup>4</sup> | Greater growth in per-capita resource use  
| Lower gains in survival (following AMI)  

(2) Health Affairs web exclusives, October 7, 2004  
(3) Health Affairs, web exclusives, Nov 16, 2005  
(4) Health Affairs web exclusives, Feb 7, 2006  
Major points

Higher spending across regions and physician groups is largely due to overuse of *supply-sensitive services* -- hospital and ICU stays, MD visits, specialist consults, imaging and testing; and more is worse.
What’s going on?
What explains the differences in practice?

Patient preferences -- can’t explain the differences observed
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Capacity and payment -- are important drivers
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Capacity and payment -- are important drivers

<table>
<thead>
<tr>
<th>Regional Spending</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital Beds</td>
<td>2.0</td>
<td>4.0</td>
</tr>
<tr>
<td>Medical Specialists</td>
<td>32% higher</td>
<td>65% higher</td>
</tr>
</tbody>
</table>

1.0 3.0 4.0
10 40 50
What’s going on?
What explains the differences in practice?

Patient preferences -- can’t explain the differences observed

Capacity and payment -- are important drivers

Whatever capacity is in place will be fully utilized

Cardiologist visits per 1,000 Medicare Enrollees

Cardiologists per 100,000 Residents

$R^2 = 0.49$
What’s going on?
What explains the differences in practice?

Patient preferences -- can’t explain the differences observed

Capacity and payment -- are important drivers

Clinical decision-making -- in the gray areas -- is critical
Putting together a story…

Clinical evidence (e.g. RCTs, guidelines) is a critically important -- but limited -- influence on clinical decision-making.

Physicians practice within a local organizational context and policy environment that profoundly influences their decision-making.

Current payment system fosters growth and ensures that existing (and new) capacity is fully utilized.

Consequence: *reasonable* individual clinical and local decisions lead, in aggregate, to higher costs -- and inadvertently -- to worse outcomes.

*More tests and “incidentalomas”*  
*More time in the hospital*  
*Greater complexity (more MDs)*
Major points

Higher spending across regions and physician groups is largely due to overuse of supply-sensitive services -- hospital and ICU stays, MD visits, specialist consults; and more is worse.

Overuse is largely a consequence of reasonable differences in clinical judgment (not errors) that arise in response to local organizational attributes (capacity, clinical culture) and policies promoting fragmentation, growth and more care.
What about current policy initiatives?

Focus largely on individual providers and their silos

Face substantial technical challenges

- Limited scope of measurement risks making bad apples (on unmeasured domains) appear good.
- “Efficiency” measures target brief episodes and largely ignore the role of volume (frequency of episodes)
What about current policy initiatives?

Focus largely on individual providers and their silos

Face substantial technical challenges

Ignore the organizational context of care: *and the decisions about capacity that drive overuse and excess spending.*
Improving efficiency

_Foster organizational accountability for quality and costs_

Policy initiatives should focus on fostering organizational accountability for _longitudinal_ quality and costs.

- **Formal**: Prepaid / multi-specialty group practices (e.g. Kaiser)
- **Virtual**: Hospitals and their affiliated physicians

**Hospitals / Medical Staff**

- Majority of physicians work in or admit to only one hospital
- Chronic disease patients are highly loyal -- allowing comparisons of longitudinal costs and quality
- Performance measurement -- and payment reform -- would create incentives for hospital and staff to collaborate to improve quality

*Provides organizational context for capacity management* -- and for implementation of information technology, QI, shared decision-making
Goal -- provide hospital specific measures of relative intensity of resource use

Approach -- measure resource use in severely ill patients

Assign Medicare beneficiaries to hospitals based upon predominant site of care during last 2 years of life (with chronic illness)

Adjust for differences in underlying illness

Measures include: Medicare reimbursements, utilization rates.

Importance

Measures reflect relative intensity and costs for other populations

Provide insight into *volume* of supply-sensitive services (a reflection of capacity and culture)
Total Medicare (Parts A and B) reimbursements
All fee-for-service Medicare enrollees, U.S. hospital referral regions (2003)

Fort Lauderdale, FL  $8,045
Sayre, PA          $4,764
Spending and utilization among *severely ill patients* in Fort Lauderdale, FL and Sayre, PA HRRs *(all deaths occurring 2000-03)*

<table>
<thead>
<tr>
<th>Measure</th>
<th>Fort Lauderdale</th>
<th>Sayre</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inpatient &amp; Part B spending</strong>*</td>
<td>$44,217</td>
<td>$26,296</td>
</tr>
<tr>
<td><strong>Hospital days</strong></td>
<td>17.0</td>
<td>13.2</td>
</tr>
<tr>
<td><strong>Primary care visits</strong></td>
<td>17.5</td>
<td>10.4</td>
</tr>
<tr>
<td><strong>Medical specialist visits</strong></td>
<td>42.8</td>
<td>16.4</td>
</tr>
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</table>

*weighted average -- all hospitals

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Improving efficiency will require policies that foster local accountability -- *ideally at the level of large medical groups and hospitals* -- for the longitudinal costs and quality of care.
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Performance measurement and payment reform will be critical.