Benchmarking, Fee Setting and Operations in Human Health Care

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History of U.S. Healthcare Payment

EARLY YEARS—Provider/patient assume cost risk
- 1929 Blue Cross/Blue Shield established
- 1938 Kaiser Permanente established
- 1940 Commercial insurance grows

MIDDLE YEARS—Provider/patient/government assume cost risk
- 1965 Medicare & Medicare enacted
- 1972 HMO Act

LATER YEARS—Providers assume cost and some utilization risk
- 1983 Medicare/Medicaid prospective payment for hospitals
- 1990 Managed care penetration largely through PPOs
- 1992 Medicare/Medicaid prospective payment for physicians
- 1997 Balanced Budget Act
- 2003 Consumer Driven Health Care

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History of U.S. Healthcare Payment

FUTURE YEARS—Providers assume cost and significant utilization risk

1992 Integrated Delivery Systems

2010 Affordable Care Act and accountability through Medicaid Homes and Accountable Care Organizations (ACOs)

Financial Analysis

1. Establish the facts in the organization
2. Compare the facts over time (trend analysis) and compare the facts to other similar organizations (benchmarking).
3. Use perspective and judgment to make decisions regarding the comparisons.

Benchmarking

1. Ratios are often used as the benchmark because they account for differences in organizational size
2. Common benchmarks in human healthcare organizations include
   1. Profitability ratios measure an organization's profitability.
   2. Liquidity ratios measure an organization's ability to meet short-term obligations.
   3. Asset efficiency ratios measure an organization's efficiency.
   4. Capital structure ratios measure an organization's ability to meet long-term obligations.

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Profitability Ratios

1. OPERATING MARGIN is an indicator of profit from operations.
2. EXCESS MARGIN is an indicator of profitability including investment income.
3. RETURN ON EQUITY is an indicator of profit in relationship to investment.

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Liquidity Ratios

1. CURRENT RATIO is the basic indicator of liquidity.
2. COLLECTION PERIOD is an indicator of the average number of days it take for a payer to make payment.
3. DAYS CASH ON HAND is an indicator of the number of days an organization could meet its obligations if receipts were discontinued.
4. PAYMENT PERIOD is an indicator of the average number of days an organization takes to pay its obligations

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Asset Efficiency Ratios

1. TOTAL ASSET TURNOVER is an indicator of how efficiently an organization is using its assets in relation to revenue.
2. INVENTORY TURNOVER is an indicator of the number of times an organization turns over its inventory in relation to revenue.
3. AGE OF PLANT is an indicator of the agerage age of the plant.

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Capital Structure Ratios

1. EQUITY FINANCING is an indicator of the relationship of assets owned by the organization and total assets.
2. DEBT TO CAPITALIZATION is an indicator of long-term debt and assets owned by the organization.
3. DEBT SERVICE COVERAGE is an indicator of the organization's ability to meet long term debt obligations.

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Ratio Formulas

Ratio	Formula
Operating Margin	$\frac{Current\ Assets}{Current\ Liabilities}$
Excess Margin	$\frac{Excess\ of\ Revenues\ over\ Expenses}{Total\ Operating\ Revenue}\ x\ 100$
Return on Equity	$\frac{Excess\ of\ Revenues\ over\ Expenses}{Equity}\ x\ 100$
Current Ratio	$\frac{Total\ Current\ Assets}{Total\ Current\ Liabilities}$
Collection Period	$\frac{Net\ Receivables}{Net\ Revenue/365}$
Cash on Hand	$\frac{Cash + Marketable\ Securities + Unrestricted\ Long - Term\ Investments}{Total\ Expenses\ - Depreciation\ Expense/365}$
Payment Period	$\frac{Total\ Current\ Liabilities}{Total\ Expenses\ - Depreciation\ Expense/365}$
Total Asset Turnover	$\frac{Total\ Operating\ Revenue + Other\ Income}{Total\ Assets}$
Inventory Turnover	$\frac{Total\ Operating\ Revenue + Other\ Income}{Inventory}$
Age of Plant	$\frac{Accumulated\ Depreciation}{Depreciation\ Expense}$

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Ratio Formulas

Equity Financing	$\frac{Equity}{Total\ Assets}\ x\ 100$
Debt to Capitalization	$\frac{Long - Term\ Debt}{Long - Term\ Debt\ +\ Unrestricted\ Net\ Assets}\ x\ 100$
Debt Service Coverage	$\frac{Excess\ of\ Revenues\ over\ Expenses + Depr\ Expense + Interest\ Expense}{Debt\ Principal\ Payments + Interest\ Payments}$

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Fee Setting History

1. 1950's—charging by consensus
2. 1960's—charging by financial expediency
3. 1970's—charging by discounts
4. 1980's—charging by consumer awareness
5. 1990's—charging by capitation

Cost-driven pricing to price-driven costing

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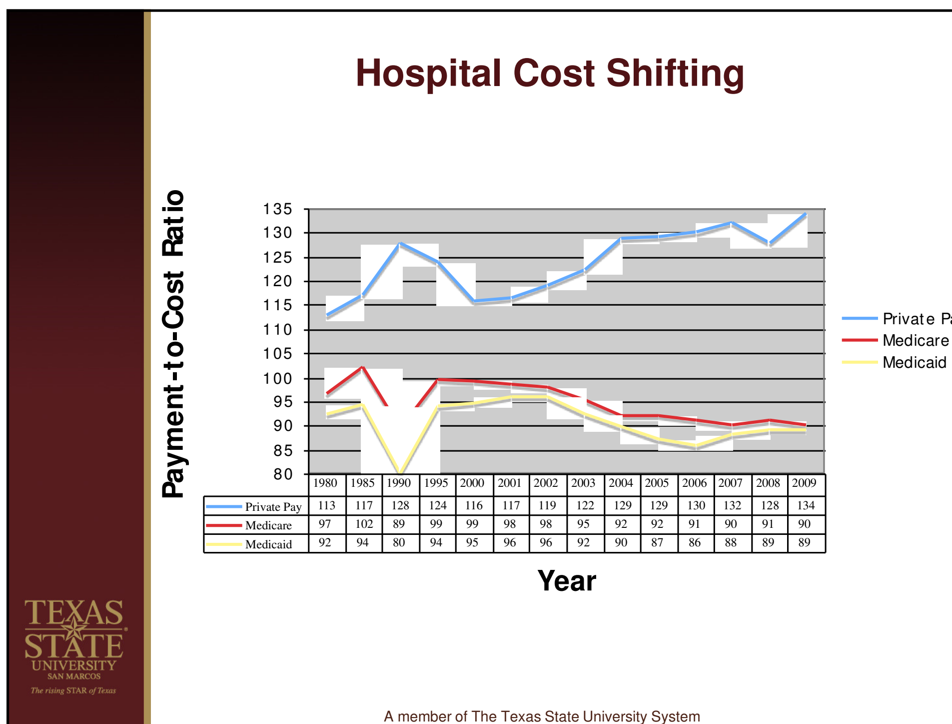
Cost Shifting

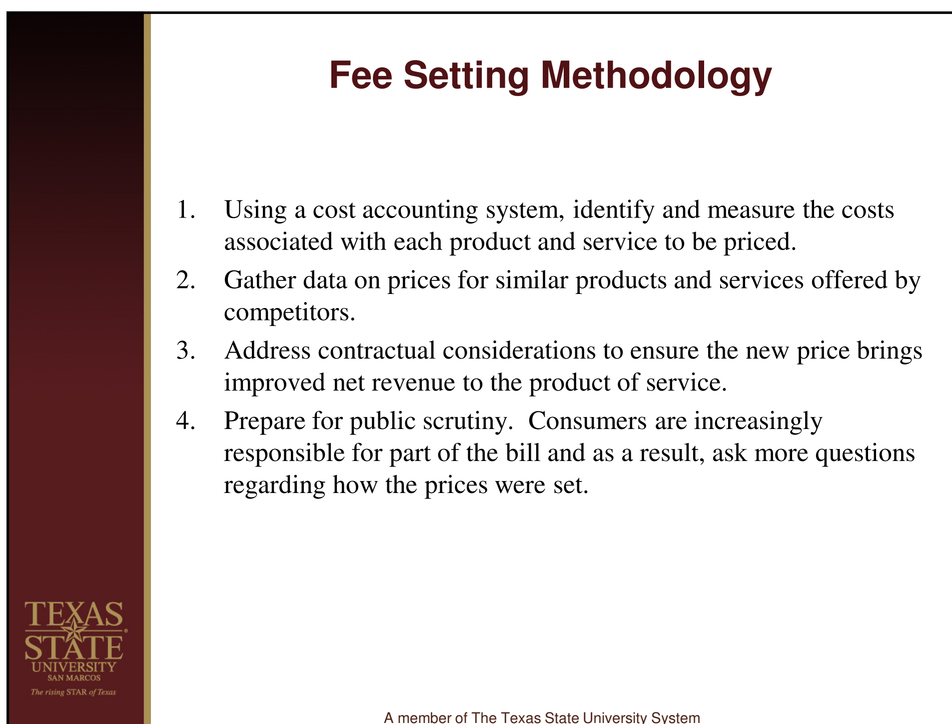
Practice of shifting costs (and increased fees) to some payers to offset losses to other payers.

Hospital Cost Shifting

Year	Uncompcare (in billions)	% of Total Expenses	Medicare Loss (b)	Medicaid Loss (b)
2000	$21.6	6.0		
2001	$21.5	5.6		
2002	$22.3	5.4		
2003	$24.9	5.5		
2004	$26.9	5.6		
2005	$28.8	5.6	$15.5	$9.8
2006	$31.2	5.7	$18.6	$11.3
2007	$34.0	5.8	$21.5	$10.4
2008	$36.4	5.8	$22.0	$10.4
2009	$39.1	6.0	$25.2	$11.3
2010	$39.3	5.8		



	1980	1985	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Private Pay	113	117	128	124	116	117	119	122	129	129	130	132	128	134
Medicare	97	102	89	99	99	98	98	95	92	92	91	90	91	90
Medicaid	92	94	80	94	95	96	96	92	90	87	86	88	89	89



Fee Setting Methodology

1. Using a cost accounting system, identify and measure the costs associated with each product and service to be priced.
   – Ratio of cost to charges
   – Process costing
   – Job order costing
   – Activity-based costing

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Fee Setting Methodology

1. Using a cost accounting system, identify and measure the costs associated with each product and service to be priced.
2. Gather data on prices for similar products and services offered by competitors.
   – Predatory pricing
   – Follower pricing
   – Preemptive pricing
   – Segment pricing
   – Loss-leader pricing

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