

# The Cost of Hospital Care

## Experience from Maryland's All-payer Rate Setting System

### National Health Policy Forum

*The Health Services Cost Review Commission -  
Baltimore, Maryland*

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# Overview of Presentation

- Brief Background on Maryland's unique All-payer hospital rate setting system administered by the Health Services Cost Review Commission (HSCRC)
- Overview of the extensive data collected by the Commission
- Data on hospital costs in Maryland by cost category
- Comparisons of Maryland to the US
- Observations about what drives hospital cost
- Potential ways of incentivizing hospitals to lower cost

# The Maryland Hospital Rate Setting System

***Maryland – like  
Switzerland?***

***The skiing is great as  
long as you have the  
Alps...***

# Maryland All-Payer Hospital Rate System

- ⦿ Established in 1971 with strong support by the Maryland Hospital Association (MHA)
- ⦿ A primary objective was to find a way of financing uncompensated care and facilitating access
- ⦿ Trustees of the MHA also mindful of constraining cost growth (as first party payers)
- ⦿ Maryland legislature established the HSCRC – an independent Commission with broad powers of data collection and rate setting authority
- ⦿ Always contemplated hospitals should face consistent incentives – Medicare waiver negotiated 1977

# Structural Characteristics of the System

- ◉ Independent Governance (politically and legally)
- ◉ Volunteer Commissioners appointed by the Governor
- ◉ Very flexible statute – discusses the policy objectives and economic concepts necessary for effective regulation
- ◉ Regulate inpatient and outpatient facility charges (no physician part B services)
- ◉ 47 acute care facilities, 3 rehabilitation hospitals, 2 private psychiatric hospitals
- ◉ Professional staff of 28 to regulate an industry \$14 billion in annual revenue

# Key Operational Features of the System

- Emphasis on formula-based regulation – establishing overall targets – DRG/APG per Case/Visit Constraints
- Strong focus on Rate Compliance
- Macro-regulatory approach to control cost, not profits, help constrain budgets, not managerial decision-making
- Cooperative rule-making approach (hospitals/payers)
- Operations geared toward achievement of Policy Goals:
  - Cost Containment
  - Access to care (system of financing hospital uncompensated care)
  - Equity
  - Accountability to the public
  - Financial stability/predictability for hospitals
  - Recent emphasis on measuring Quality and linking to payment

# Results

- ⦿ Second lowest growth in hospital costs 1976-2008 of any state
- ⦿ Cumulative savings to the State \$43 billion in averted hospital expenditures (\$2.0 trillion savings had US grown at MD rate)
- ⦿ Equitable financing of over \$1 billion in care to the uninsured
- ⦿ Prohibitions on Cost-Shifting/Price Discrimination
- ⦿ High level of financial stability (highest % of investment grade hospitals of any State – 2006)
- ⦿ Implementation of broad-based Quality measurement and P4P system around hospital complications and readmissions

# Data Collection

## ◎ Cost Report Data

- Cost build up by Functional Cost Center, Direct Costs
- Indirect Costs
- Also report on all Capital Costs, Physician Supervision and Residents and Interns

## ◎ Monthly Experience Reports (trending/rate compliance)

- Unaudited Financials
- Revenues and Volumes

## ◎ Other Financial Information

- Wage and Salary Report
- Audited financials (reconciled to Cost reports)

## ◎ Inpatient and Outpatient Discharge Abstract (Case mix)

- Clinical, Demographic, Financial and Physician data on every patient
- Present on Admission indicator and up to 30 secondary diagnoses (complications)

## ◎ Community Benefit Report and hospital 990s

## ◎ Report on Best Practice Standards of Board Governance



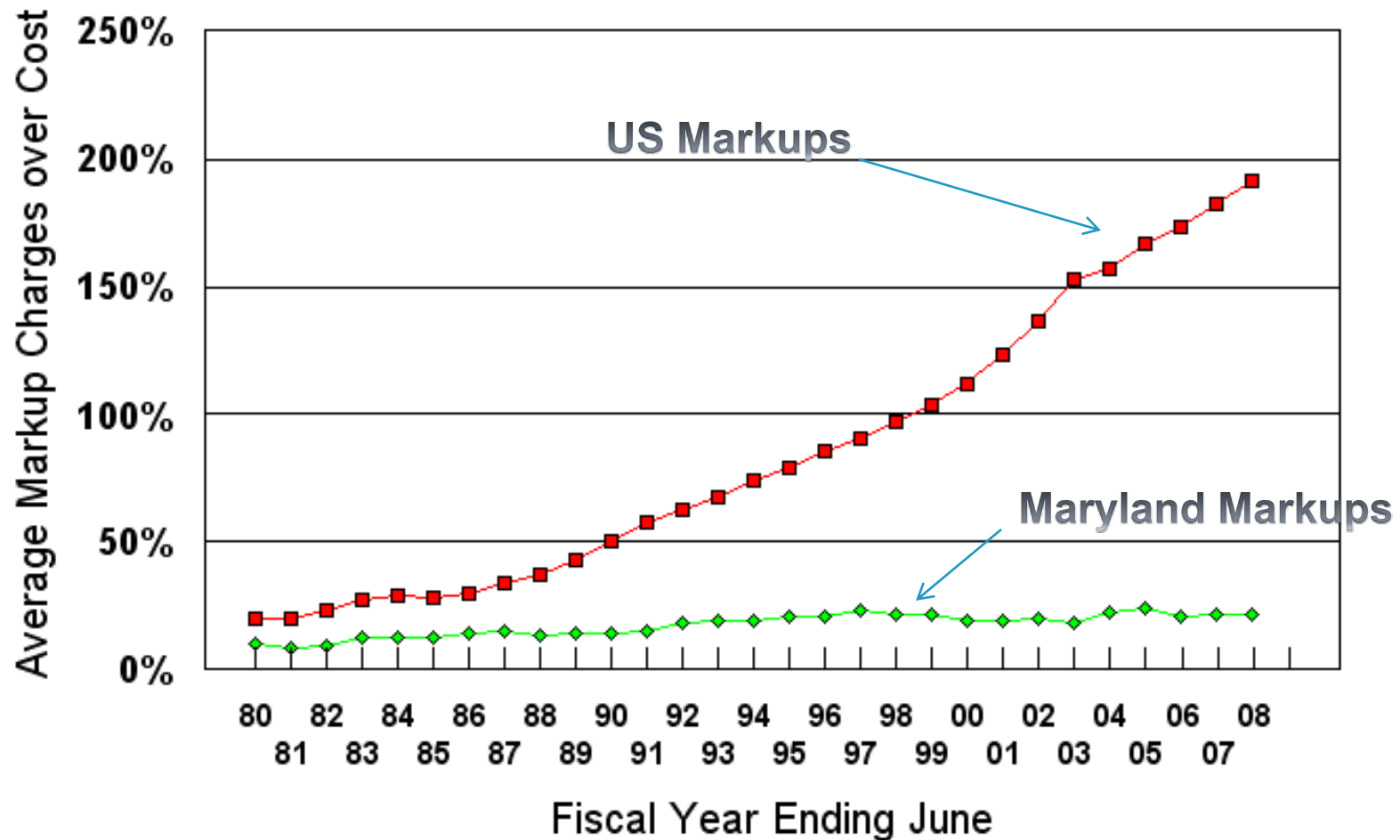
# The Maryland Hospital Rate Setting System

***More detailed look at  
Hospital Costs in  
Maryland***

# Absolute Charge Comparisons

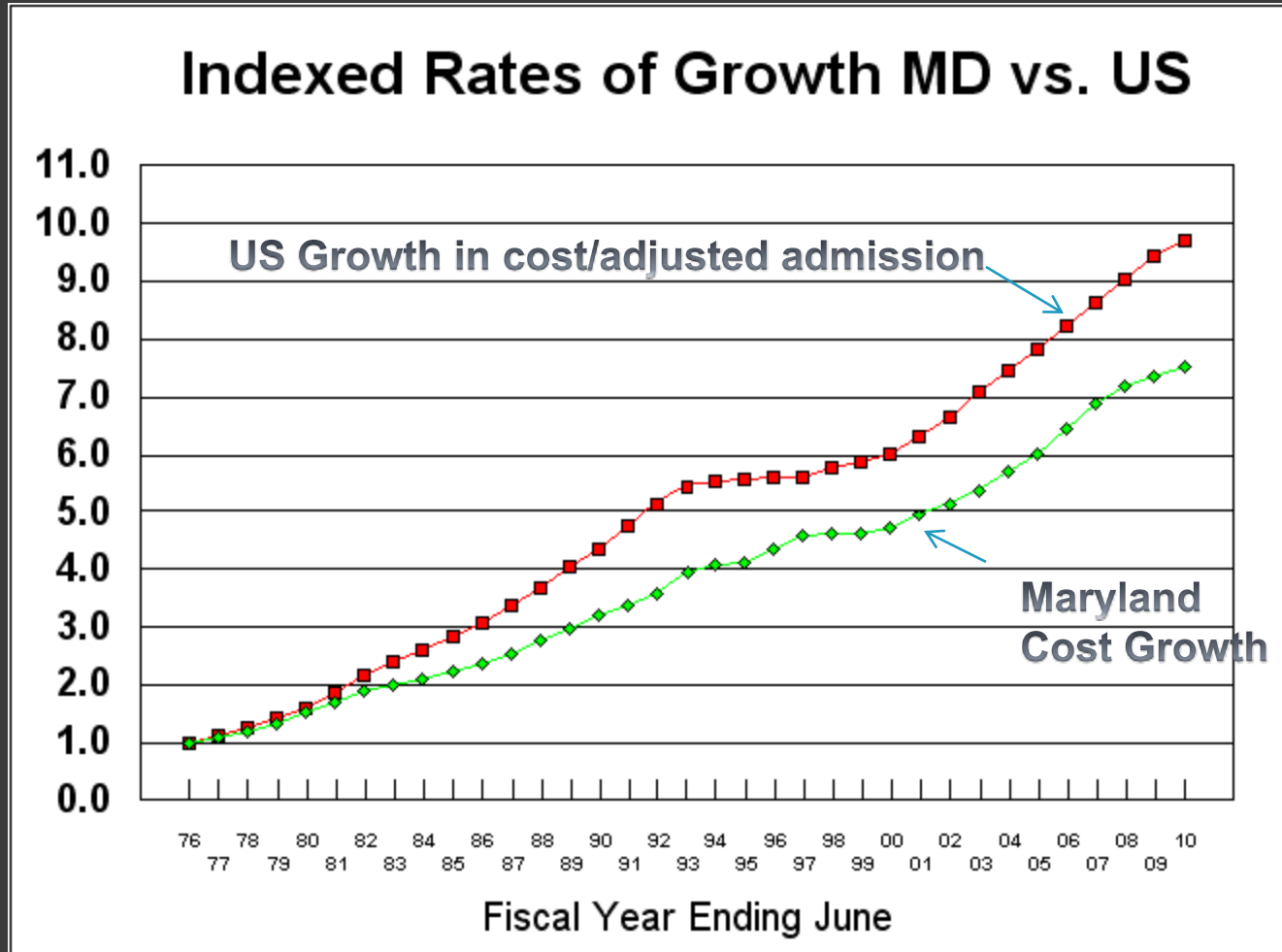
Maryland has the lowest Charges in the US by far

## Average Markup Charges over Costs



# Absolute Cost Comparisons

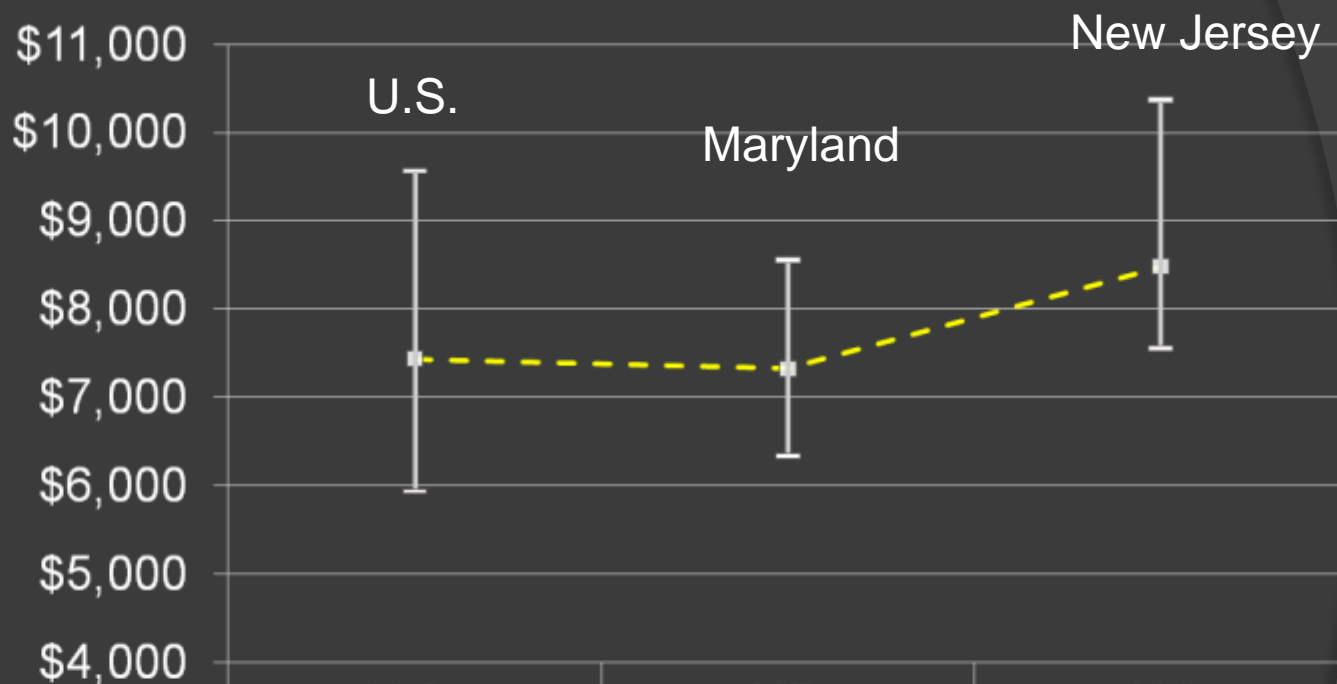
Prohibition on price-discriminate (cost-shift) results in better overall Cost-containment



Maryland moved from 25% above the US in Cost per Case to 3% below in 2010 est.

# Maryland has less Cost Variation than other States

Average Cost per Discharge  
U.S., MARYLAND, and NEW JERSEY, 2008



|                       | U.S.    | MD      | NJ       |
|-----------------------|---------|---------|----------|
| – Top 75th Percentile | \$9,565 | \$8,561 | \$10,369 |
| – Low 25th Percentile | \$5,936 | \$6,330 | \$7,552  |
| – Median              | \$7,436 | \$7,325 | \$8,483  |

# Distribution of Hospital Costs by Category

- Don't see much variation in proportions of costs by hospital – high cost vs. low cost.

| FY 2009 PERCENTAGE OF HOSPITAL COSTS           |                |                |               |
|--|----------------|----------------|---------------|
| CATEGORIES OF COST                             | High Cost      | Low Cost       | Difference    |
| SALARIES & FRINGE BENEFITS                     | 35.27%         | 37.99%         | -2.71%        |
| FRINGE BENEFITS                                | 8.67%          | 9.00%          | -0.33%        |
| <b>SUB-TOTAL</b>                               | <b>43.94%</b>  | <b>46.98%</b>  | <b>-3.05%</b> |
| SUPPLIES, CONTRACTED SERVICES & OTHER EXPENSES |                |                |               |
| MED/ SURG. SUPPLIES                            | 10.43%         | 11.09%         | -0.65%        |
| IV SOLUTIONS & PHARMACY                        | 3.98%          | 5.18%          | -1.20%        |
| LAUNDRY & LINEN                                | 0.35%          | 0.36%          | -0.01%        |
| FILMS & SOLUTIONS                              | 0.18%          | 0.09%          | 0.09%         |
| BLOOD, PLASMANATE ALBUMEN                      | 0.53%          | 0.64%          | -0.11%        |
| CONTRACTED SERVICES                            | 5.48%          | 5.91%          | -0.43%        |
| PROFESSIONAL FEES                              | 2.48%          | 1.91%          | 0.57%         |
| AGENCY NURSES                                  | 2.12%          | 0.91%          | 1.21%         |
| MALPRACTICE INSURANCE                          | 1.50%          | 1.27%          | 0.23%         |
| ALL OTHER INSURANCE                            | 0.00%          | 0.18%          | -0.18%        |
| TELEPHONE                                      | 0.27%          | 0.09%          | 0.17%         |
| UTILITIES & WATER                              | 1.50%          | 1.45%          | 0.05%         |
| FOOD   | 0.71%          | 0.91%          | -0.20%        |
| PRINTING, OFFICE SUPPLIES, COPYING & POSTAGE   | 0.71%          | 1.09%          | -0.38%        |
| CHEMICALS, SOLUTIONS, LUBRICANTS & GASES       | 0.44%          | 0.45%          | -0.01%        |
| MISCELLANEOUS                                  | 6.90%          | 4.73%          | 2.17%         |
| <b>SUB-TOTAL</b>                               | <b>37.58%</b>  | <b>36.26%</b>  | <b>1.32%</b>  |
| BUILDING & EQUIPMENT                           |                |                |               |
| -  |                |                |               |
| DEPRECIATION                                   | 5.57%          | 5.91%          | -0.34%        |
| INTEREST                                       | 1.33%          | 1.73%          | -0.40%        |
| <b>SUB-TOTAL CAPITAL</b>                       | <b>6.90%</b>   | <b>7.63%</b>   | <b>-0.74%</b> |
| WORKING CAPITAL                                | 2.00%          | 2.00%          | 0.00%         |
| UNCOMPENSATED CARE                             | 9.58%          | 7.12%          | 2.46%         |
| <b>TOTAL</b>                                   | <b>100.00%</b> | <b>100.00%</b> |               |

# Why Costs Vary from Hospital to Hospital

- Factors that explain cost variation in Maryland
  - Differences in “Case mix” - explains 33% of variation
  - Differences in uncompensated care levels - 11% of variation
  - Labor market differences - 1.8% of variation
  - Teaching Costs and “DSH” - 24% of variation
  - Capital Structures – 0.4% of variation
  - Other – Practice Pattern Variation, Differences in Quality of Care as measured by Complication rates and unnecessary procedures

# Practice Pattern Variation

- ⦿ Physician incentives not aligned with hospital incentives
- ⦿ Large variation in costs per case because of differences in practice patterns
- ⦿ *“The fact that physicians are generally not employees of the hospital and the hospital is dependent on these very physicians for referrals makes it difficult for a hospital to exercise effective managerial control over these issues”*
- ⦿ *“The Commission heard a presentation from a consultant where costs for similar risk patients with a similar diagnosis varied by a magnitude of five depending on the physician caring for the patient within a given hospital”*
  - \* Source New Jersey Commission “Reinhardt Report” on Rationalizing Health Care Resources, 2008
- ⦿ *“Doctors, like most people, don’t like to work weekends, and they probably don’t enjoy being evaluated against their peers. But their industry can no longer afford to protect them from the inevitable.”*

“Health Care’s Lost Weekend” Peter Orszag, The New York Times, October 3, 2010

# How much does Variation in Physician Practice Contribute to Costs?

- Our analysis found similar variation in physicians practice (C<sub>adj.</sub> LOS)

| APR_DRG | Attending Physicians                             | Variation in Cost |
|---------|--|-------------------|
| 510     | Pelvic evisceration, radical hysterectomy        | 4.7               |
| 751     | Major depressive disorders                       | 3.4               |
| 161     | Cardiac defibrillator & heart assist implant     | 3.3               |
| 566     | Other antepartum diagnoses                       | 3.0               |
| 52      | Nontraumatic stupor & coma                       | 2.6               |
| 446     | Urethral & transurethral procedures              | 2.6               |
| 279     | Hepatic coma & other major acute liver disorders | 2.5               |

| APR_DRG | Operating Physicians  | Variation in Cost |
|---------|---|-------------------|
| 510     | Pelvic evisceration, radical hysterectomy & other radical GYN procs | 4.4               |
| 751     | Major depressive disorders & other/unspecified psychoses            | 4.0               |
| 639     | Neonate birthwt >2499g w other significant condition                | 3.7               |
| 321     | Cervical spinal fusion & other back/neck proc exc disc excis/decomp | 3.7               |
| 161     | Cardiac defibrillator & heart assist implant                        | 3.1               |
| 254     | Other digestive system diagnoses                                    | 3.1               |
| 693     | Chemotherapy  | 3.0               |

- If all physicians practicing at or above the 25<sup>th</sup> percentile on case mix adjusted length of stay, attained this attainable best practice standard of care (at the 25<sup>th</sup> percentile level), the system could save 15% of inpatient variable costs or approximately \$1.0 billion.

- Yes “B” as in **BILLION**

**THAT'S A LOT OF MONEY!**



# How much does Variation in Quality Contribute to Cost differences?

- Maryland measures hospitals on risk-adjusted rates of hospital acquired complications across 49 categories of “Potentially Preventable Complications” (PPCs)
- These include harmful events (accidental lacerations) or outcomes (hospital acquired pneumonia) that may result from the process of care rather than from a natural progression of the underlying disease
- Total costs associated with these events in Maryland approximate \$593 million in FY 2010
- If hospitals at or above the 25<sup>th</sup> percentile in their rate of complications (actual vs. “expected”) brought their complication rates down to the 25<sup>th</sup> percentile level – it would result in \$236.5 million in cost savings (2.7% of total hospital cost)

# How much does Unnecessary Use Contribute to Costs?

- Maryland a recent focus of federal and state investigations relating to alleged inappropriate use of Drug Eluting Stents
- An independent peer-review study for one high-volume interventional cardiologist in Maryland concluded that as many as 25% of procedures were “not medically necessary”
- Assuming that the 25 highest volume interventional cardiologists in Maryland over the past 5 years FY 2004 - FY 2009 had 10% unnecessary procedures – this would have resulted in approximately \$78 million in unnecessary hospital charges

# Penultimate Observations/Conclusions

- Costs variation after adjusting for various factors (case mix, labor, teaching, etc.) can be mostly attributed to variations in practice patterns and quality differences
- Argues for increased emphasis on ways to align incentives across hospitals/physicians
- Increase in hospital employment of physicians may help – but most arrangements are structured to generate more utilization, not less
- Obvious need to develop broad-based outcome metrics linked to strong financial incentives to improve quality

# Final Thoughts about Hospital Costs

- Relative hospital efficiency also appears to be dramatically influenced by Pricing Leverage in the Market
- Hospitals facing broad financial constraint (more “financial pressure”) with less market-share and less ability to charge private payers more – have lower costs and better Medicare margins

Private Payer Profits can induce Negative Medicare Margins, Stensland, et.al. Health Affairs May 2010

- Maryland experience supports this observation (broad constraint under All-Payer Structure)
- Recent Provider reaction to push for Accountable Care Organizations in ACA – may be moving us in the wrong direction for the short term (more market power by providers)

# Okay, These really are my Final Thoughts

*“There is much hand-wringing about spending, but little attention is paid to the main culprit: lack of market power by purchasers – something that exists in nearly all other countries. This lack of attention is not surprising, however, given that having an open discussion could ultimately lead to more regulation – and a major redistribution of resources away from providers and back to employers, individuals, and families, and taxpayers.”*

Market Failure and the Failure of Discourse: Facing up to the Power of Sellers. B Vladeck, T Rice, Health Affairs, September/October 2009

We won't get a handle on health care cost growth in this country, until we grapple with this issue of Market Power on the part of Providers. The only way to address this dynamic – which undermines all ability to control health care costs - is to legislate a maximum payment obligation for private payers. This maximum limit should be some multiple of Medicare payments (1.5? say).

It won't create a “Switzerland.” but the skiing will be good enough.