Background on the Maryland All-Payer Hospital Payment System

The Health Services Cost Review Commission (HSCRC)
Background, Methods and Lessons Learned

Presentation for the Seminar on Information Systems and Performance Assessment of Public Hospitals

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Purpose of the Presentation

1) Describe the Maryland Hospital Payment System

2) Provide an Overview of Diagnostic Related Grouping (DRG) – based Payment Systems

3) Discuss how successful implementation of a well-structured, data-driven Provider Payment Mechanism (PPM) can achieve multiple policy goals:
   - Cost-Containment
   - Quality Improvement
   - Financial Stability (Payment Adequacy)
   - Equity and Standardization
   - Improved Performance Monitoring (Accountability)
   - Enhanced Management Decision-making Autonomy

Structure of the Presentation

1) Major Health Care Problems in Maryland prior to Implementation of Payment Mechanism

2) Description of Maryland Hospital Provider Payment Mechanism (PPM)

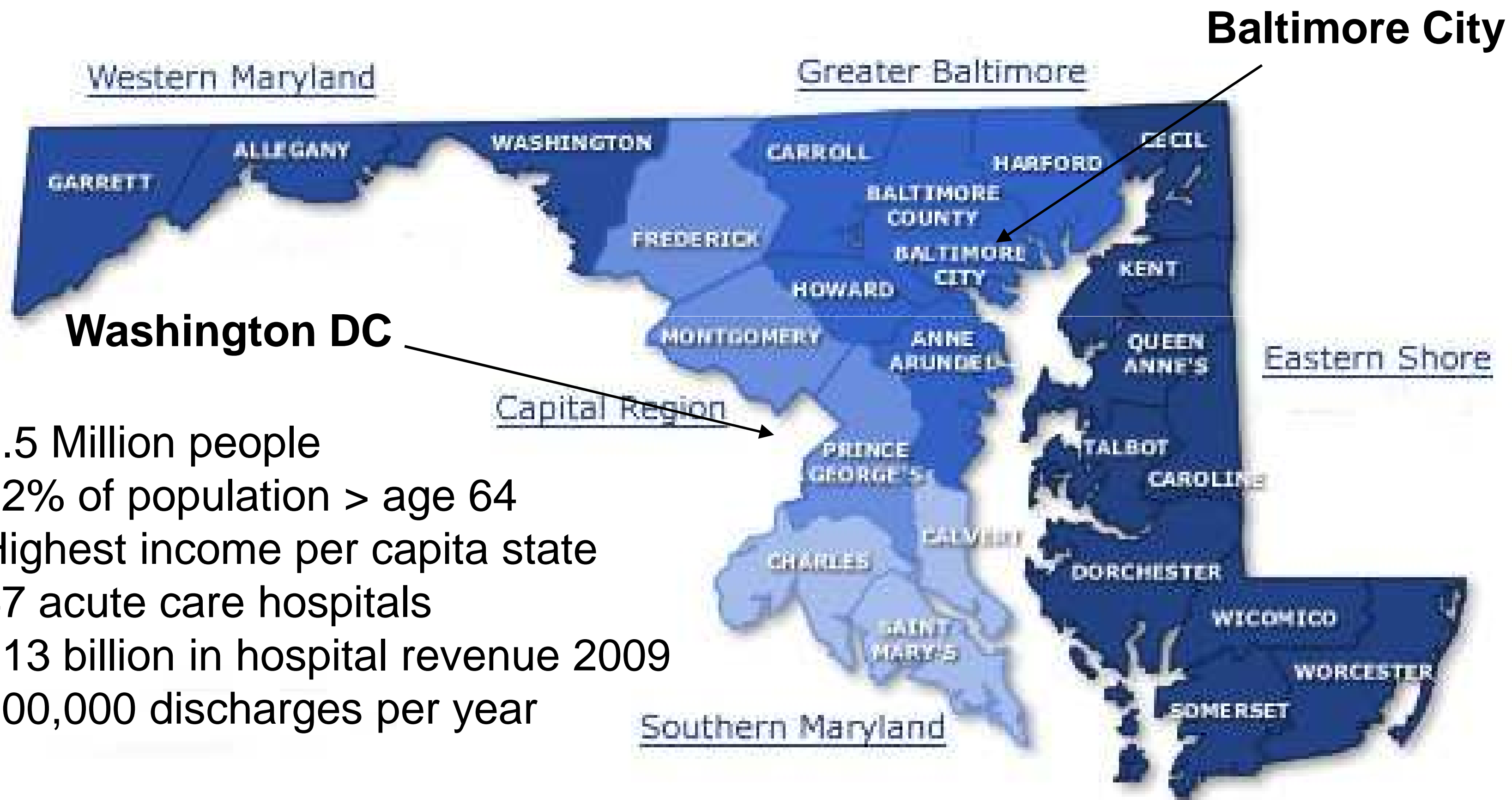
3) Performance Results

4) Basics of DRG-based Payment

5) Relevancy for Sao Paulo Public Hospital System

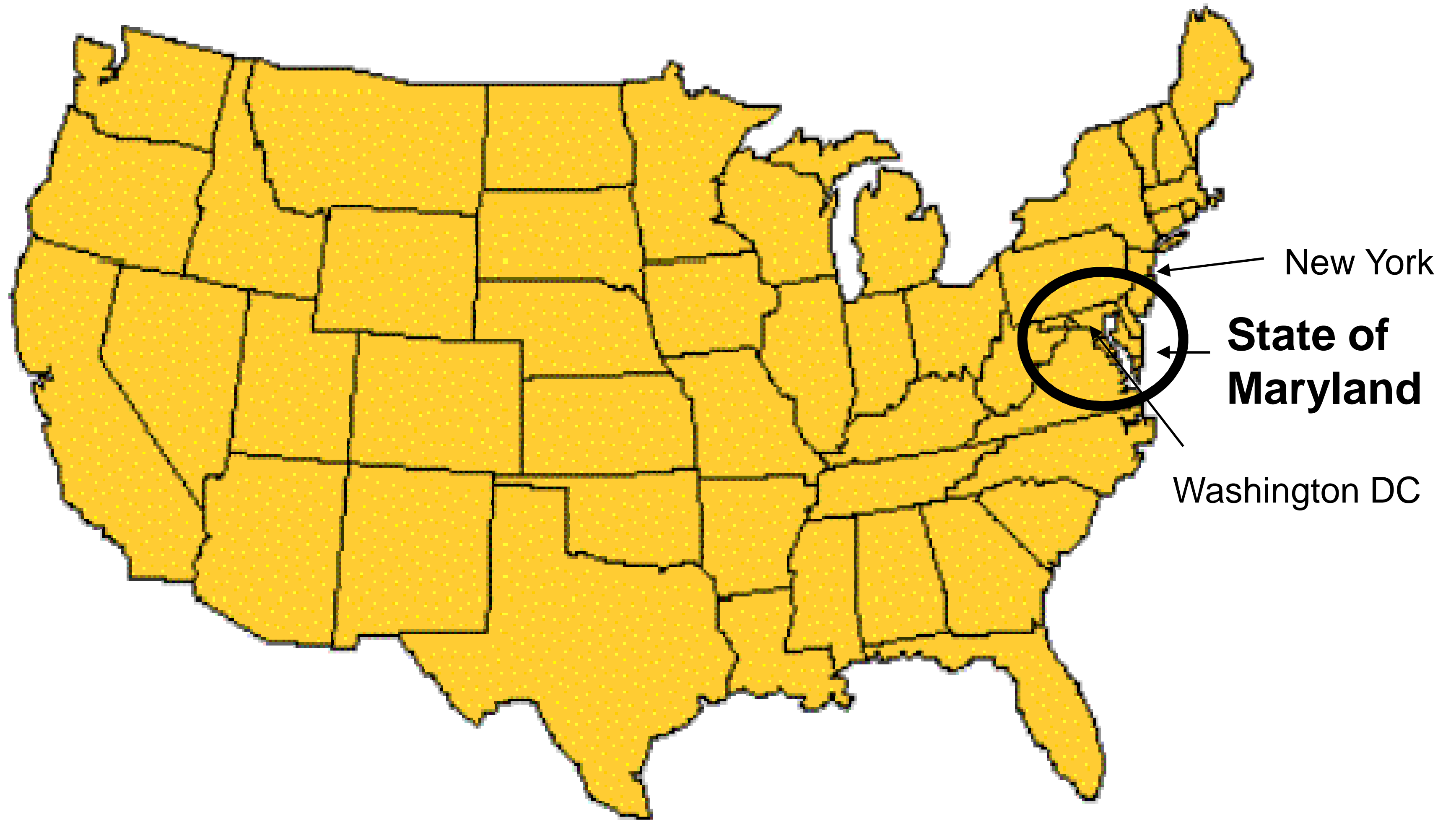
Health Care Policy Issues and Problems in Maryland 1970s

State of Maryland



- 5.5 Million people
- 12% of population > age 64
- Highest income per capita state
- 47 acute care hospitals
- $13 billion in hospital revenue 2009
- 800,000 discharges per year

Maryland in the U.S.



Health Care Issues in Maryland 1970s

- Hospitals accounted for high proportion of health costs (>50%)
- Pluralistic payer and provider industries (public/private)
- Large and inefficient public hospitals (city, county, state)
- Highly fragmented payment system
- Very high cost (25% above national average) and growing more rapidly
- Hospitals stratified by patients served and by services offered
  - "Poor" hospitals and "Rich" hospitals
- Absence of reliable information on performance (cost /quality)

Major Policy Problems

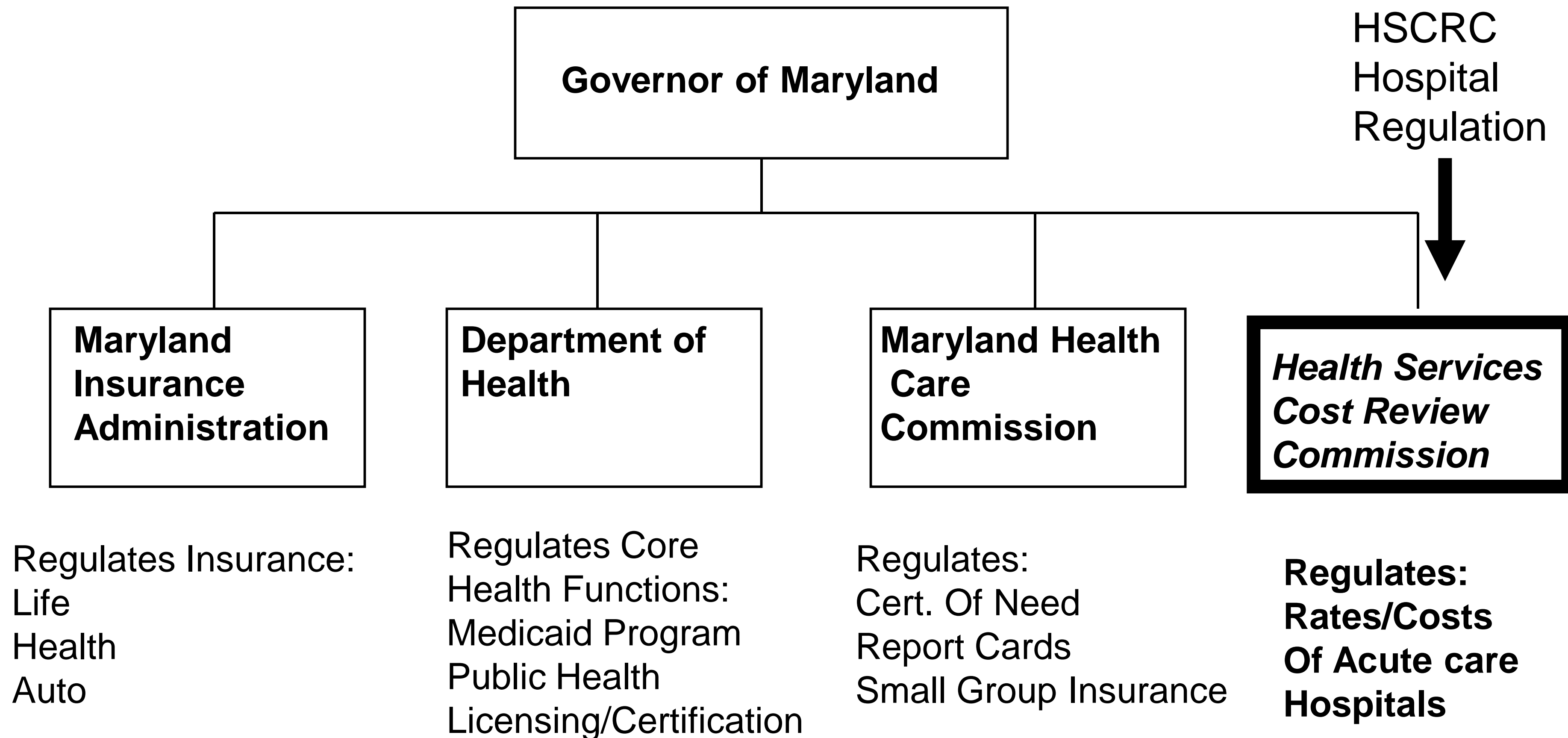
- Inconsistent payments and no clear financial incentives
- Overall high cost – strain on government budgets
- Over and under supply of services
- Two-tiered system of medical care (Rich vs. Poor)
- Insufficient payment levels for hospitals treating uninsured
- Growing access problems
- Financial instability – city hospitals on the verge of insolvency
- No consistent way of measuring performance (lack of metrics)

Creation of the Health Services Cost Review Commission (HSCRC)

Payment System Development

- HSCRC (government agency) - Created in 1971 to address policy problems
- Legislation supported by the hospitals in the state
  - Needed a way to pay for care to the uninsured
  - Wanted a more financially stable system
  - Agreed to cost control
- HSCRC - Two Key Powers:
  - Broad powers of data collection and disclosure
  - Broad powers to establish payment levels for hospitals
- 1971 – 1973: Development of Data Systems
- 1974: Set payment levels paid by Private Insurers
- 1977: Authorized to set payment levels for Public Insurers

Overview of Maryland Health Regulatory Agencies



Characteristics of the HSCRC

- 7 Commissioners appointed by Maryland Governor
- HSCRC politically and legally independent over time
- Very broad language in statute & regulation – provides the Commission with flexibility to modify payment system
- Commission professional staff: currently 28 FTEs
- Regulate inpatient & outpatient hospital services for 47 acute care hospitals - $13 billion revenue per year
- Strong emphasis on data collection
- Use of financial incentives (payment) to change behavior and achieve goals
- Extensive use of measurement and monitoring tools

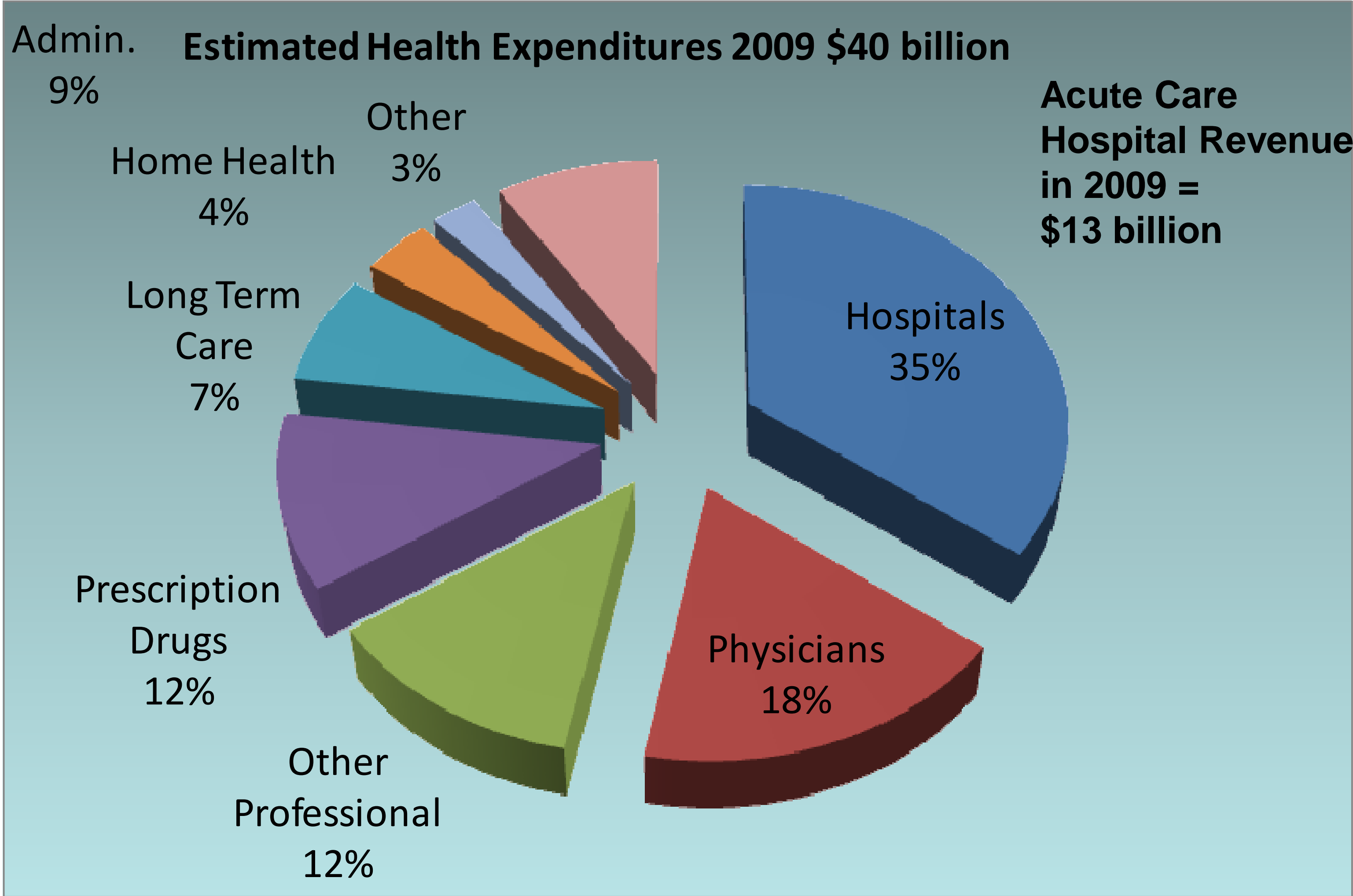
HSCRC Law and Policy Goals

- Legislature did not prescribe payment methods
- Enabling statute articulated broad guidelines for the approach and overall policy goals of the Commission:
    1. Cost Containment
    2. System for funding care to the uninsured (Access)
    3. Equity in terms of the final rates established and fairness in the methodologies
    4. Public disclosure/Accountability (monitoring)
    5. Financial Stability and Management Autonomy
    6. Effective hospital operation (Quality of care)
- HSCRC has largely fulfilled these key policy goals
- Context and Performance Results follow

Performance Results
1977- 2010

- Cost Containment
- Access to Care
- Equity and Fairness
- Accountability and Monitoring
- Financial Stability
- Quality of Care

Snap Shot: Health Care Industry in Maryland 2010



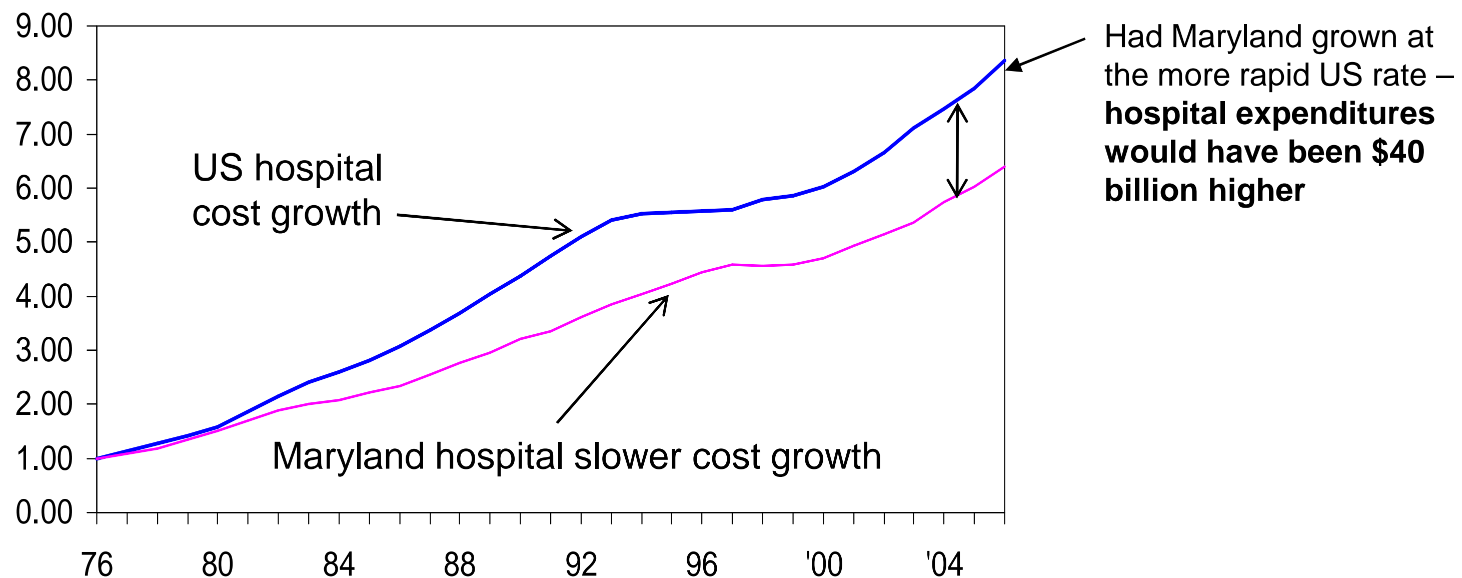
Source: Maryland Health Care Commission

Cost and Efficiency Goals - Context

- Efficiency in Funding – Macro (Health System Level)
- Efficiency in Production – Micro (hospital level)
- Allocation Efficiencies (allocation of resources and availability of services)
- Mechanism to promote autonomy in decision making by managers to evolve, respond and innovate
- All accomplished through the HSCRC's Provider Payment Mechanism

Cost Containment Success in Maryland

- 2nd Lowest Rate of Cost Growth of any State 1976-2007
  - 1976: Maryland Cost per case was 25% ABOVE the US average
  - 2007: Maryland Hospital cost per case 2% BELOW the US average
  - 2010: Maryland projected to be 4% below the US average
  - Estimated $40 billion savings to the State over the period 1976-2007



- Had the US grown at the slower Maryland rate of growth - hospital spending would have been $1.8 trillion lower

Access Goals - Context

- Policy Failure in US – absence of universal insurance
- Maryland needed for a mechanism to pay for care to uninsured patients
- Stratification of hospitals – “poor” and “rich” results in two-tiered Medicare Care
- Public and City hospitals suffered from underfunding
- Need for equitable sharing of these costs across public and private insurers

HSCRC Mechanisms to Promote Access

- HSCRC developed a unique mechanism for financing hospital "uncompensated care" (UC)
- Hospital payments levels contain an extra provision ("mark-up") to fund care to the uninsured
- Example: Cost per day = $1,000; UC 8% markup; hospital price set at $1,080 per bed day charged to all payers
- Results:
  - Maryland has the best access to hospital care in the US
  - Hospitals receive funding for $1 billion/year for care to the uninsured
  - This "mark-up" is in the rates applied to All-Payers, so all payers contribute equitably to the funding of this care
  - There is no "Patient-Dumping" from private to public hospitals
  - Public and Private facilities receive this extra payment

Equity and Fairness - Context

- In the US – different payers pay different amounts for the same hospital service
- Large amount of “cost-shifting” from payer to payer
  - Public payers “pay lowest levels” and raise their prices to Private insurers
  - Uninsured patients are charged the highest amounts
- Very unfair payment system in the rest of the USA
- Contributes to inability to control costs
- Also “cross-subsidization” of services
  - Obstetrics – low charges and lose money
  - Cardiac Surgery – very high charges and highly profitable
- Results in over- and undersupply of services

Equity, Fairness and Standardization Goals

- Maryland has the most Equitable Payment system in US
- Payment level for a given service at a given hospital is the same for every payer (insurer)
- No “preferential arrangements” to any one insurer and no “cost-shifting” allowed
- All payers pay their fair share of hospital costs
- Equity also means “fairness” in methodologies for payment
  - Necessary adjustments to payment (outliers; different labor costs)
- Lastly – there is an emphasis on uniform standards in reporting and comparative analysis across hospitals

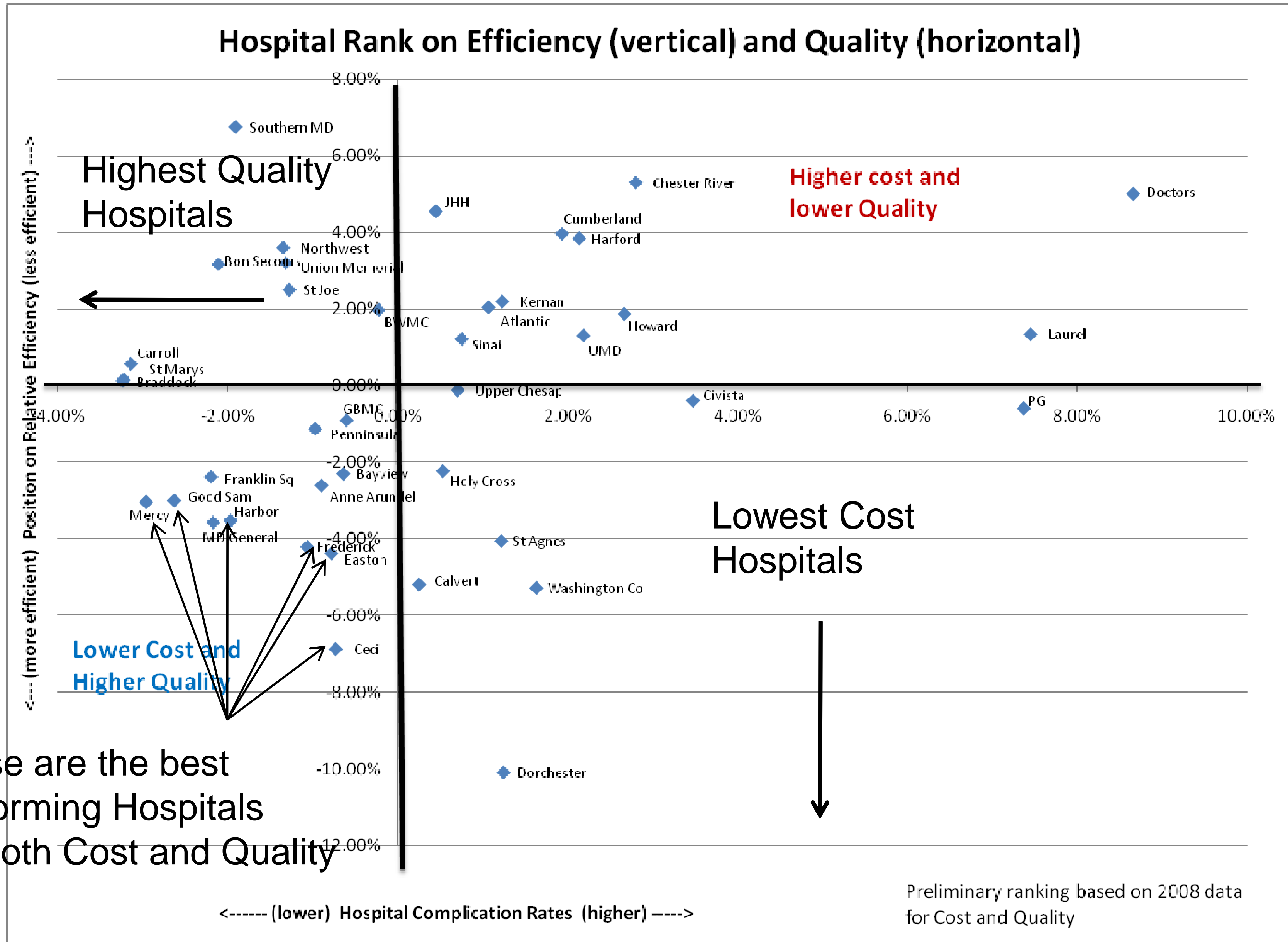
Accountability/Monitoring Goals - Context

- Data are needed to establish the payment system
- These data must be accurate, available and timely
- Success of a payment system depends on payment incentives used
- Incentives must be clear and understandable
- Also - the public also has the right to hold hospitals accountable for their performance
- Government uses comparative measurement (metrics) to identify best and worst performing hospitals

Accountability & Monitoring in Maryland

- Maryland has the best data on hospital performance in US
- All data are publicly available (cost data, patient data, prices, financial statements, quality data)
- All Commission discussion done in public meetings
- Many Reports and Analysis on Hospital Performance (Cost, Access, Quality, and Meeting Community needs)
  - Overall Cost Performance vs. the Nation
  - Ranking of hospitals on Relative Efficiency
  - Uncompensated Care levels by hospital
  - Report on the level of Community Benefits provided by hospitals
  - Annual Hospital Financial Condition report
  - Annual ranking of hospitals on HSCRC Quality measures
- Hospital and Payer Performance Report (example)
  - Focus – development of a "**Value Index**" for Maryland Hospitals

HSCRC Value Index



Adequate Payment/Financial Stability - Context

- Hospitals should be given payments that provide them with sufficient revenues to efficient operating costs
- Sufficient payments help avoid unintended behaviors
  - Risk Selection (avoiding the sickest patients)
  - Skimping on Quality
  - Informal payments
- Predictable revenues allow hospitals to manage their costs better
- Focus of policy should be on “cost control” not profit control”
- Clear financial incentives promote desired behaviors

Financial Stability in Maryland

- Focus on Payment adequacy: Set payments in proportion to cost
- Payments set “in advance”; allows for better budgeting
- Uncompensated care “paid for” in the rates
- Maryland has the highest “bond credit ratings” of any state
- Our experience: Hospitals manage their expenses to in response to changes in their revenues (payment levels)
- Overall operating margins (regulated and unregulated operations) = 2.75% (*slightly below US profit levels*)
- Result: high degree of predictability & financial stability in the system – for both Public and Private hospitals
- “Public” hospitals operate independently/autonomously

Operating Effectiveness and Quality - Context

- Hospitals have dual goals of improving efficiency and effectiveness in operation (Quality)
- Payment incentives can be established to promote Quality
- Not much progress in US on measuring Quality until now
- Now a focus on linking “Outcomes” to payment
- Need to eliminate current incentives that reward poor quality or pay hospitals for adverse events
- Linking of efficiency and effectiveness = “Overall Value”

HSCRC Efforts to Promote Quality

- HSCRC has statutory mandate to promote Effective Operation
- HSCRC: Uniquely position to lead the nation in Hospital Quality
  - Comprehensive payment system (link to quality measures)
  - Most sophisticated Risk Adjustment system
  - Most extensive administrative data in the country (Quality measures)
- **HSCRC now leading the nation in linking Payment to Quality**
  - Evidence based process of care measure
  - Hospital Complication Rates
  - Development of a Method to reduce Preventable Hospital Readmissions
- Also a “Cost” component to improving Quality

HSCRC Quality Initiatives

- Value Based Purchasing (VBP)
  - Monitoring hospitals use of Effective "Evidence-based Processes of Care" in 4 clinical categories (heart failure; heart attack; pneumonia; SIP)
  - Implemented in 2008
  - Linked to payment (hospitals at-risk for $65 million each year)

- Comparing Hospital Complication Rates & Link to Payment
  - Methodology – compares actual number of complications vs. "expected" number
  - Extensive exclusion logic and risk-adjusted for a fair comparisons
  - Very broad initiative – looking at 50 different complication categories
  - Expected to reduce hospital costs by as much as $500 million per year in Maryland

- Reducing Readmission Rates by linking to Payment
  - Methodology largely completed
  - Expected implementation July, 2010
  - Estimated system savings from reducing unnecessary readmissions > $800 mill/.year

- Also – Development of HSCRC Value Index

Hospital Acquired Complications being Monitored

Extreme Complications
- Extreme CNS Complications
- Acute Pulmonary Edema & Respiratory Failure w Ventilation
- Shock
- Ventricular Fibrillation, Cardiac Arrest
- Renal Failure with Dialysis
- Post-Operative Respiratory Failure w Tracheostomy

Cardiovascular-Respiratory Complications
- Stroke & Intracranial Hemorrhage
- Pneumonia, Lung Infection
- Aspiration Pneumonia
- Pulmonary Embolism
- Congestive Heart Failure
- Acute Myocardial Infarct
- Peripheral Vascular Complications Except VT
- Venous Thrombosis

Gastrointestinal Complications
- Major GI Complications w Transfusion or Signif Bleeding
- Major Liver Complications

Infectious Complications
- Clostridium Difficile Colitis
- Urinary Track Infection
- Septicemia & Severe Infection

Perioperative Complications
- Post-Op Wound Infection & Deep Wound Disruption w Procedure
- Reopening of Surgical Site
- Post-Op Hemorrhage & Hematoma w Hemorrhage Control Proc or I&D Proc
- Accidental Puncture/Laceration During Invasive Procedure
- Post-Op Foreign Body

Malfunctions, Reactions Etc.
- Iatrogenic Pneumothrax
- Mechanical Complication of Device, Implant & Graft
- Inflammation, & Other Complications of Devices, Implants or Grafts Except Vascular Infection
- Infections due to Central Venous Catheters

Obstetrical Complications
- Obstetrical Hemorrhage w Transfusion
- Obstetrical Laceration & Other Trauma w/o Instrumentation
- Obstetrical Laceration & Other Trauma w Instrumentation
- Major Puerperal Infection and Other Major Obstetrical Complications

Other Medical and Surgical Complications
- Post-Hemorrhagic & Other Acute Anemia w Transfusion
- Decubitus Ulcer
- Encephalopathy

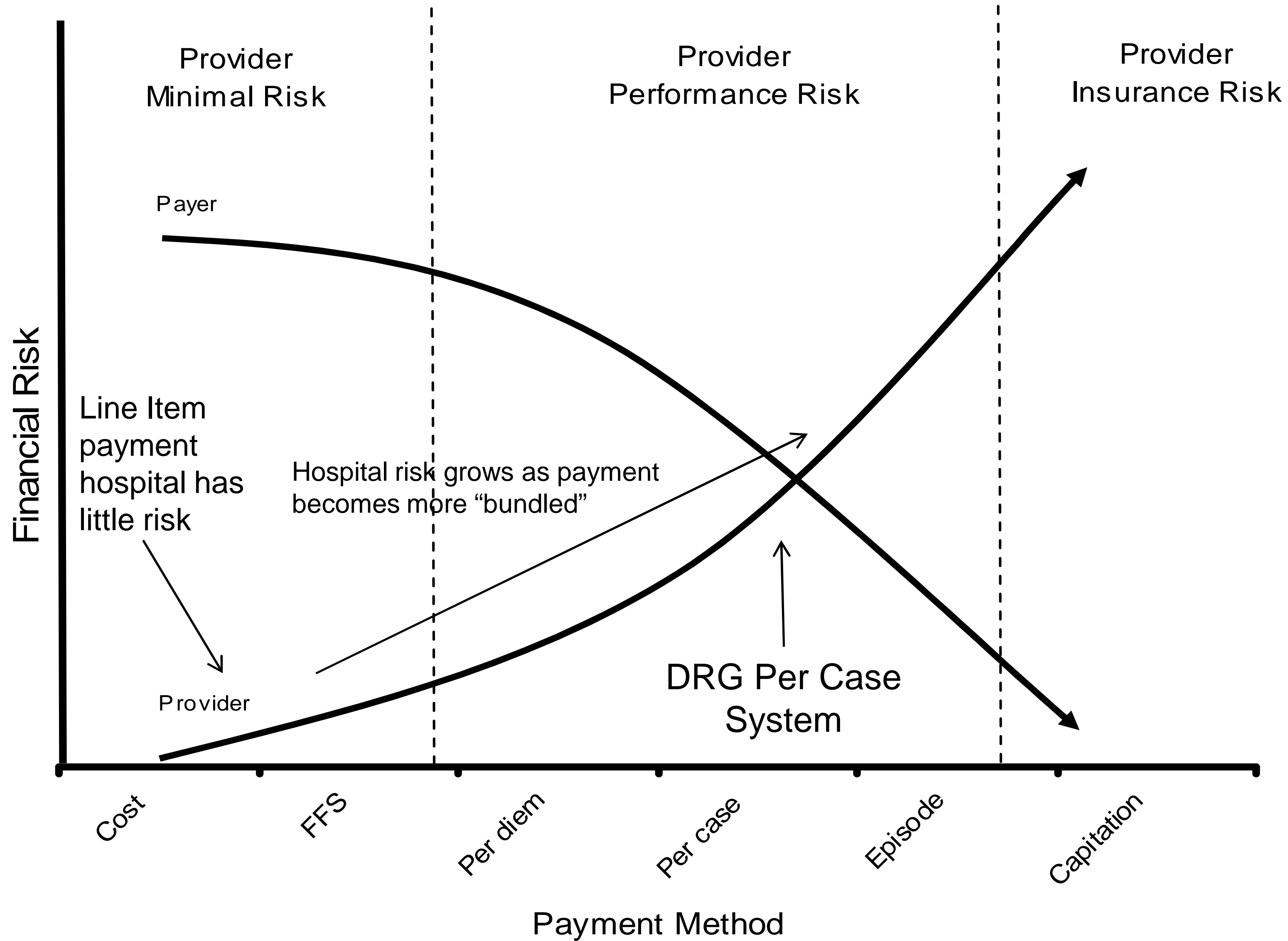
HSCRC's Provider Payment Mechanism/Monitoring Tool:

Diagnostic Related Groups (DRGs) and Case-Based Payment Systems

Payment System Development

- Choice what Payment System to use depends on major Policy Goals
- Different Payment Systems: Line Item; Per Diems; Per Case; Episode payment; Global Payment (capitation)
- Each system has advantages/disadvantages
- Each has different financial risk implications for hospitals and payers (performance risk/insurance risk)
- Maryland uses a DRG based system

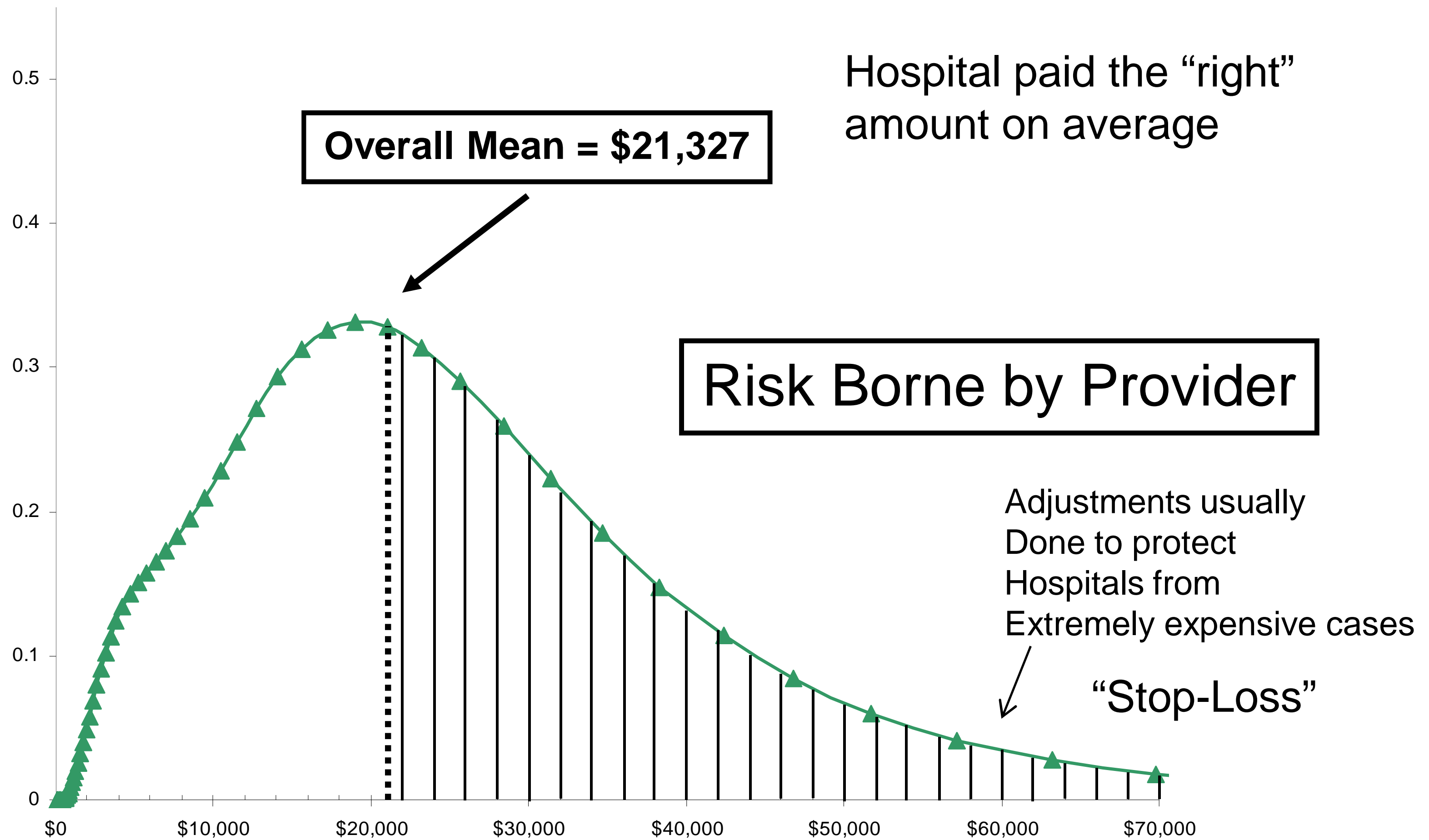
Financial Risk of Different Payment Structures



Per Case Payment

- Relies on relating the Cost per patient to a specific category (product definition) for each case
- The cost (on average) for all Open Heart Surgery Cases of a given severity level = $25,000
- Hospital then is paid for its performance “on average”
- Cases performed vary above and below the average
- So hospital assumes some financial risk
- But overall – risk assumed is reasonable and hospitals should be at some risk to provide efficient care

Hospitals Usually Paid DRG-Specific Fixed Price



History and Use of DRGs

- Developed in US in early 1970s
- Maryland System – first to use DRGs for Reimbursement - 1976
- Used in other State-Based All-Payer Hospital Payment Systems
- Adopted by the US Medicare Program (Inpatient Prospective Payment System (IPPS) in 1983
- Used around the world in OECD and Middle Income countries as a clinical classification and payment system

DRGs: Fundamental Incentive System

- DRGs: Can be a fundamental building block of any Health System
- Categorical model for defining the “types of cases” or the products of hospital care
- DRG categories can be linked to payment values
- DRG Systems not just a Provider Payment Mechanism - they are a valuable incentive system that can help achieve Primary Health Policy Goals
- Success of any incentive system depends on how clearly targets/goals can be communicated

DRGs: A Product Definition, Measurement and Communication Tool

- DRGs also have very important “Communication” benefits – clinical description of each “type” of case
- Clinical Categories that define the products of hospital care
- Communication/Categorical nature of DRGs - also a powerful management tool (in discussing/monitoring care)
- Provide a metric for measuring relative efficiency and quality

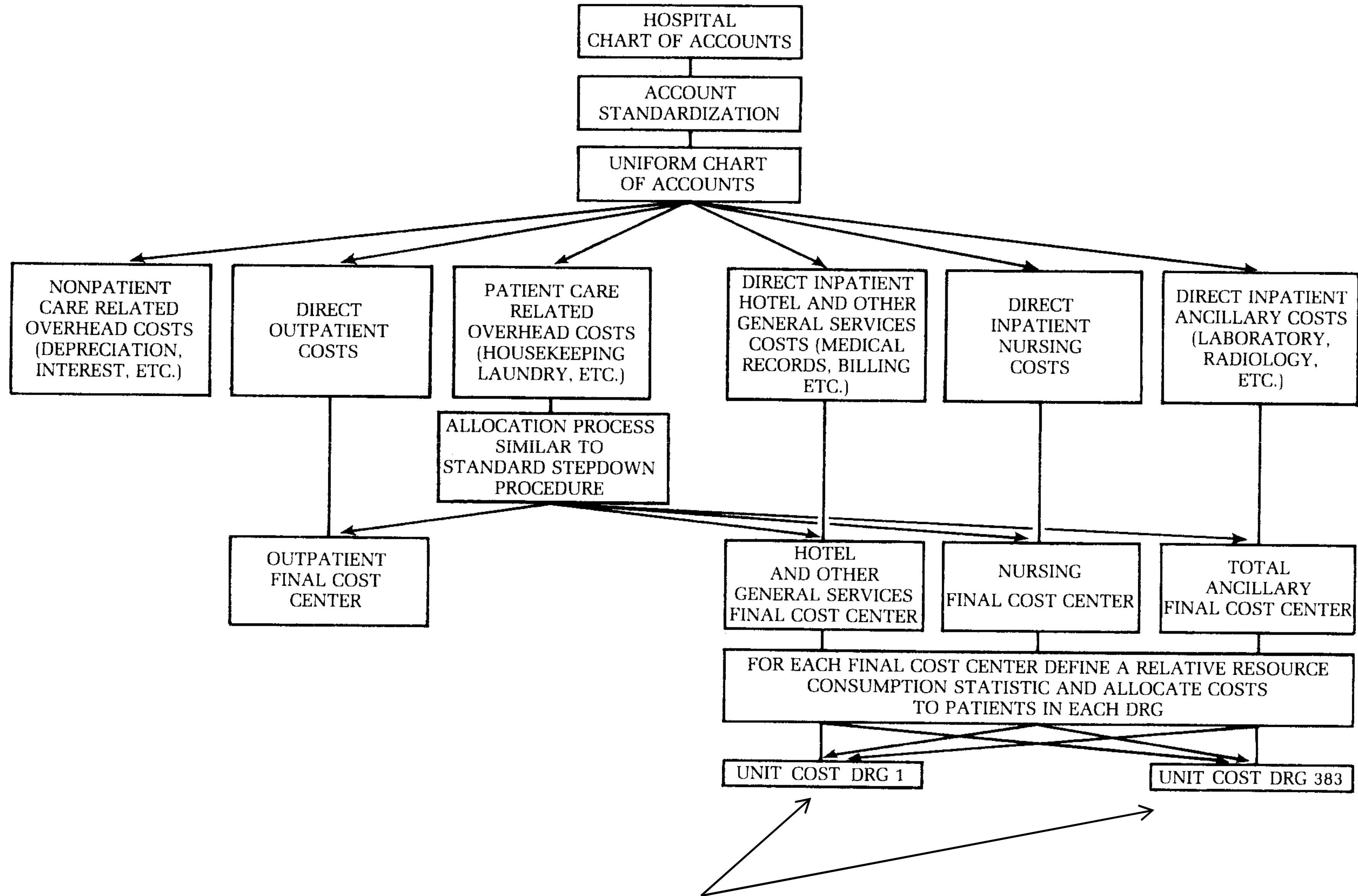
DRG Characteristics

- Medically/Clinically meaningful categories
- Similar expected amount and type of resource use for patients in each DRG
- Based on routinely available data (cost data and patient data)
- Manageable number of groups
- Embodies cost and clinical data into a single clinical category (Product of Care)

Requirements to Develop

- Cost accounting system that allows costs (direct and indirect) to be assigned to patients
- Medical record information (clinical and demographic) on each patient to assign DRGs
- Ability to link cost data on each patient to the patient information and the patient’s DRG category
- Establishment of Base DRG Payment (payment for the average case)
- Development of “relative weights” (payment levels for each DRG)

DRGs and Cost Accounting



Strengths of DRGs

- Better way to categorize and measure care and cost
- Provides standardized definitions and language
- Helps control cost per case – resulting in shorter stays and less ancillary use per case (more efficient inputs)
- Also improves overall health system efficiency
  - May reduce overall hospital expenditures
  - Help to reduce over utilization and excess capacity
- Will help reduce cost variations across providers
- Provides a clear incentive for hospitals (key to DRG's success)

Strengths of DRGs

- Basis for increasing hospital management autonomy – provide more flexibility of decision-making to respond to DRG-based incentives
- Better allocation of revenues and resources if DRG payment levels accurately reflect cost per case
- Basis for measuring Quality of Care (data collected provide useful data)
- Metric for comparing relative efficiency and quality
- Can lead to expanded “bundles of care” (i.e., Admission/Readmission; or Hospital/Physician)

DRG Payment System Weaknesses

- Heavily reliant on timely and accurate data and standardized and accurate coding procedures
- Requires improved managerial and analytic capabilities
- Will encounter problems if DRG payment levels do not reflect costs per patient
- Controls cost per case, but number of cases
- Potential for quality skimping if payment set too low – i.e., don't cover long run marginal costs
- Need for frequent re-establishment of payment levels every 1-2 years to reflect changes in medical practice

Conclusions

- DRG systems are both an incentive tool and a communication/evaluation tool
- Success of DRGs related to the importance of having a clear definition of the product
- DRG per case systems place hospitals at some financial risk (moderate risk) for improved efficiency
- Success of DRG systems dependent on cost data and ability to set payment levels to match cost per case
- The use of DRGs continues to evolve
  - Quality area
  - More expanded bundled payment

Key Principles and Lessons from the Maryland Experience

Key Success Factors of HSCRC System

1. Financial incentives drive hospital behavior

2. Establishing appropriate incentives can help achieve major policy goals and increase managerial autonomy

3. Prospective systems establish prices in advance – provide clear targets and lead to better budgeting

4. Per case systems place hospitals under moderate financial risk to improve efficiency

5. Payment levels must be set to reflect the cost of care (adequate and proportional to cost)

6. Categorical models (DRGs) can add to this clarity of financial incentives and provide a good measurement tool

Key Success Factors (continued)

7. Equity in establishing payment levels is important to avoid “cost-shifting” and risk-avoiding behaviors

8. Adjustments to payment levels should be made to account for factors beyond a hospital’s control
   - Outlier cases (extremely costly cases)
   - Differences in area wage levels
   - Other cost differences (medical education, high % poor patients)

9. System should be a “cost-control system not a “profit-control” system (profits are rewards to management for efficiency)

10. Accountability, Monitoring and Evaluation identify the best and worst performers

11. Payment systems should be modified over time to help improve quality of care and expanded coordination of care

Maryland Relevancy for US Reform

- USA Congress on the verge of passing major health reform legislation now
- Focuses only on Access (insurance) expansion
- Will reduce number of uninsured from 48 to 15 million
- Represents a substantial improvement to US health system if enacted
- No cost-control mechanisms considered
- Access and Cost are linked (must control cost)
- Maryland is the most enduring cost control system in the USA over the past 35 years

Recent National Recognition/Discussion of Maryland During Health Reform Debate

- Stuart Altman testimony: **Senate Finance** discussing the Maryland All-Payer Model (July 09)
- **RAND study** for Massachusetts recommending “All-Payer” rate setting and bundled payment as most effective cost containment approach (Aug. 2009)
- Presentations/Discussions of Uwe Reinhardt/Paul Ginsburg in national forums **(Health Affairs/New York Times** – Aug. 2009)
- **Wall Street Journal** article on the HSCRC (Sept. 2009)
- **Health Affairs Article** on successes of the Maryland System (Sept. 2009)
- Other articles in **New England Journal of Medicine Health Affairs** on the success of All-Payer systems (Summer 2009)
- **Business Week** article on “cost-shifting” discussing Maryland (Oct. 2009)
- **Washington Post Editorial** on Success of the HSCRC (Oct. 2009)
- **Paul Ginsburg testimony before MedPac** on Market Concentration of Hospitals; implications for cost containment and All-Payer Rate Regulation (Oct. 2009)
- **Commonwealth Foundation** article on success of Maryland (Nov. 2009)
- **ABC News** story on hospital Cost-Shifting, price variation nationally vs. situation in Maryland

Tudo Bem!

Muito Obrigado

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