Financial Performance of CAHs in Indiana

Critical Access Workshop, IRHA / HFMA, November 19 2010

George H. Pink, G. Mark Holmes and
H. Ann Howard

NC Rural Health Research
& Policy Analysis Center

This work is funded by federal Office of
Rural Health Policy, PHS Grant No. U27RH01080

A Performance Monitoring Resource for
Critical Access Hospitals, States, and Communities

Flex Monitoring Team

University of Minnesota
University of North Carolina at Chapel Hill
University of Southern Maine

Agenda

- Comparison of CAHs in IN to US
  - Hospital characteristics
  - Median financial performance over 5 years
- 2009 financial performance of CAHs in IN
  - Profitability, liquidity, capital structure, revenue, cost, utilization
- 2009 financial performance of CAHs in IN against five CAH benchmarks
- What's next?

1. Comparison of CAHs in IN and US

CAHs in IN and US - 2008

Ownership:	IN	US
Government-owned	36% (13)	44%
Not owned by govt	64% (23)	56%
# of hospitals	36	1304

CAHs in IN and US - 2008

Long term care:	IN	US
Provides LTC	11% (4)	34%
Doesn't provide LTC	89% (32)	66%
# of hospitals	36	1304

CAHs in IN and US - 2008

Rural Health Clinic:	IN	US
Operates a RHC	8% (3)	42%
Doesn't operate a RHC	92% (33)	58%
# of hospitals	36	1304

CAHs in IN and US: Summary

- Compared to the US, a higher percentage of CAHs in Indiana:
  - Are not owned by government
  - Do not provide LTC
  - Do not operate a RHC

Evolution of the CAH Financial Indicators Report

- How to measure CAH performance[1]
  - Indicator selection principles, data quality and availability, and performance metrics
- How to compare CAH performance[2]
  - Peer groups as a meaningful basis for performance comparisons
- How to evaluate CAH performance[3]
  - Relative (medians) or absolute (*benchmarks*)

1. Pink GH, Holmes GM, D'Alpe C, McGee P, Strunk. L, Slifkin RT. Financial Indicators for Critical Access Hospitals. *Journal of Rural Health* 22(3):229-236, Summer 2006

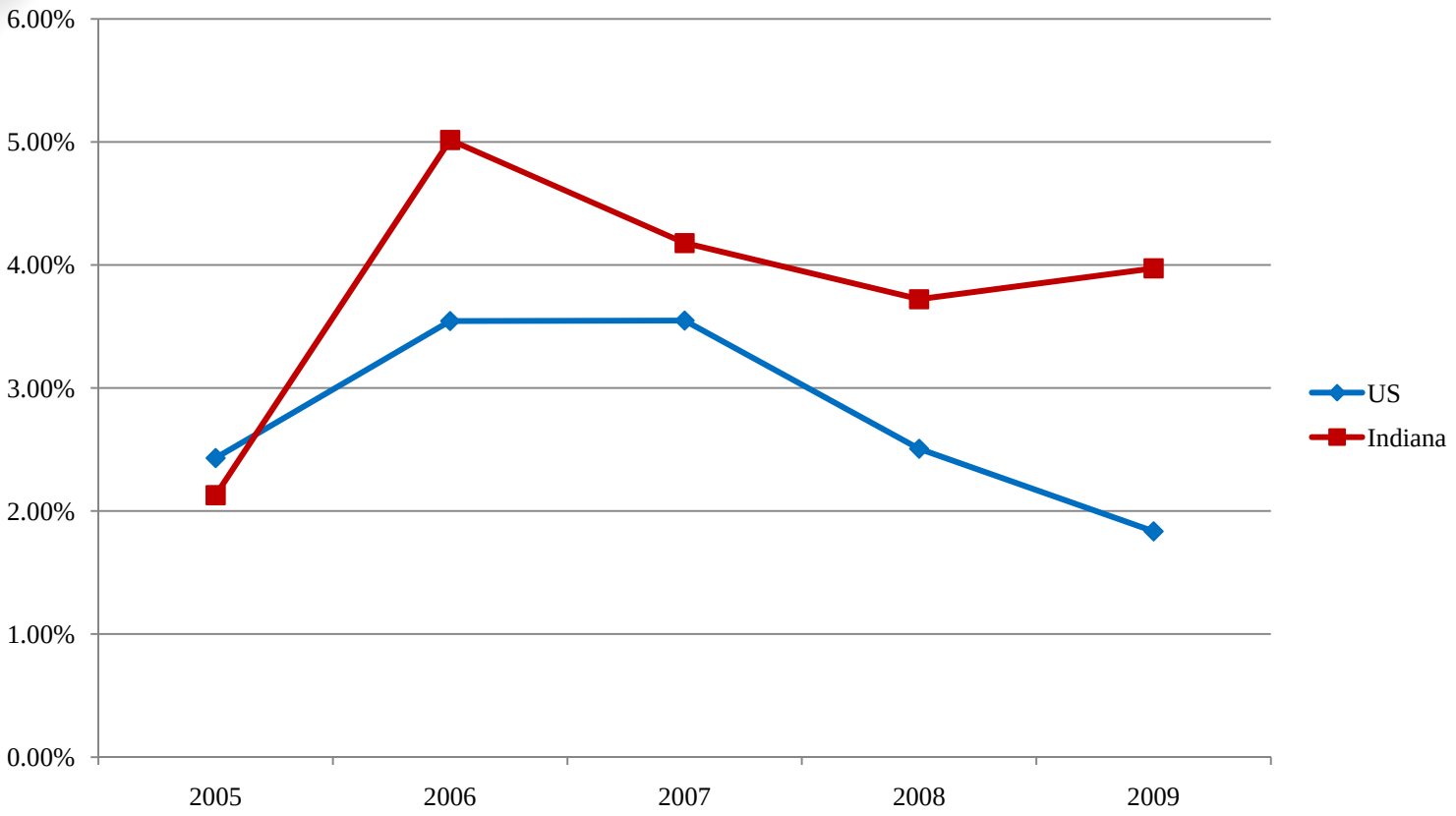
2. Pink GH, Holmes GM, Thompson RE, Slifkin RT. Variations in Financial Performance Among Critical Access Hospitals. *Journal of Rural Health* 23(4), 299-305, Fall 2007

3. Pink GH, Holmes GM, Slifkin RT, Thompson RE. Developing Financial Benchmarks for Critical Access Hospitals,*Health Care Financing Review* 30(3), Spring 2009

CAH Financial Indicators Report

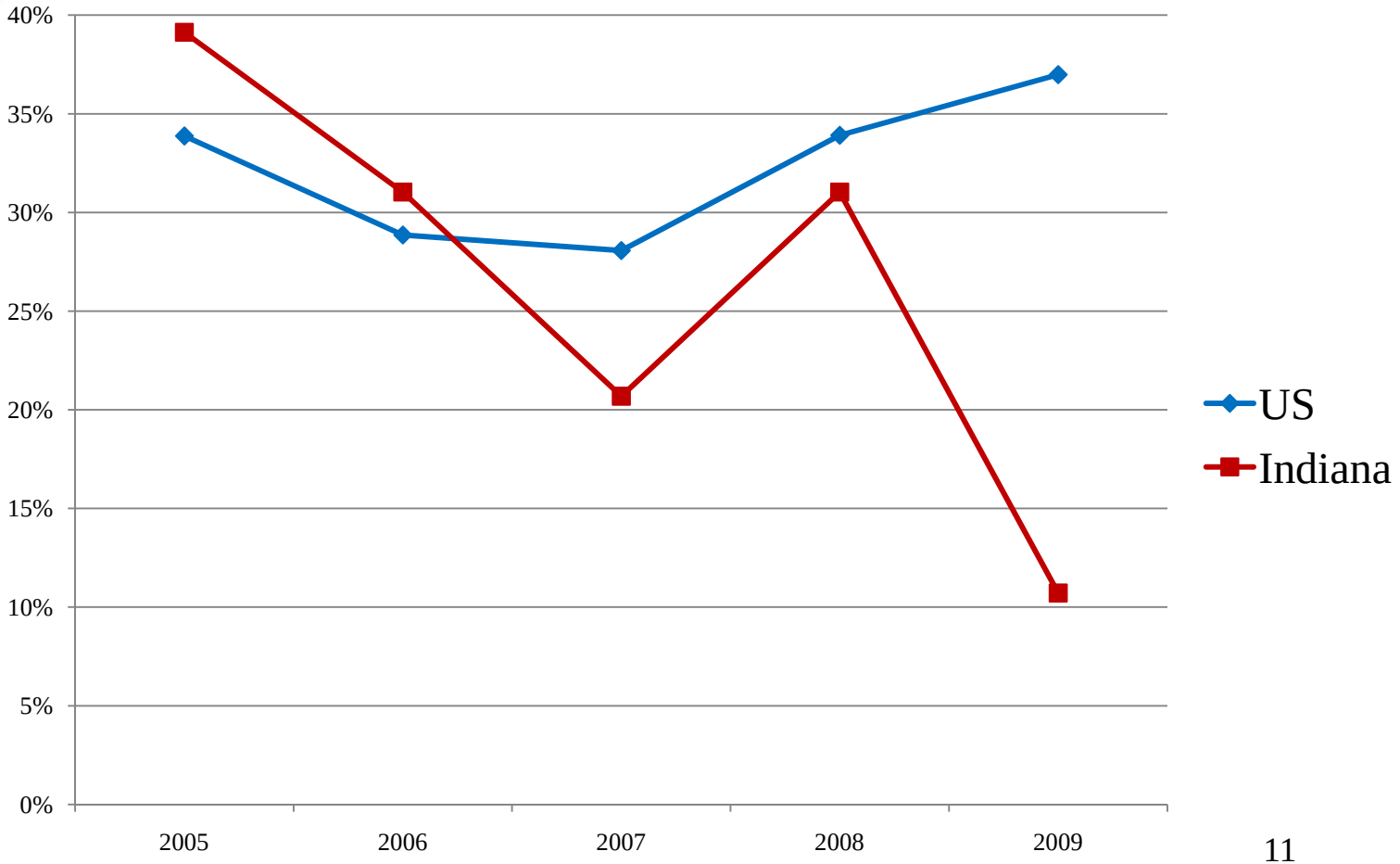
- 21 indicators of financial performance and condition developed with expert advice
- Profitability, liquidity, capital structure, revenue, cost, and utilization
- Peer groups
- Benchmarks

Profitability: Total margin (median)

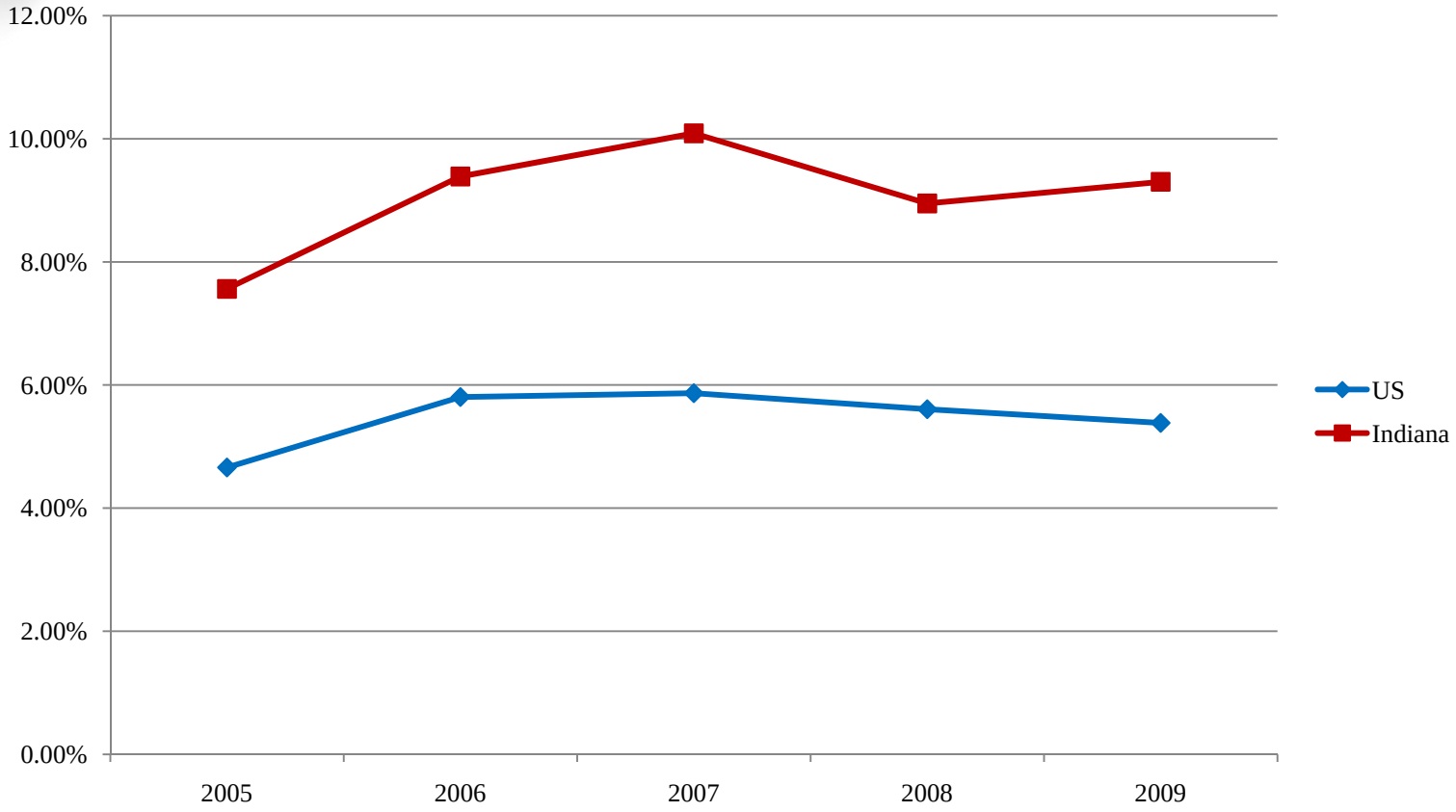


Net income
Total revenue

Percent of hospitals with negative total margin

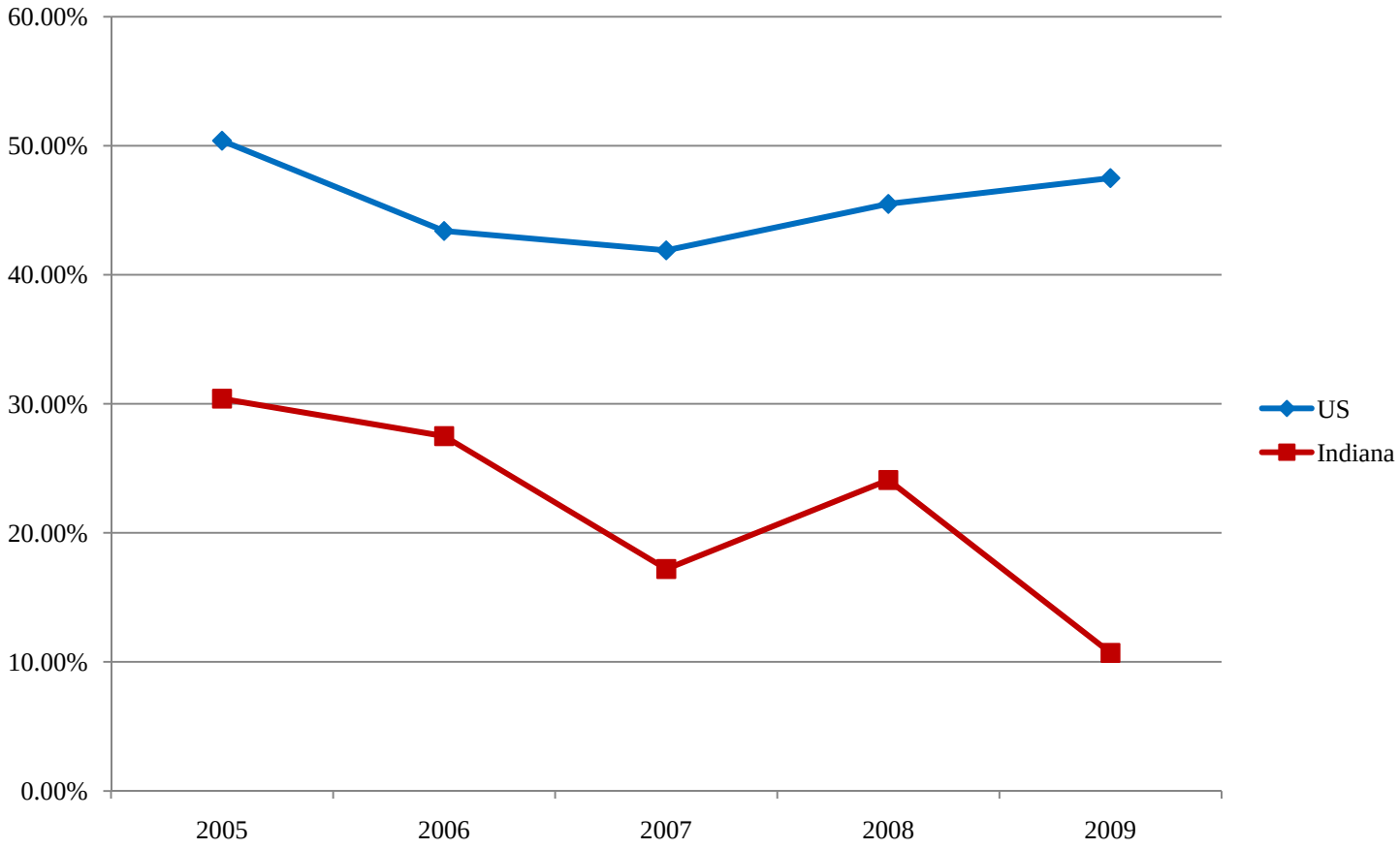


Profitability: Cash flow margin (median)

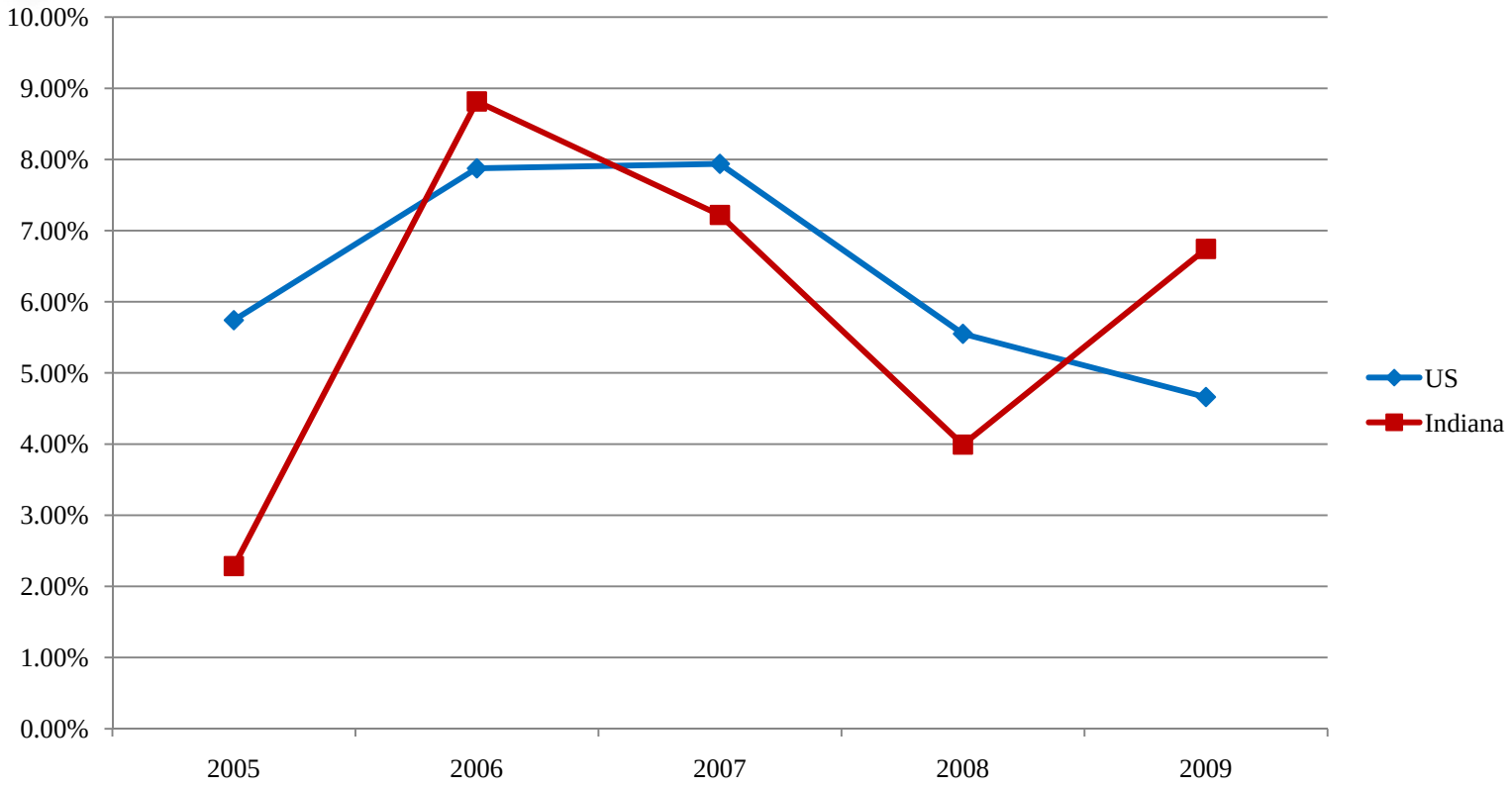


Net income – (Contributions, investments, and appropriations + Depreciation expense + Interest expense)
Net patient revenue + Other income – Contributions, investments, and appropriations

Percent of hospitals with negative cash flow margin

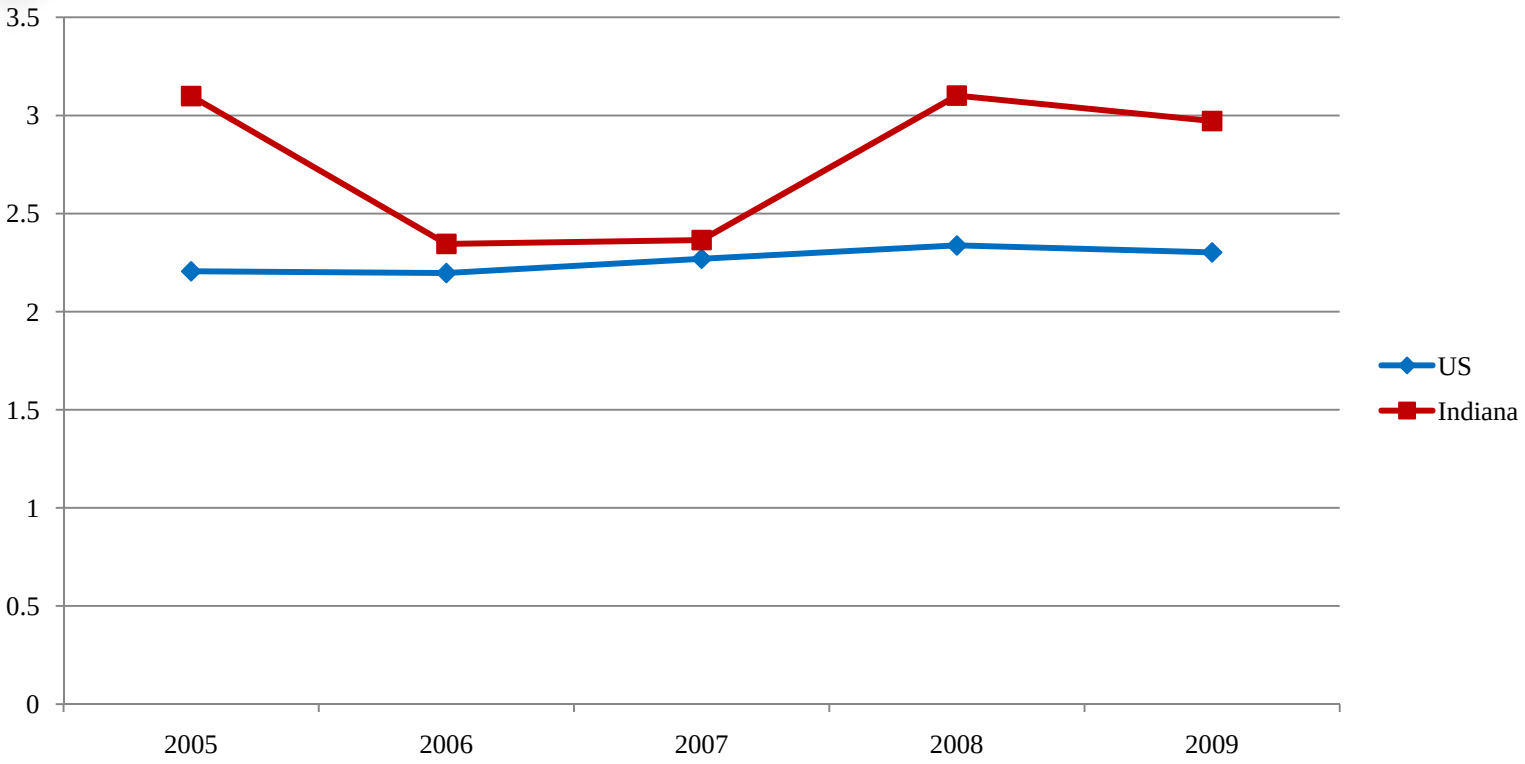


Profitability: Return on equity (median)



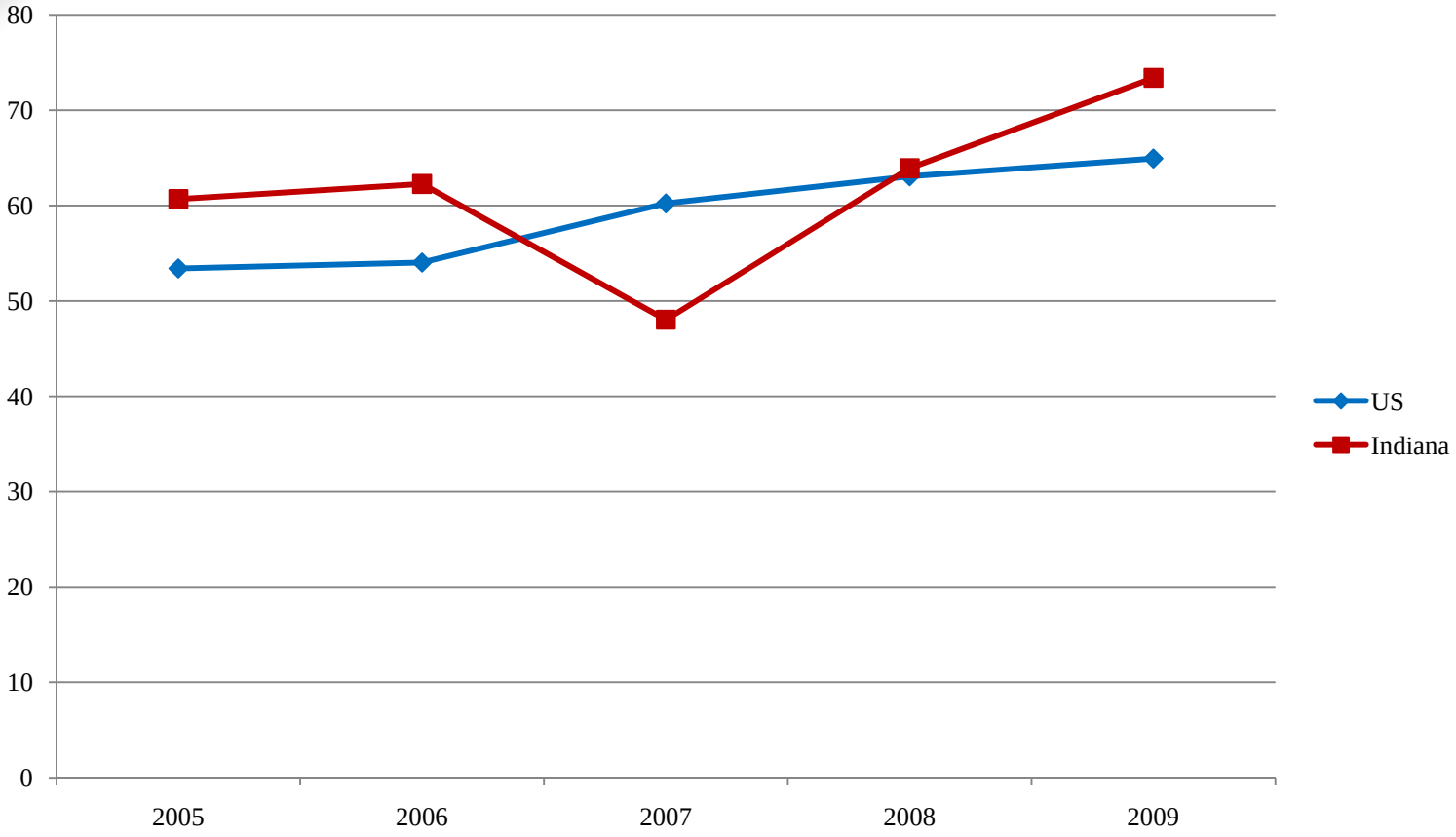
Net income
Fund balance

Liquidity: Current ratio (median)



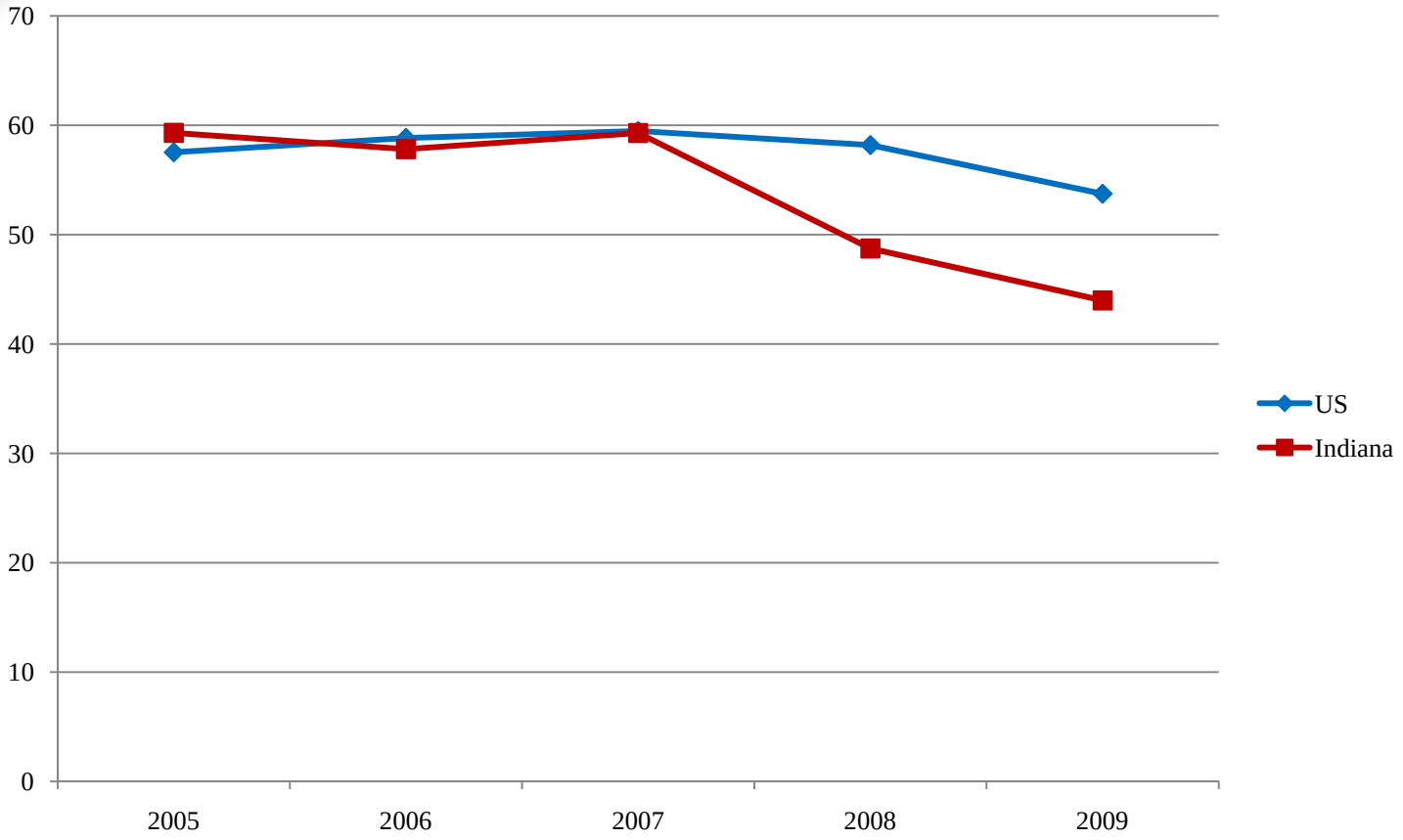
Current assets
Current liabilities

Liquidity: Days cash on hand (median)



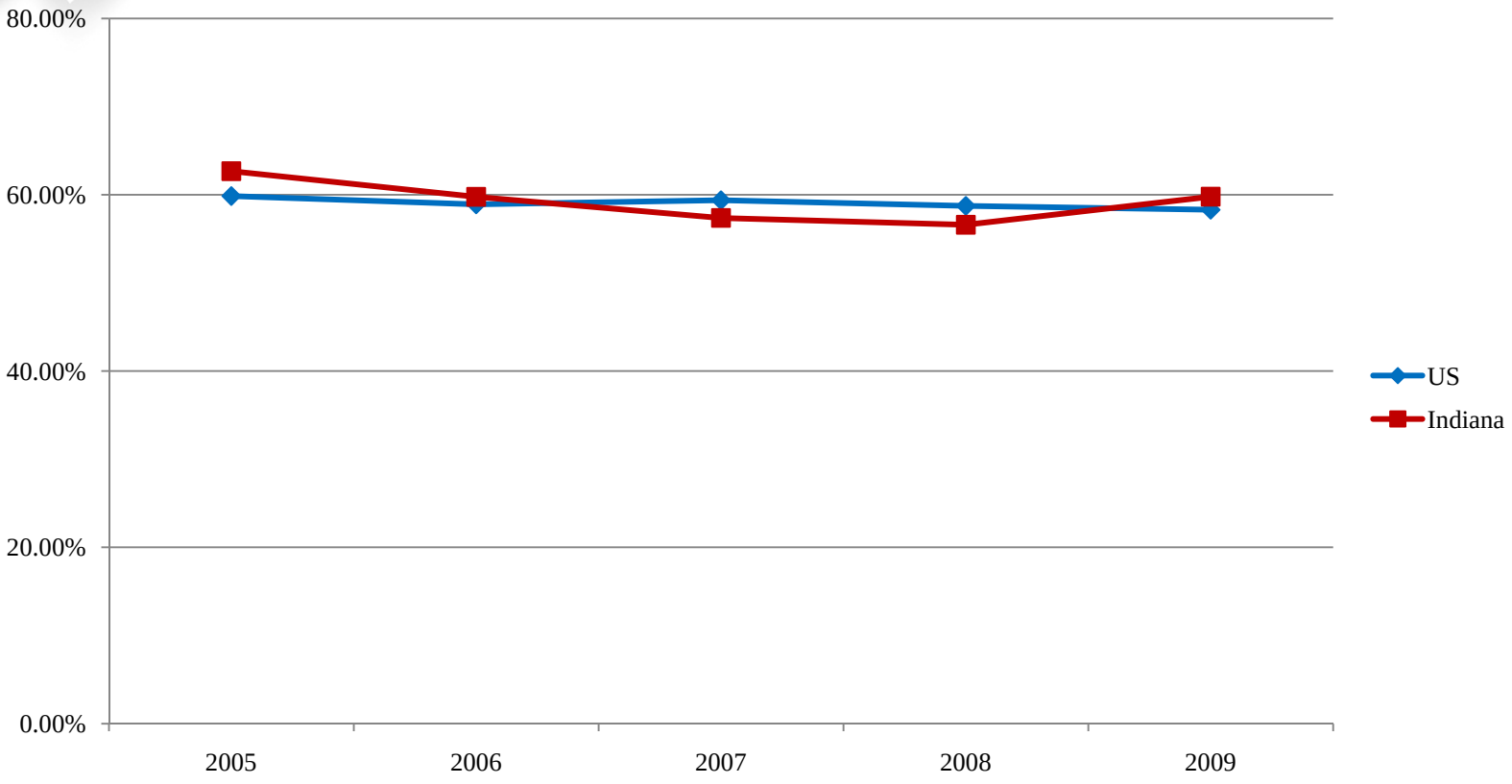
Cash + Marketable securities + Unrestricted investments
(Total expenses – Depreciation) / Days in period

Liquidity: Days revenue in accounts receivable (median)



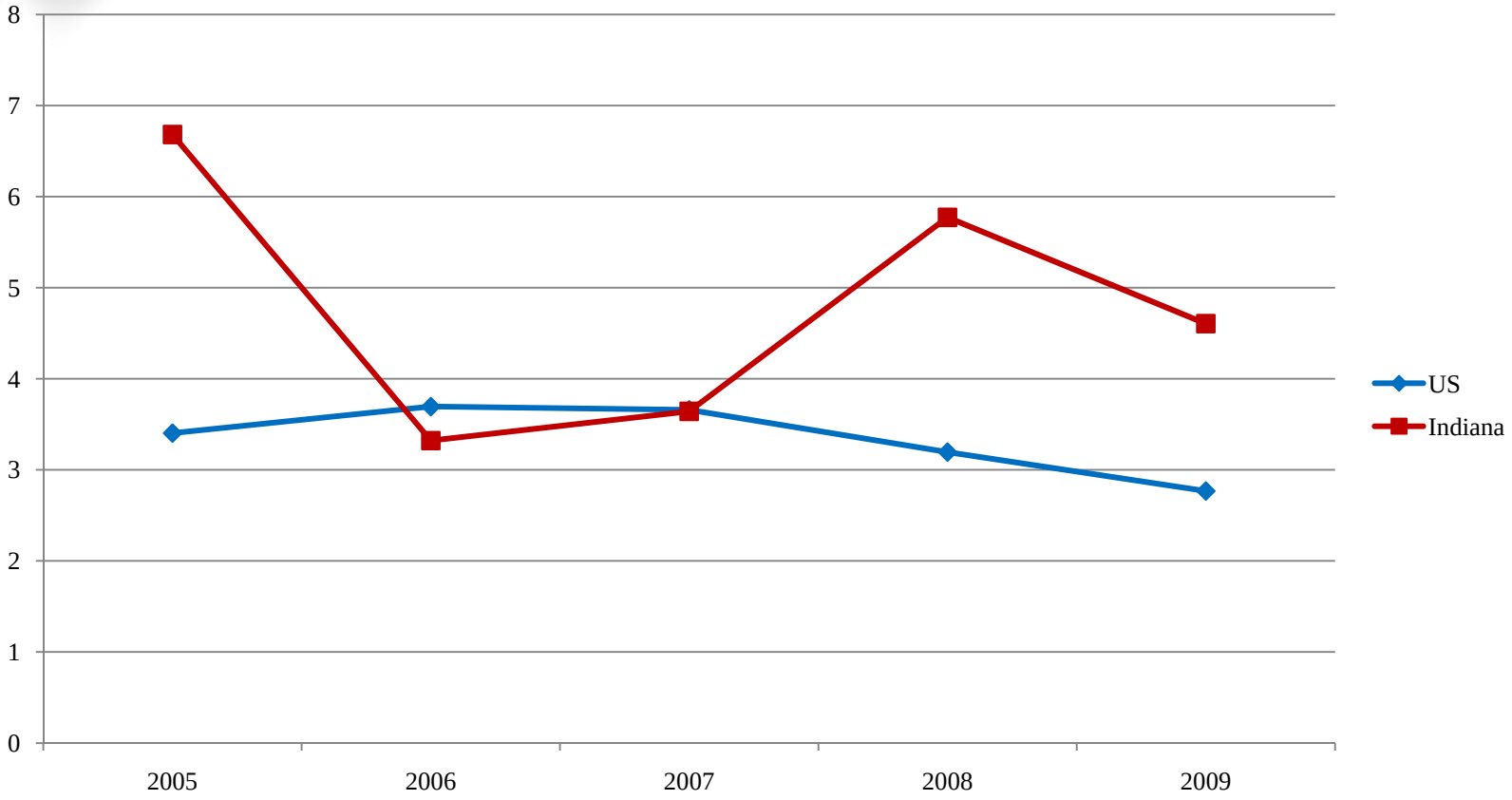
Net patient accounts receivable
(Net patient service revenue) / Days in period

Capital structure: Equity financing (median)



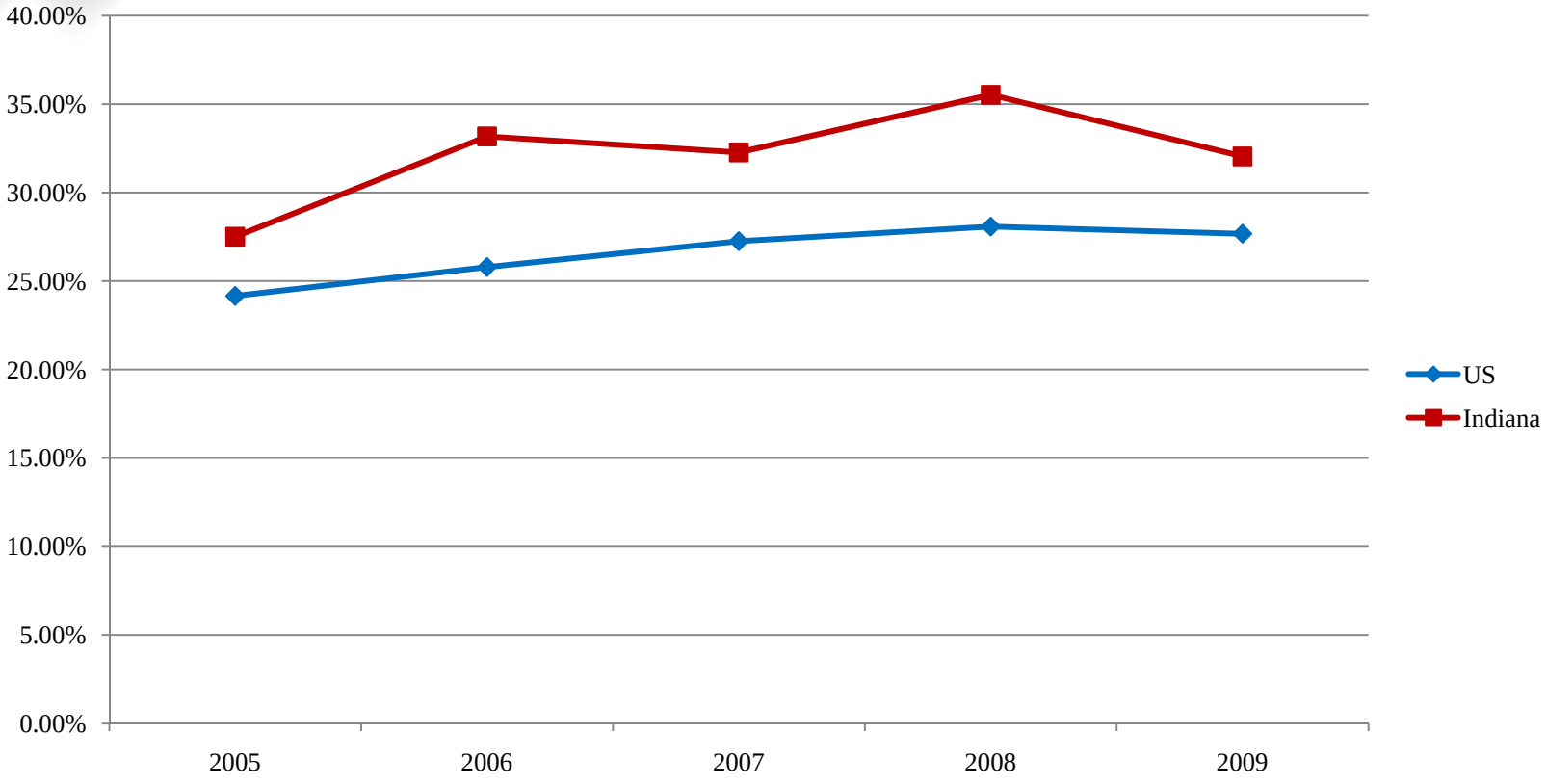
Net assets
Total assets

Capital structure: Debt service coverage (median)



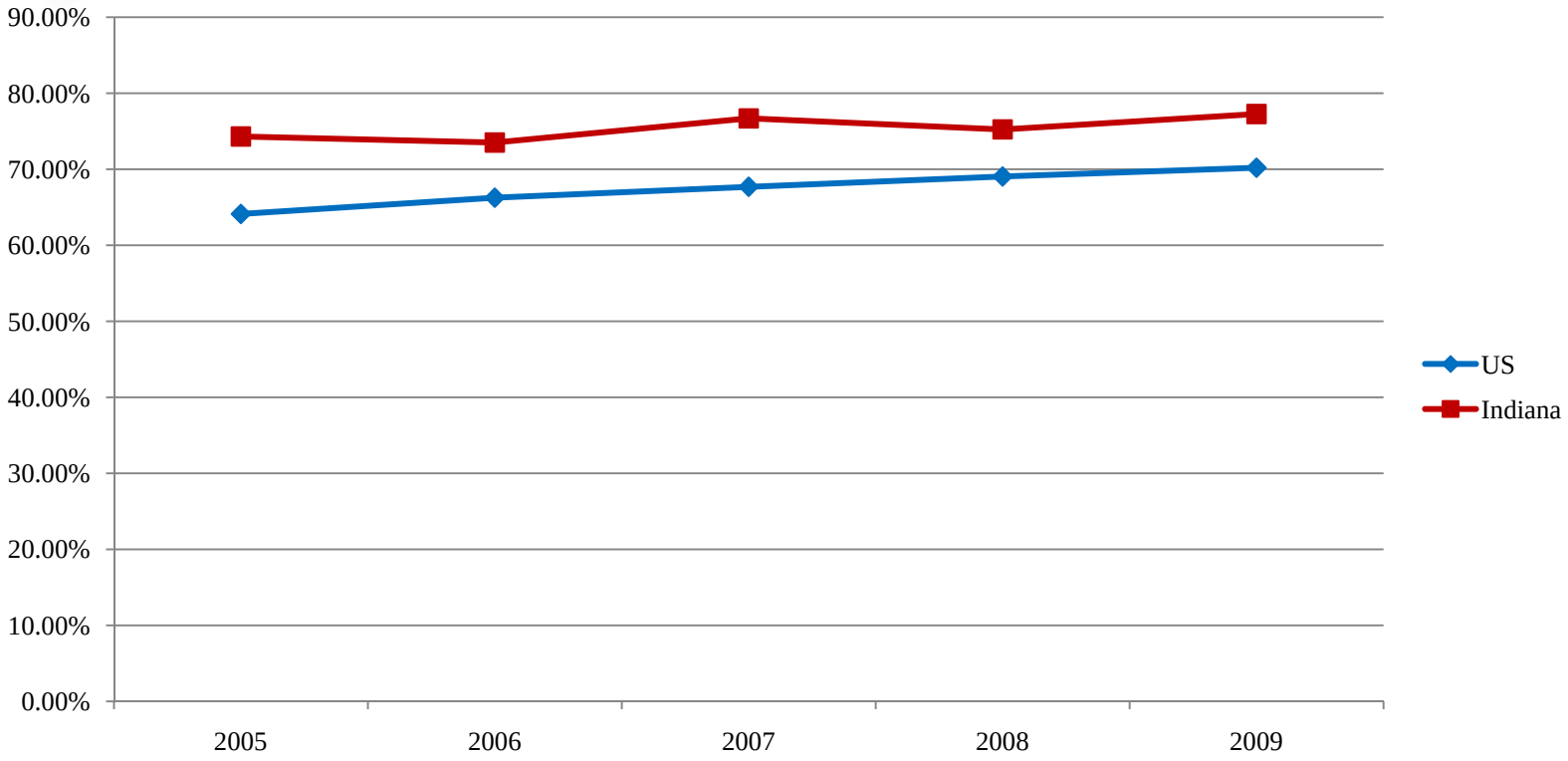
$$\frac{\text{Net income + Depreciation + Interest expense}}{\text{Current portion of long-term debt + Interest expense}}$$

Capital structure: Long-term debt to capitalization (median)



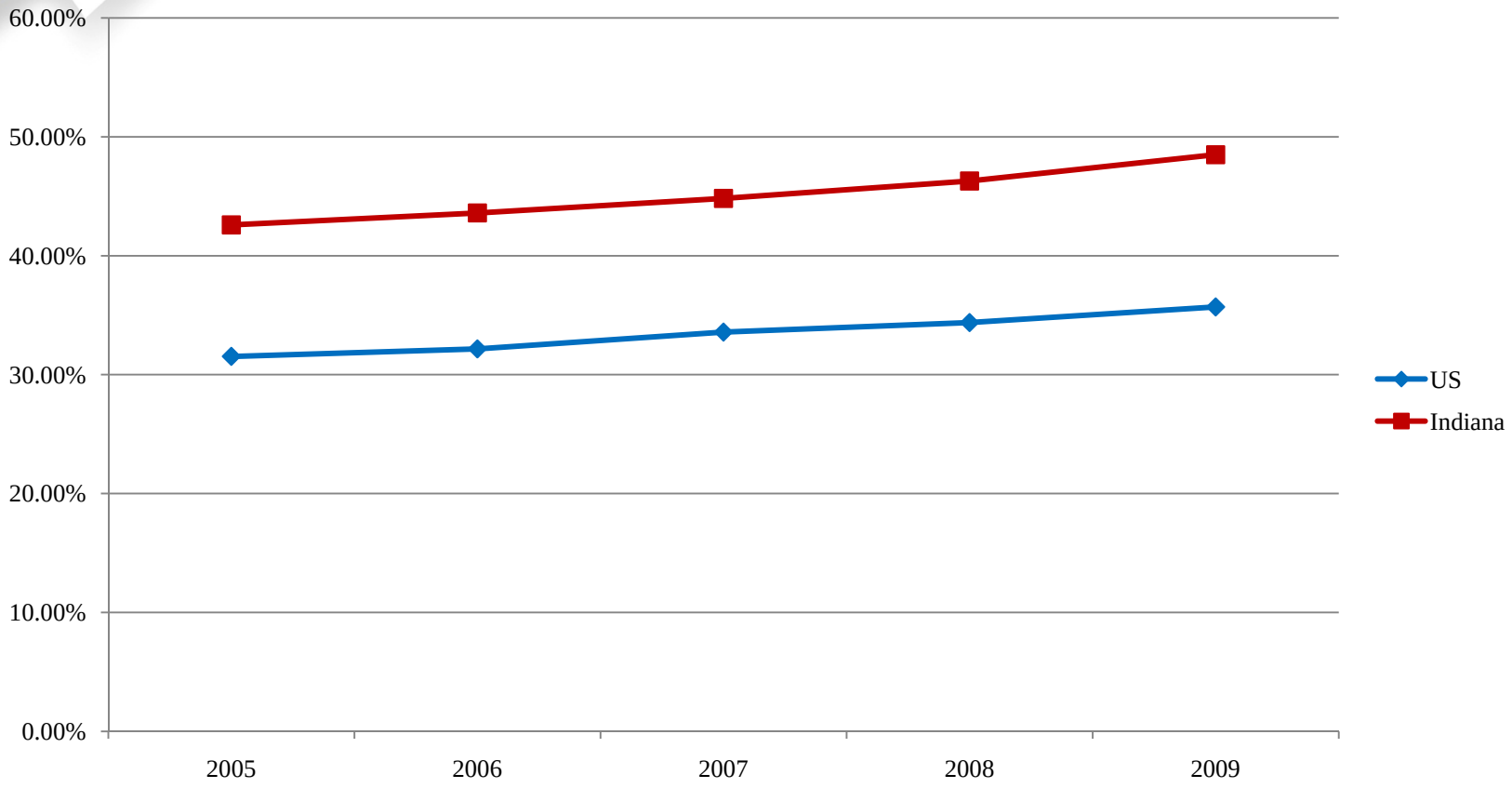
Long-term debt
Long-term debt + Fund balance

Revenue: Outpatient revenue to total revenue (median)



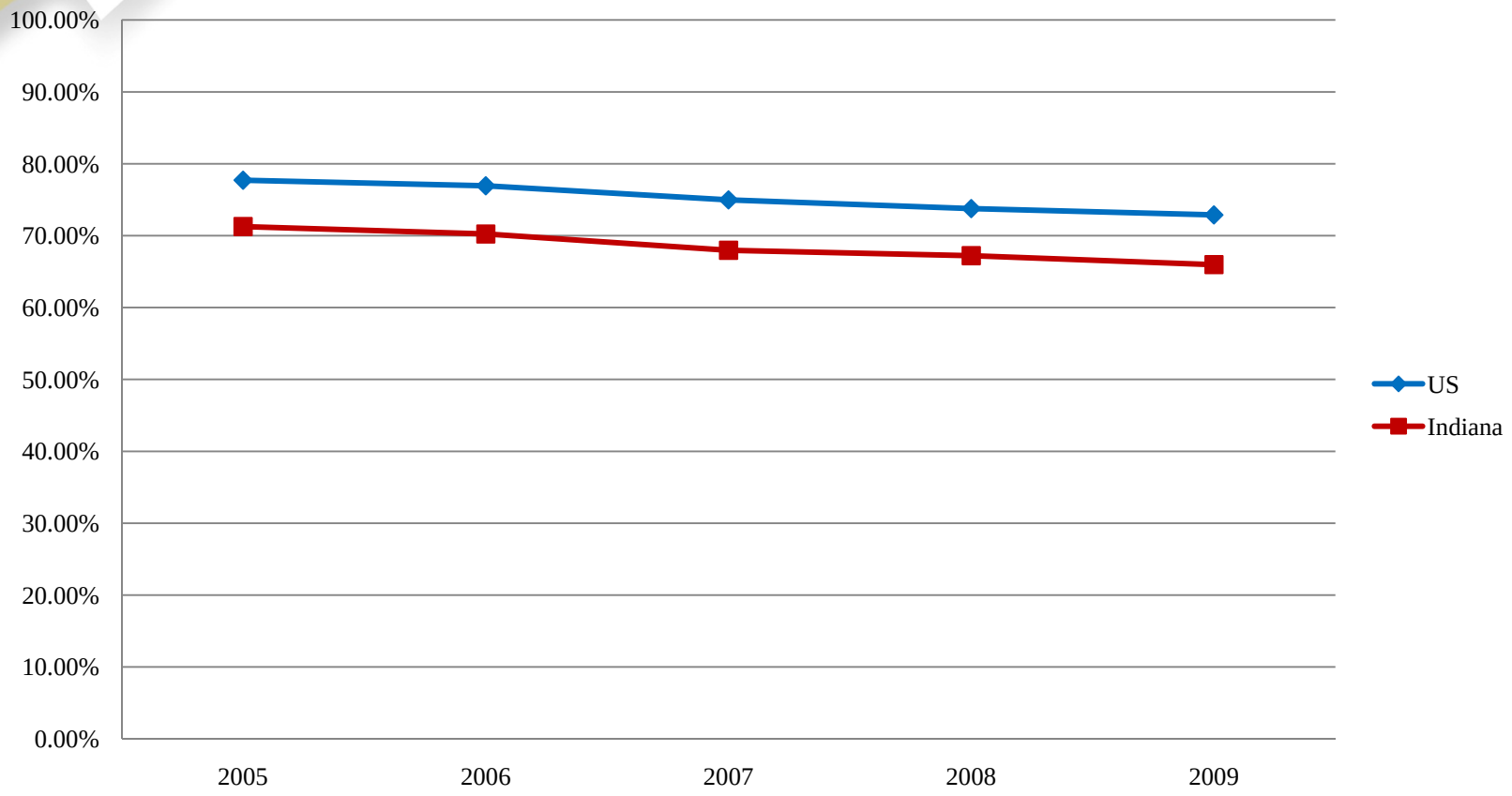
Total outpatient revenue
Total patient revenue

Revenue: Patient deductions (median)



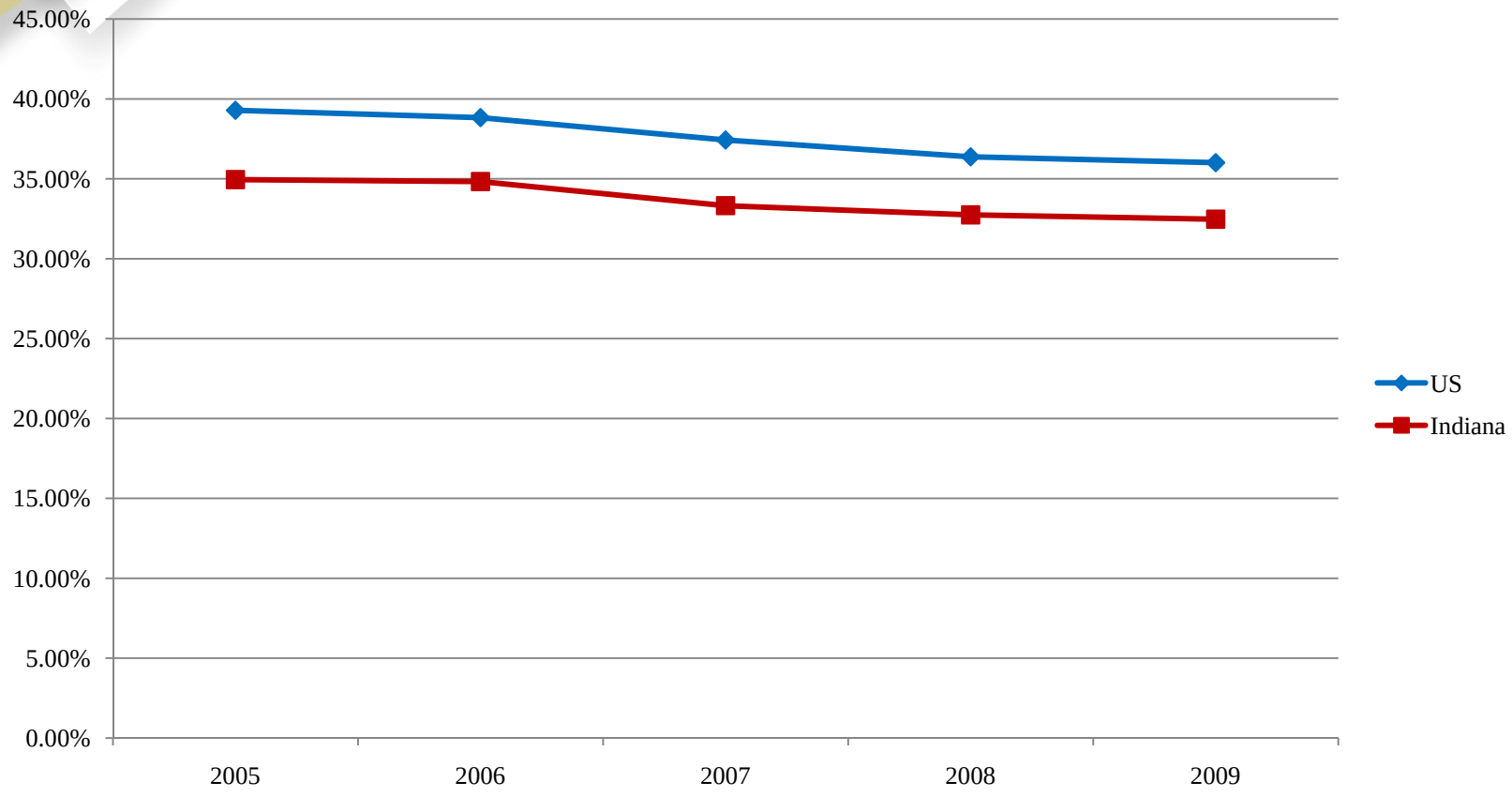
Contractual allowances and discounts
Gross total patient revenue

Revenue: Medicare inpatient payer mix (median)



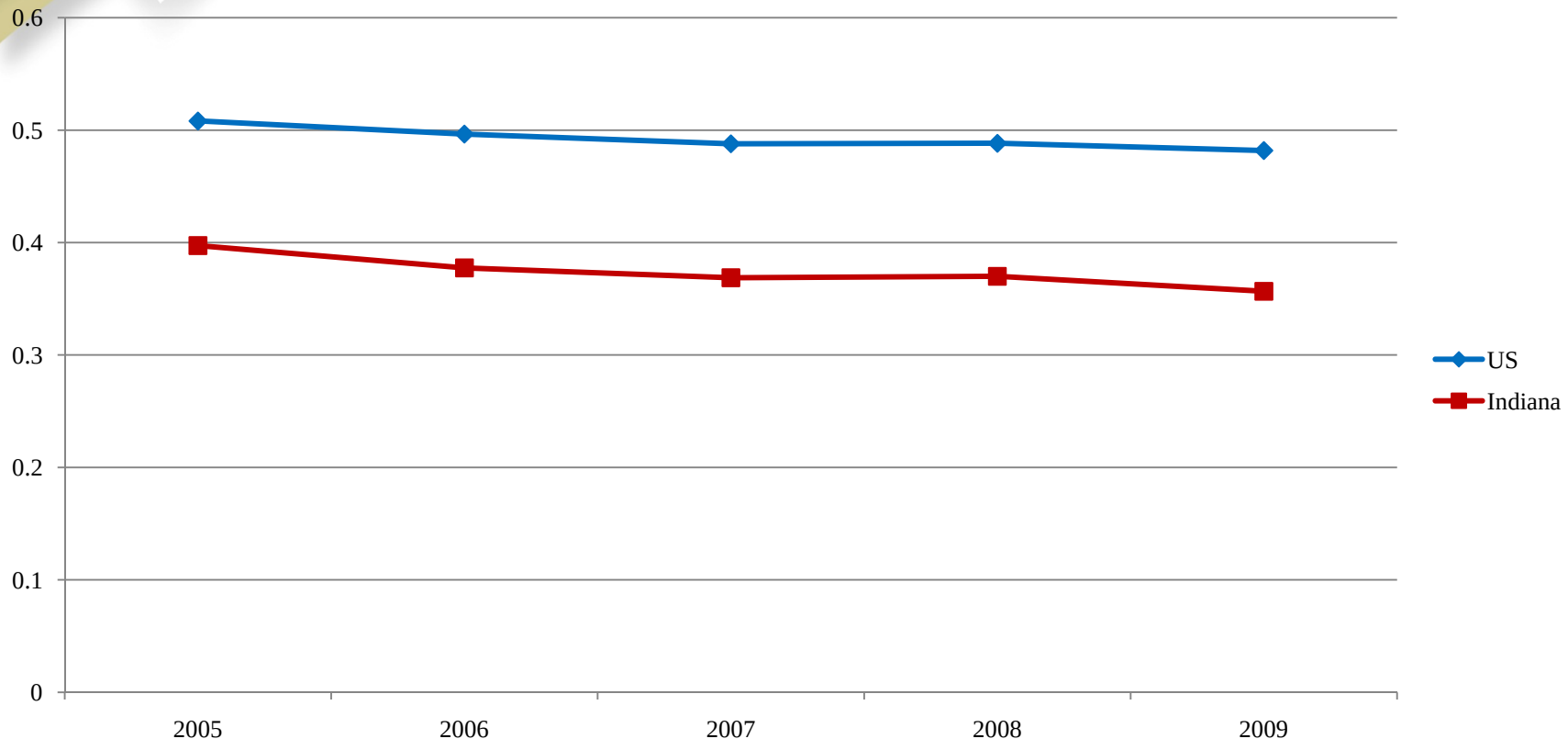
Medicare inpatient days
Total inpatient days – Nursery bed days – NF Swing bed days

Revenue: Medicare outpatient payer mix (median)



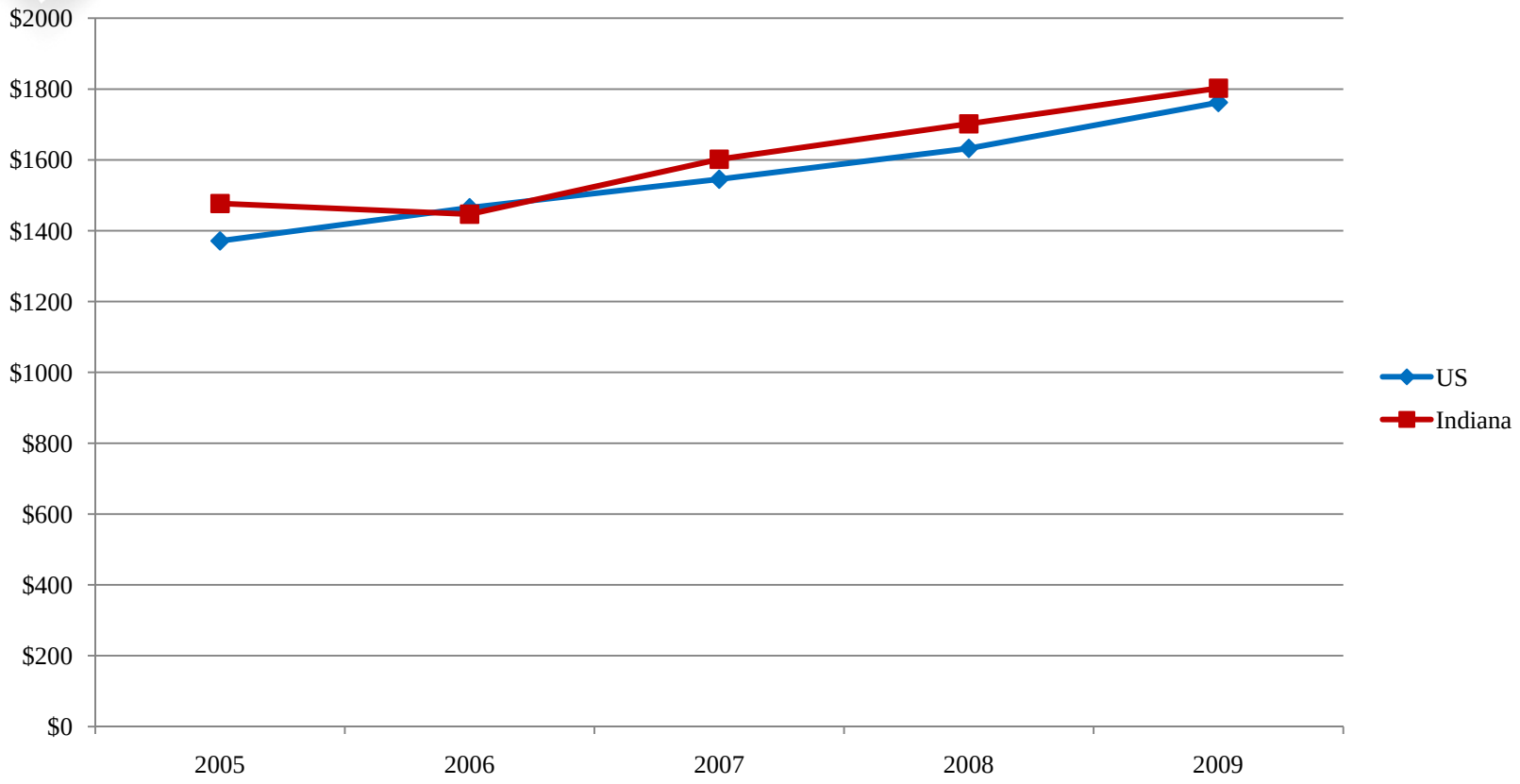
Outpatient Medicare charges
Total outpatient charges

Revenue: Medicare outpatient cost to charge (median)



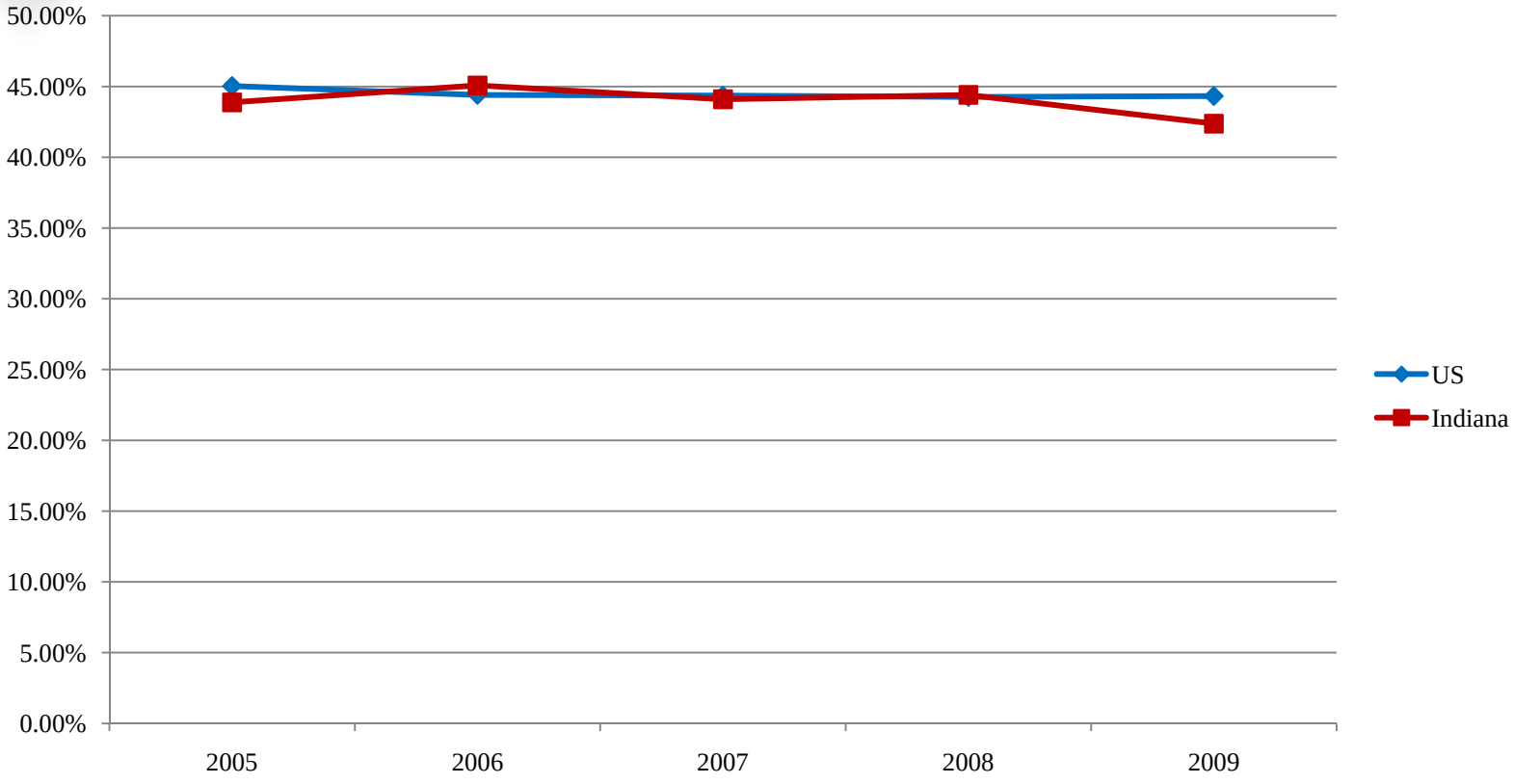
Outpatient Medicare costs
Outpatient Medicare charges

Revenue: Medicare revenue per day (median)



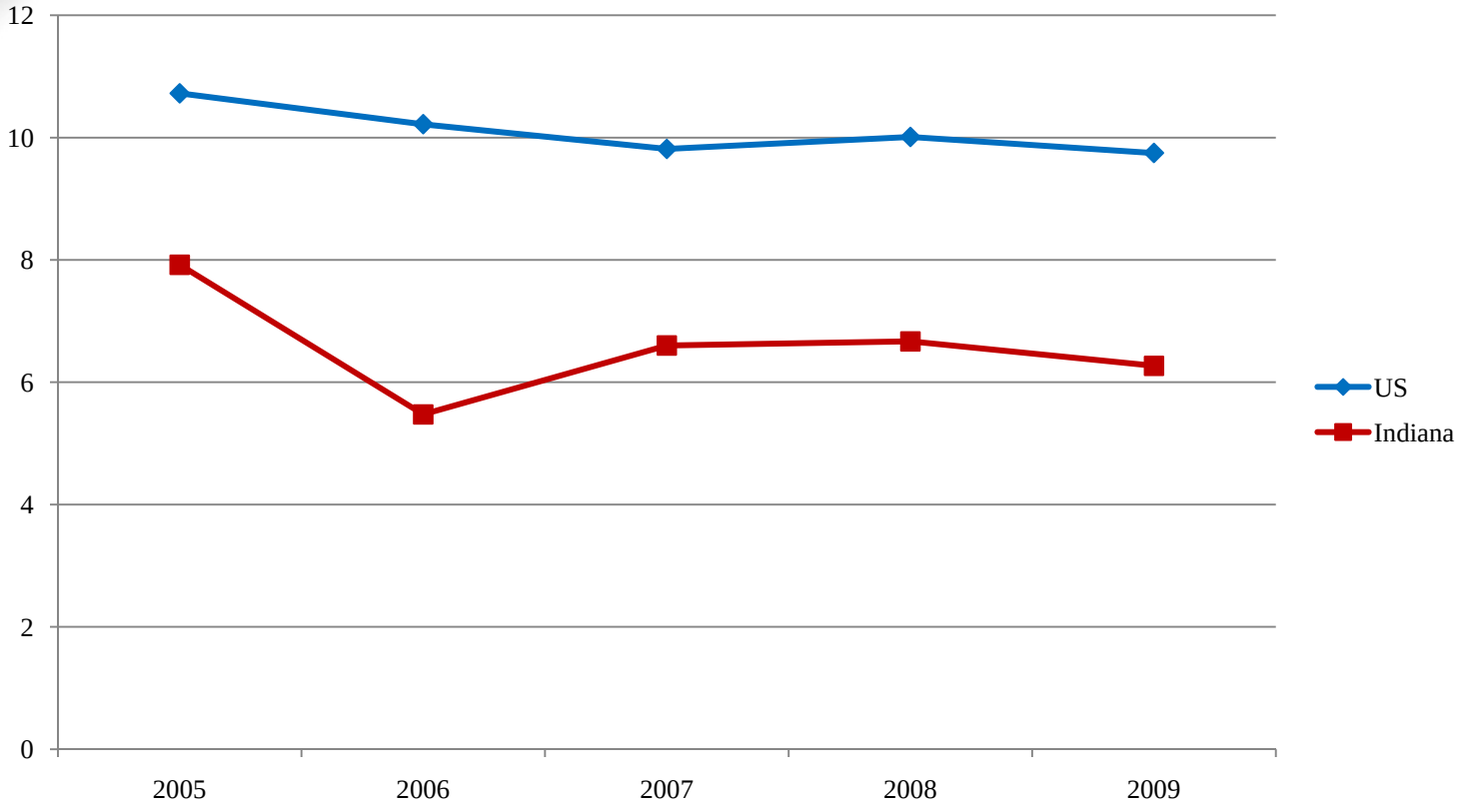
Medicare revenue
Medicare days – SNF Swing bed days

Cost: Salaries to total expenses (median)



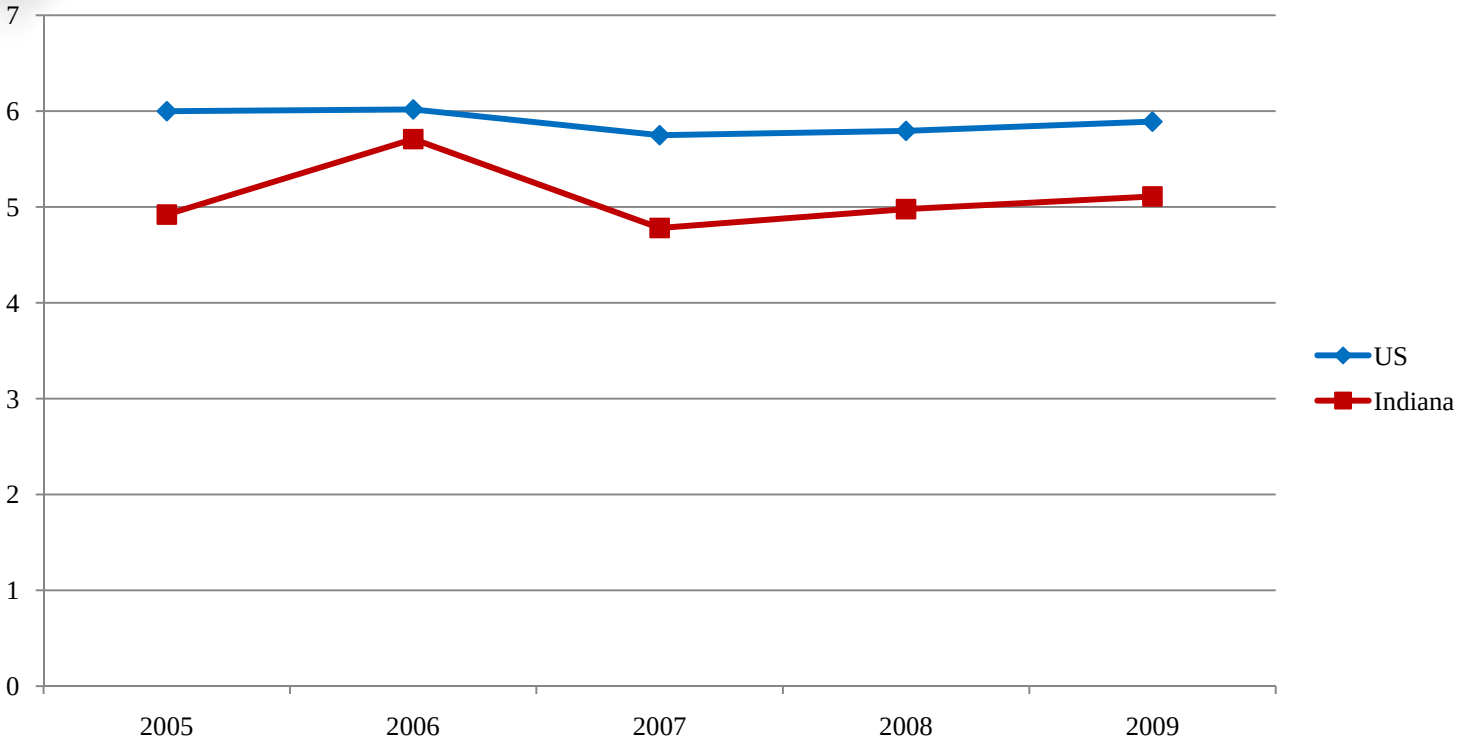
Salary expense
Total expenses

Cost: Average age of plant (median)



Accumulated depreciation
Depreciation expense

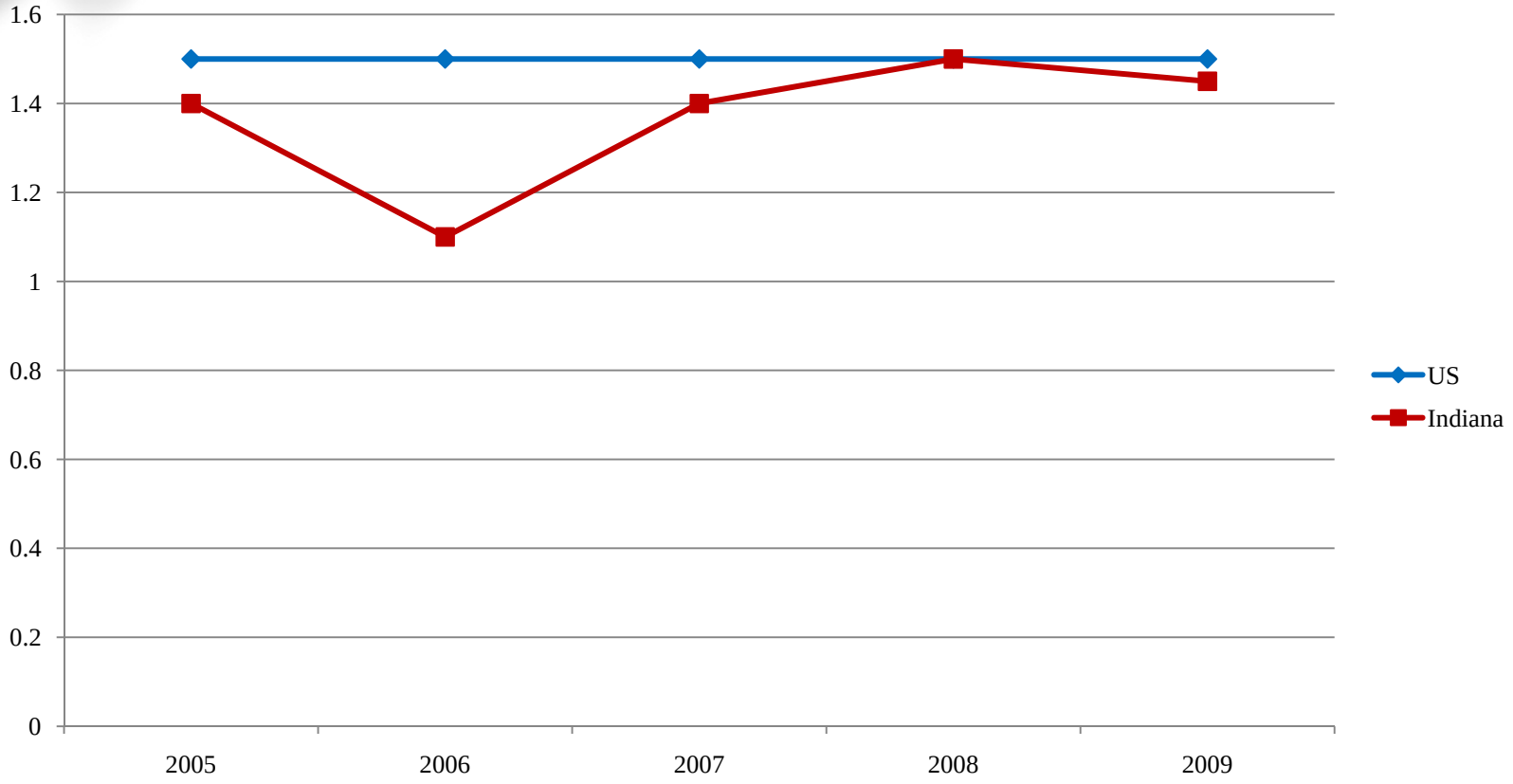
Cost: FTEs per adjusted occupied bed (median)



Number of FTEs
Adjusted occupied beds**

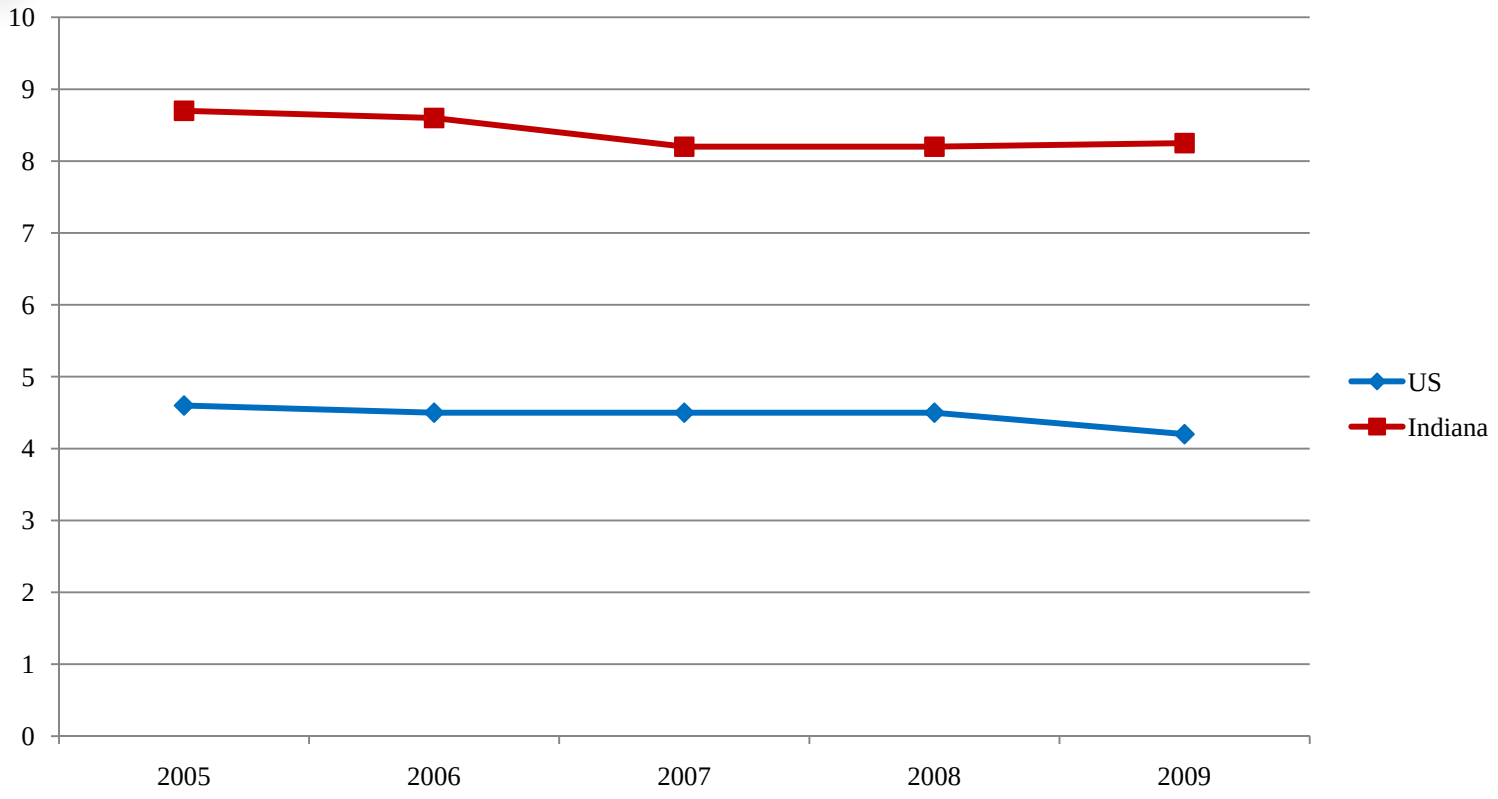
** (Inpatient days – NF Swing days – Nursery days) *
(Total patient revenue / (Total inpatient revenue – Inpatient NF revenue – Other LTC Revenue)) / Days in period

Utilization: Average daily census: Swing/SNF beds (median)



Inpatient swing bed SNF days
Days in period

Utilization: Average daily census: Acute beds (median)



Inpatient acute care bed days
Days in period

Summary

- Compared to the US, CAHs in Indiana:
  - Are more profitable
  - Are more liquid
  - Have more debt and are better able to service debt
  - Have higher proportion of outpatient revenue and patient deductions
  - Have lower Medicare payer mix and outpatient cost to charge
  - Have newer age of plant and lower FTEs / bed
  - Have higher ADC acute beds

IN CAHs are more profitable than average US CAH. Why?

- Potential reasons from the data:
  - Fewer CAHs with RHC and LTC
  - Higher proportion of outpatient revenue
  - Lower Medicare payer mix (if higher commercial)
  - Lower outpatient cost to charge
  - Newer age of plant and lower FTEs / bed
  - Higher ADC acute beds
  - Other reasons?

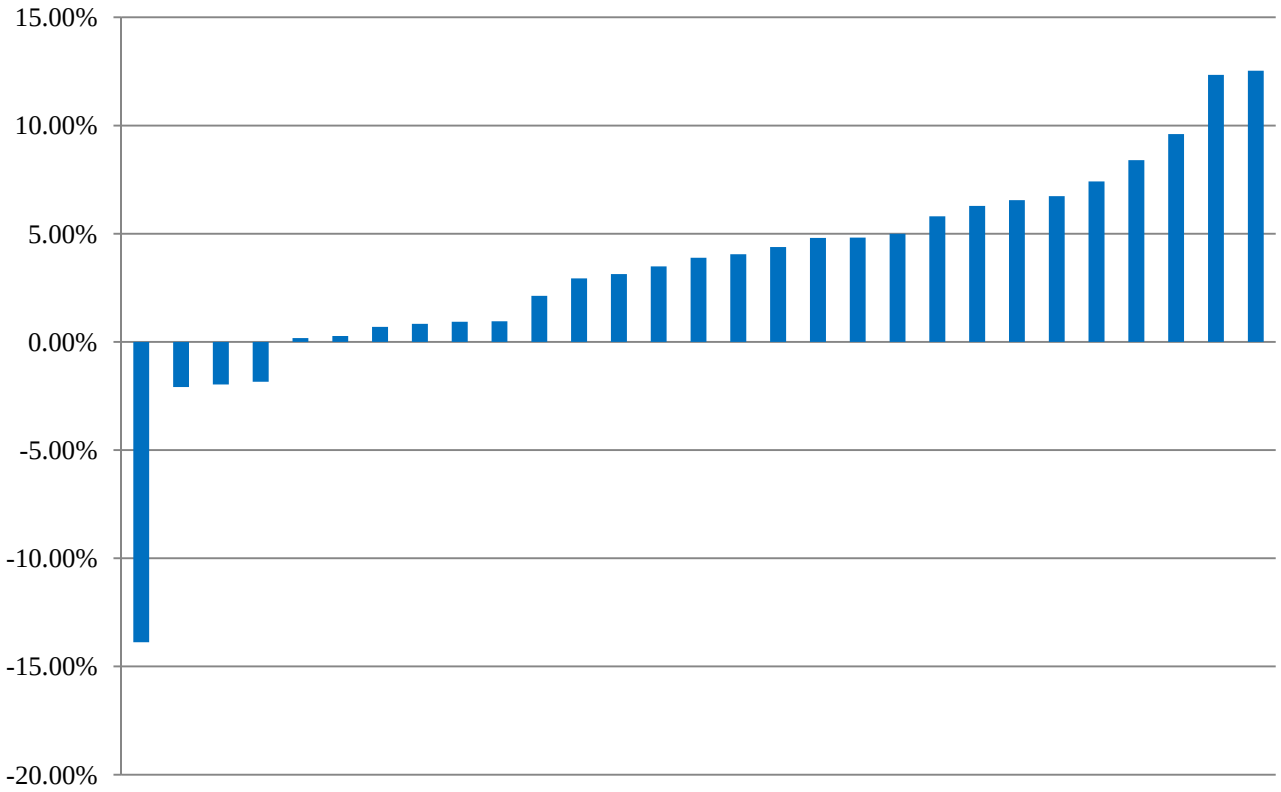
IN CAHs are more profitable than average US CAH. Why?

- Other potential reasons:
  - Net revenue is relatively higher (more patient volume, higher rates, better payer mix, Medicaid)
  - Costs are relatively lower (wage rates, bad debt, charity care, efficiency)
  - Non-operating income is relatively higher (investment income, state or county support, charitable revenue?)
  - System / network
  - Suggestions from the audience?

*2. 2009 Financial Performance of CAHs in IN**

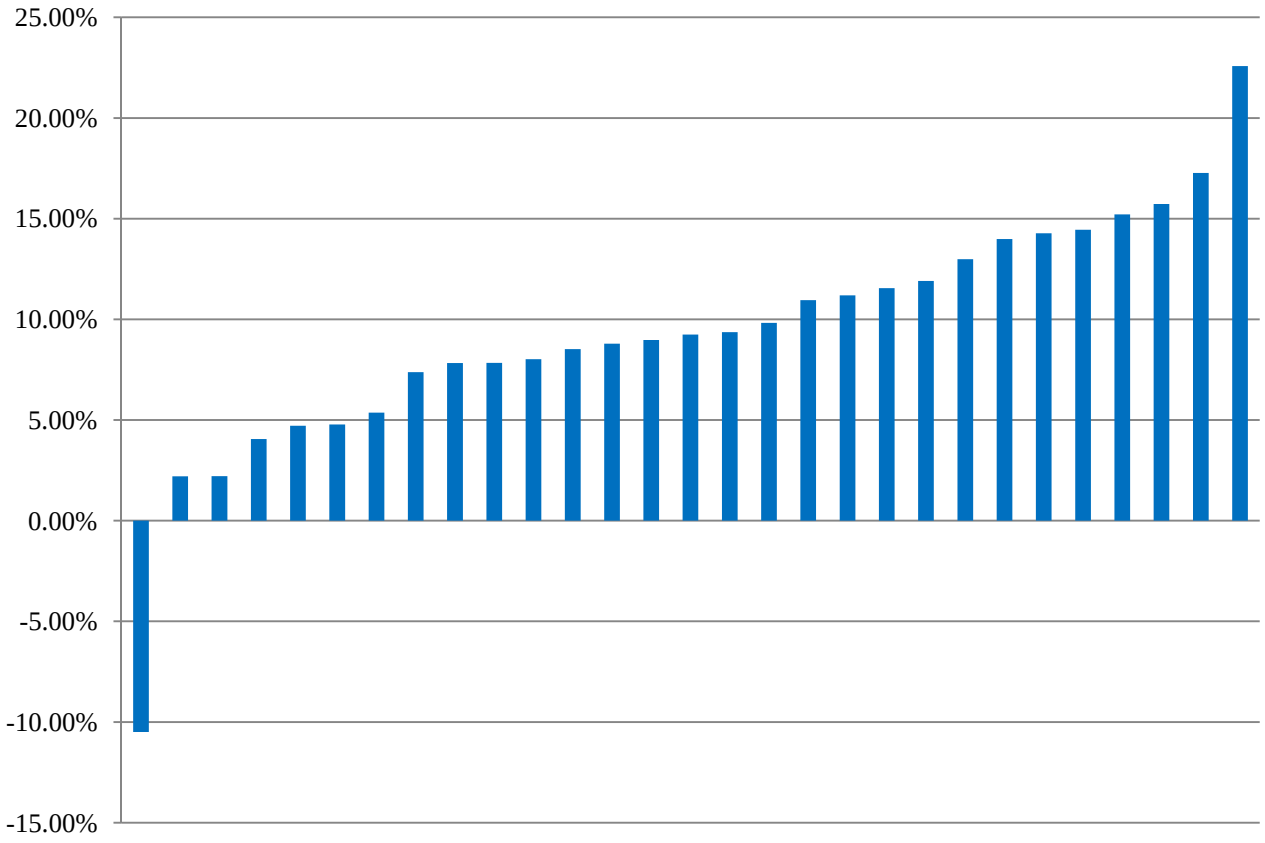
* Based on Medicare Cost Report data as of June 30, 2010

IN CAHs in 2009 Profitability: Total margin



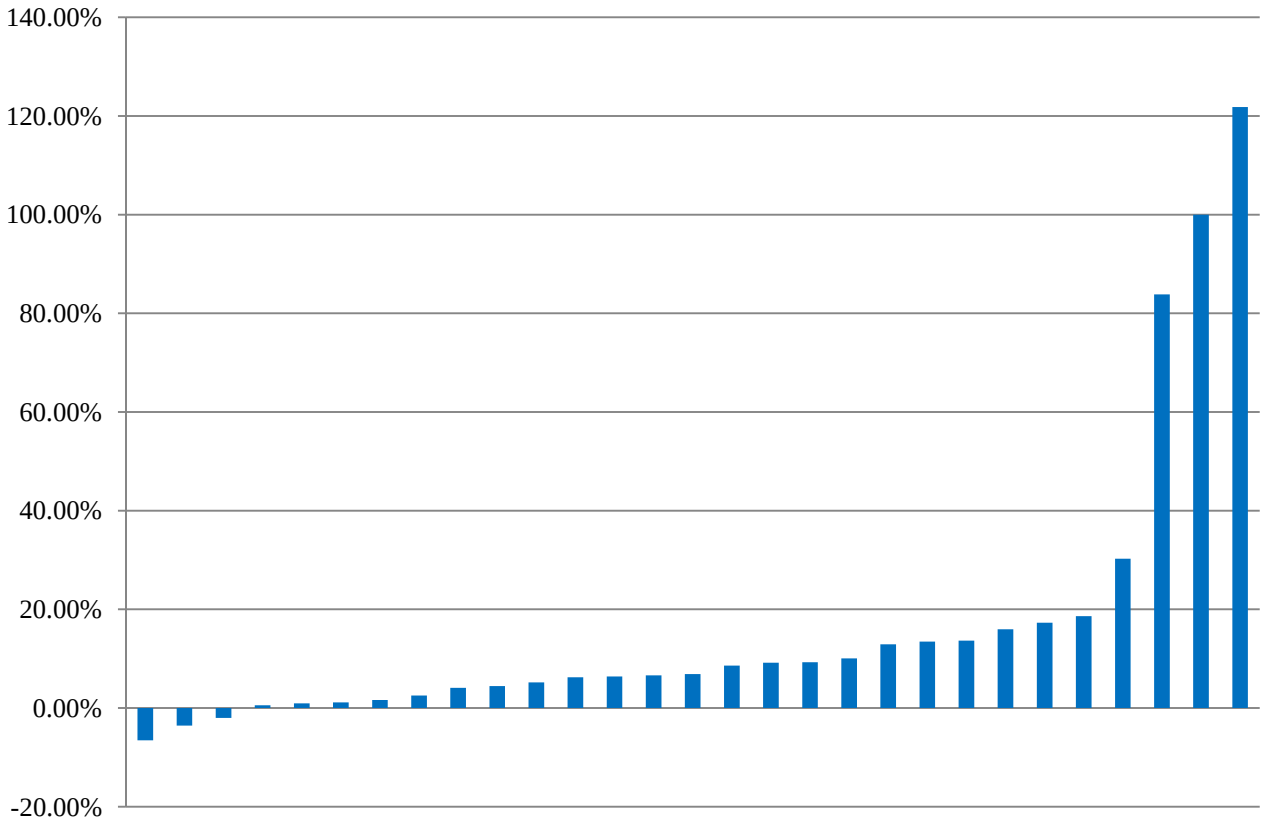
Net income
Total revenue

IN CAHs in 2009 Profitability: Cash flow margin



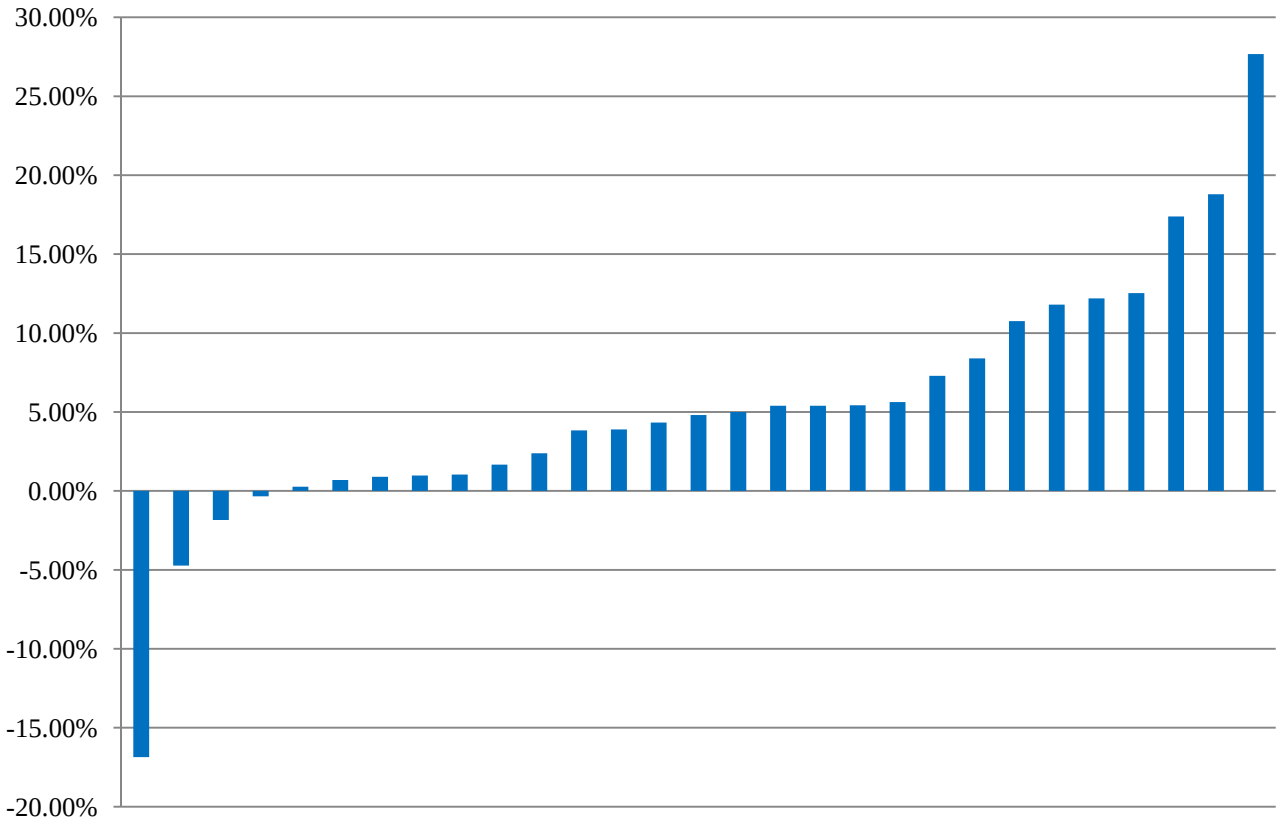
Net income – (Contributions, investments, and appropriations) + Depreciation expense + Interest expense
Net patient revenue + Other income – (Contributions, investments, and appropriations)

IN CAHs in 2009 Profitability: Return on equity



Net income
Fund balance

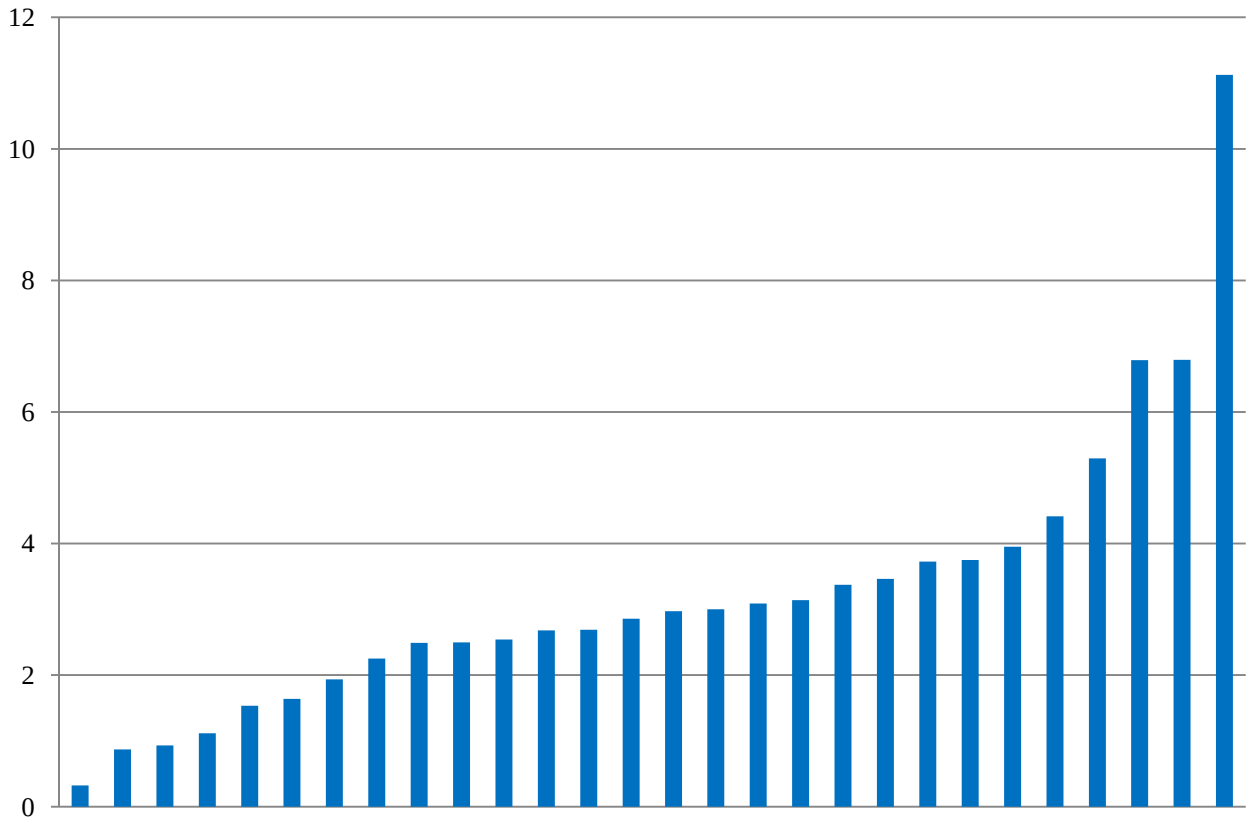
IN CAHs in 2009 Profitability: Operating margin



Operating income
Operating revenue

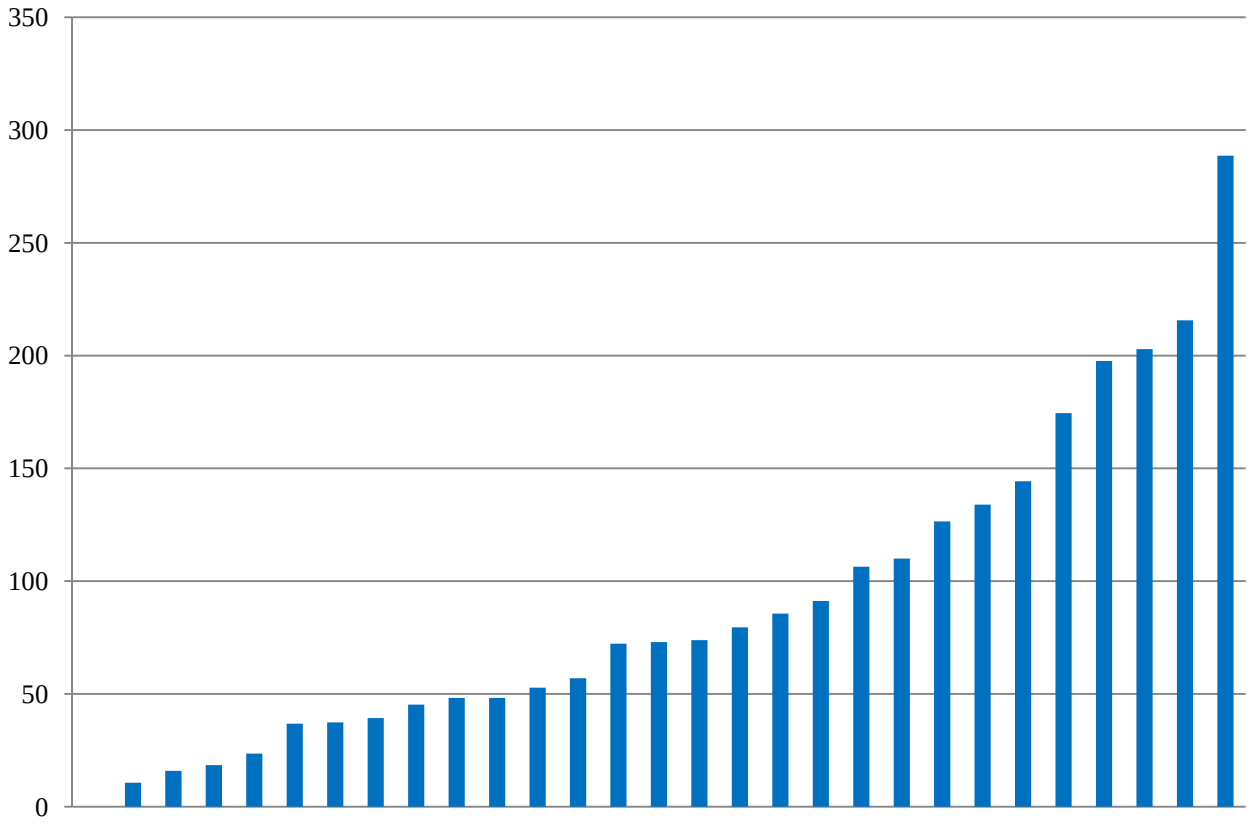
IN CAHs in 2009 Liquidity: Current ratio

Missing: 1



Current assets
Current liabilities

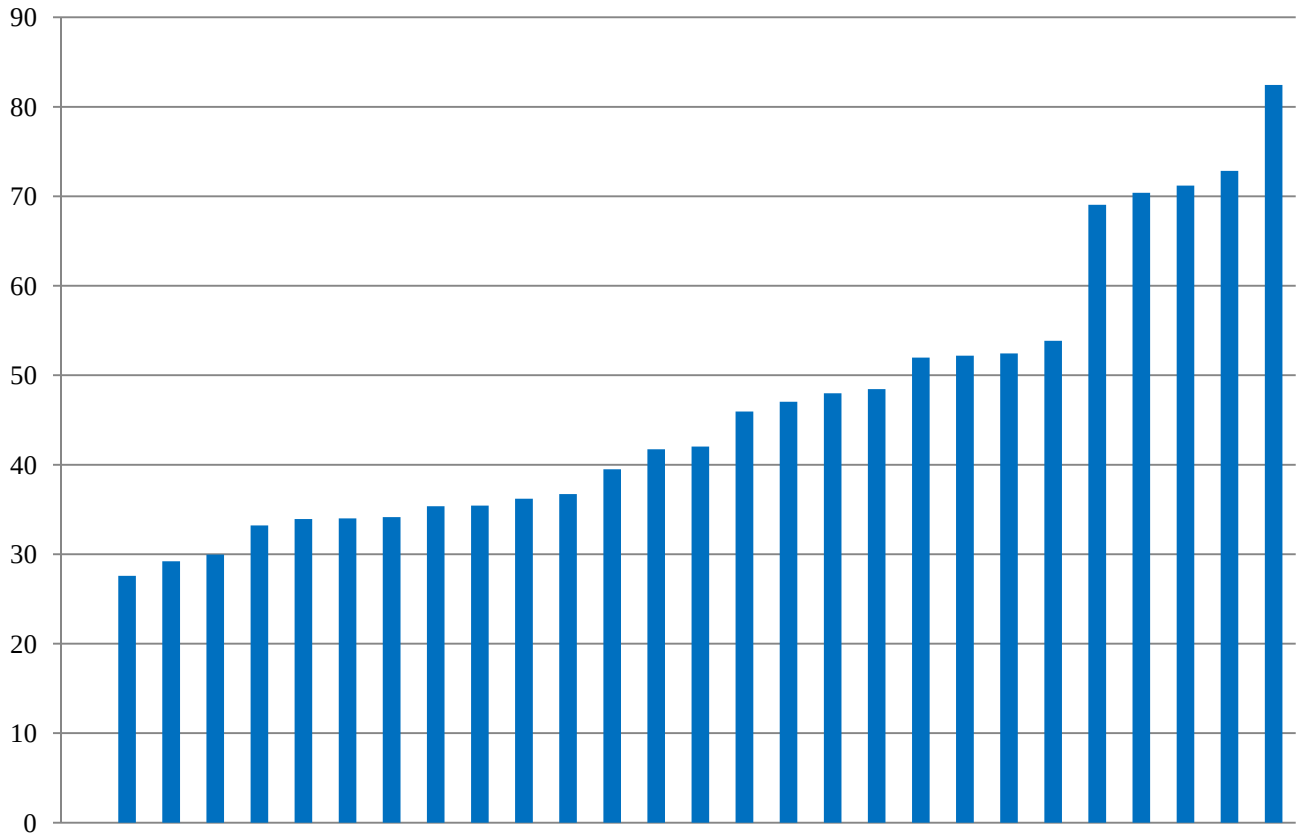
IN CAHs in 2009 Liquidity: Days cash on hand



Cash + Marketable securities + Unrestricted investments
(Total expenses – Depreciation) / Days in period

IN CAHs in 2009
Liquidity:
Days revenue in accounts receivable

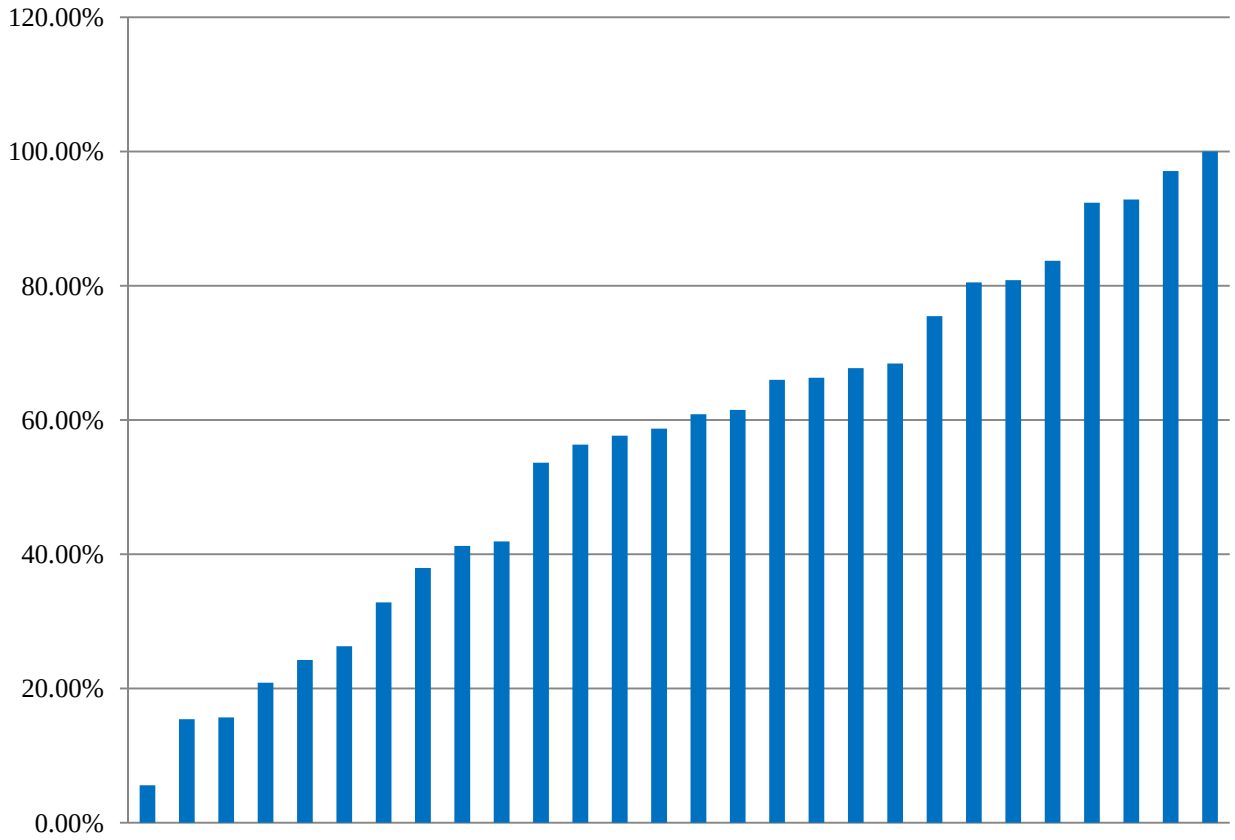
Outlier:
171.89



Net patient accounts receivable
(Net patient service revenue) / Days in period

IN CAHs in 2009 Capital Structure: Equity financing

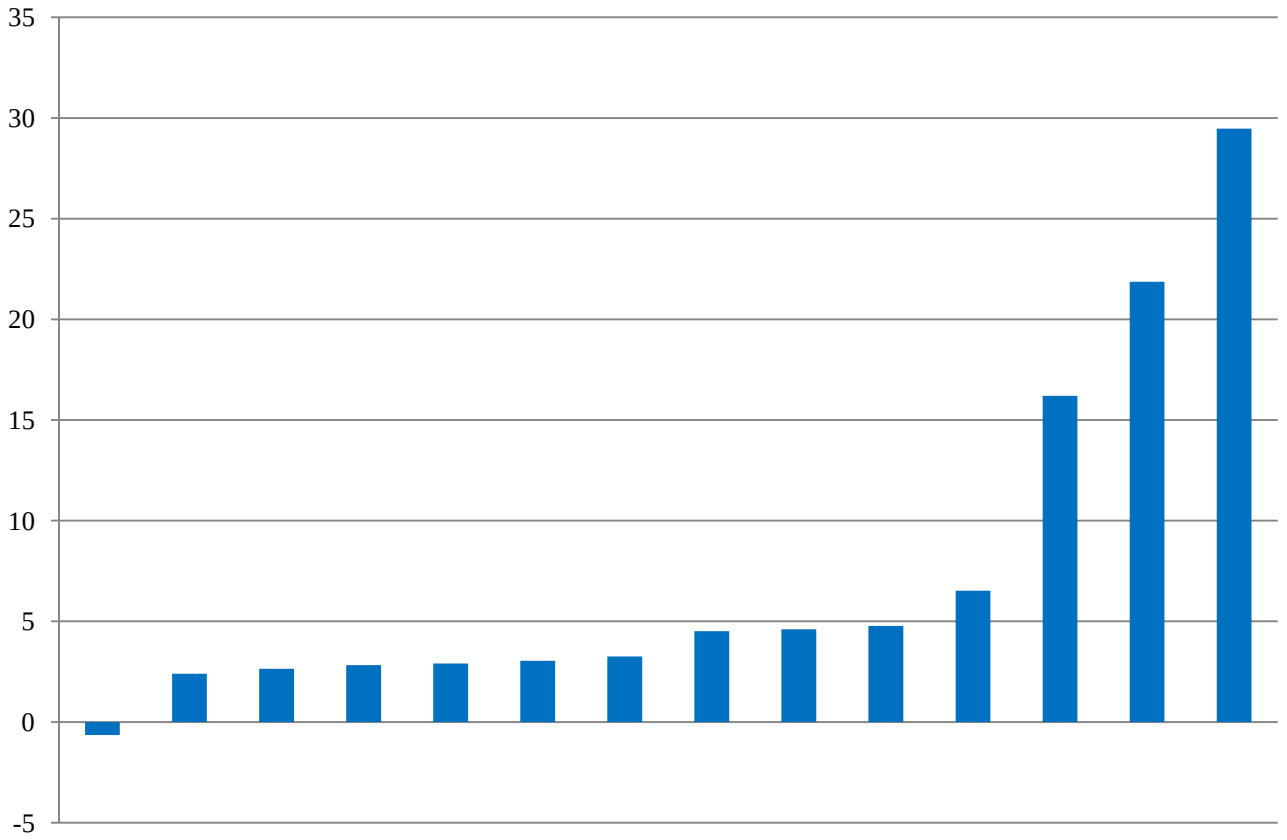
Outlier: -8%



Fund balance
Total assets

IN CAHs in 2009 Capital Structure: Debt service coverage

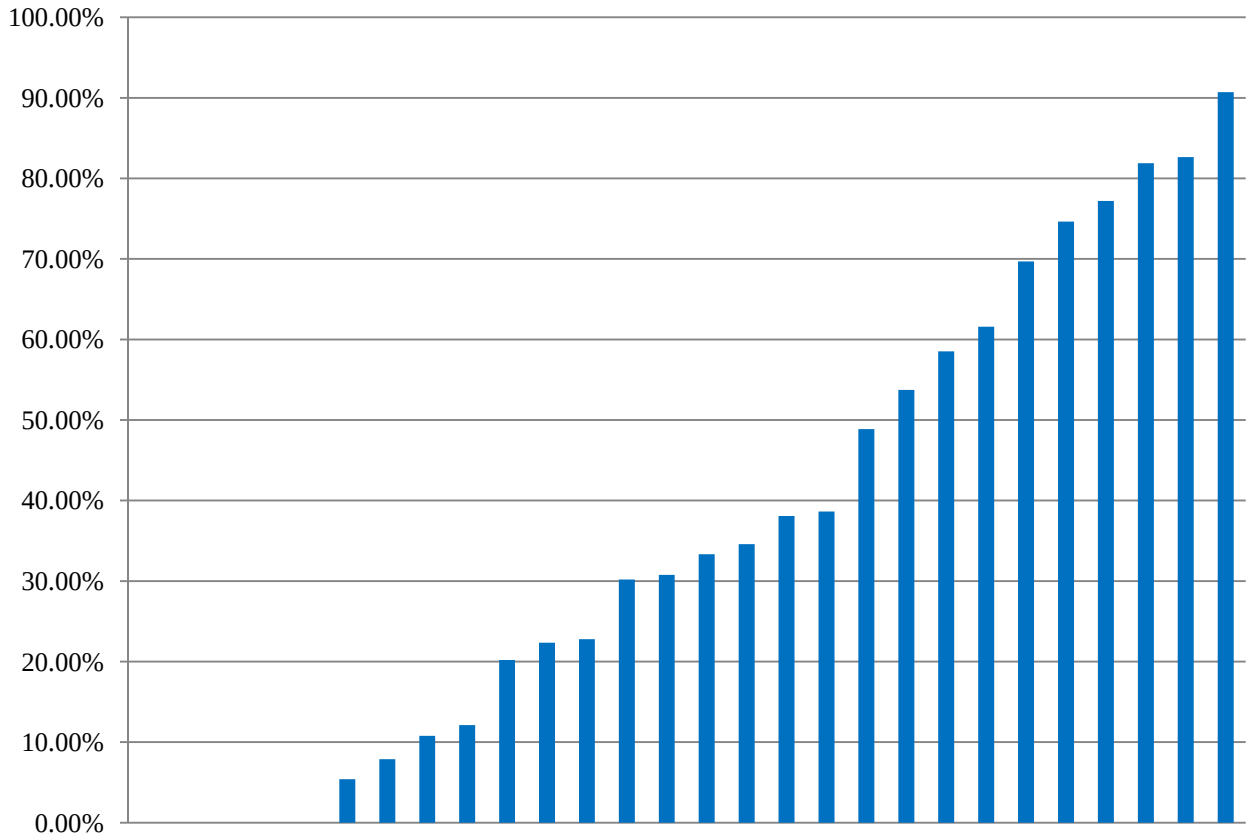
Missing: 13
Outliers: 60.68, 111.24



Net income + Depreciation + Interest expense
Current portion of long-term debt + Interest expense

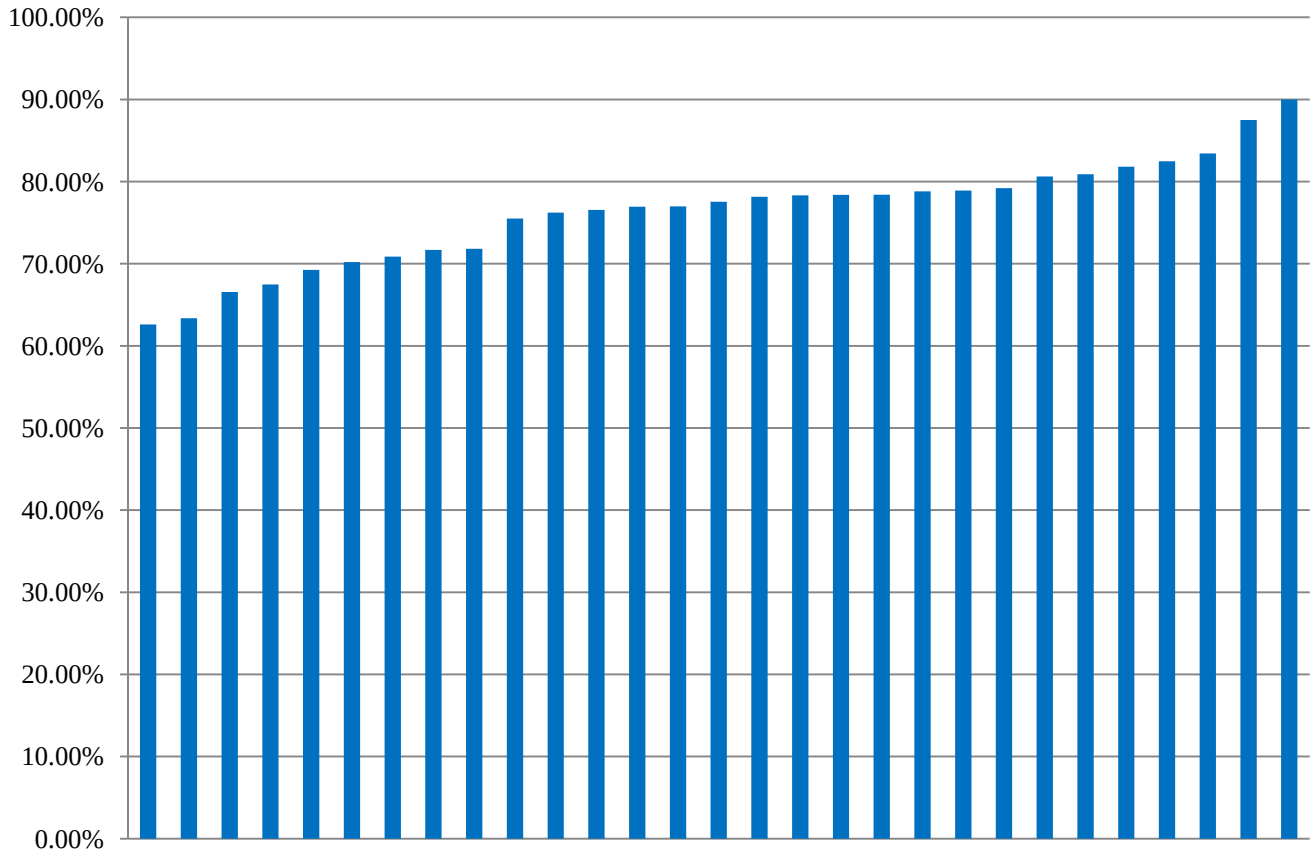
IN CAHs in 2009 Capital Structure: Long-term debt to capitalization

Outlier: 117%
Missing: 5



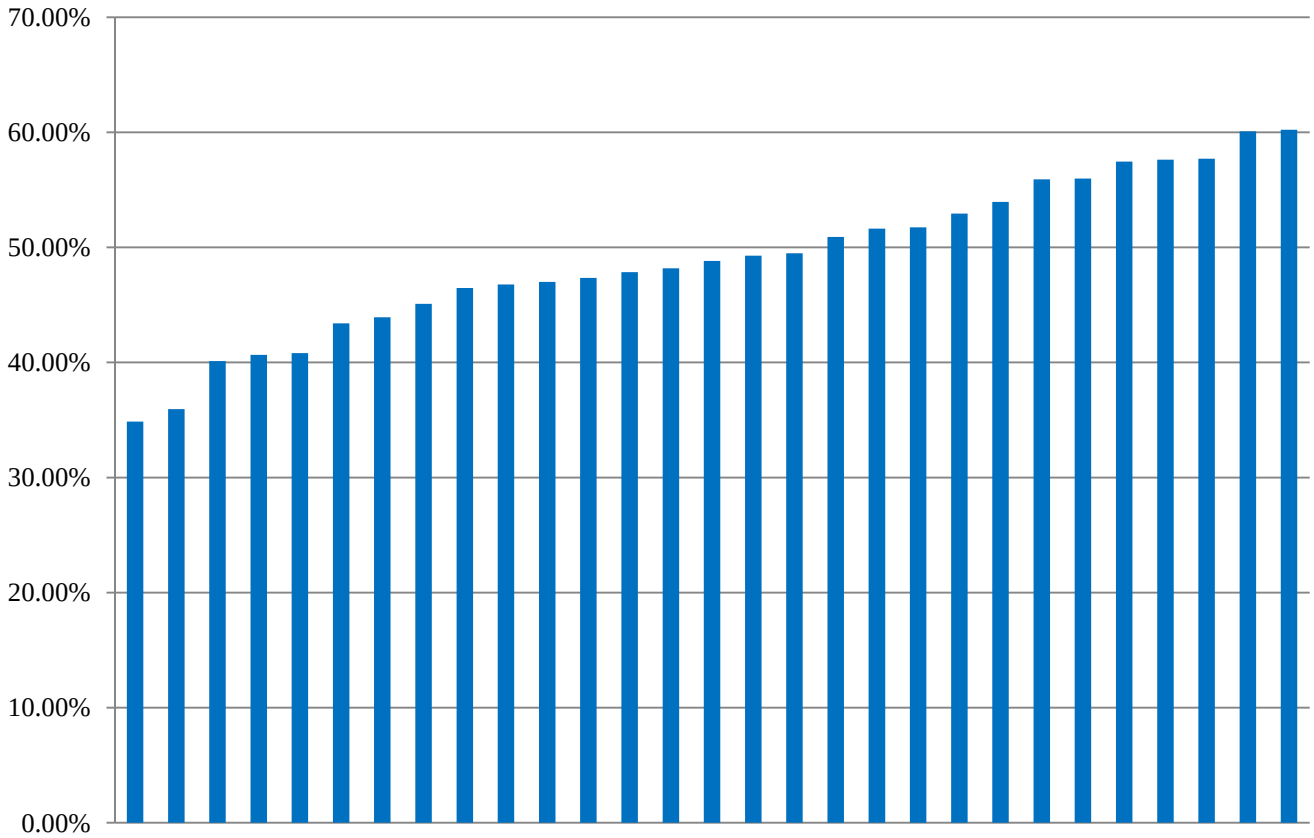
Long-term debt
Long-term debt + Fund balance

IN CAHs in 2009
Revenue:
Outpatient revenues to total revenues



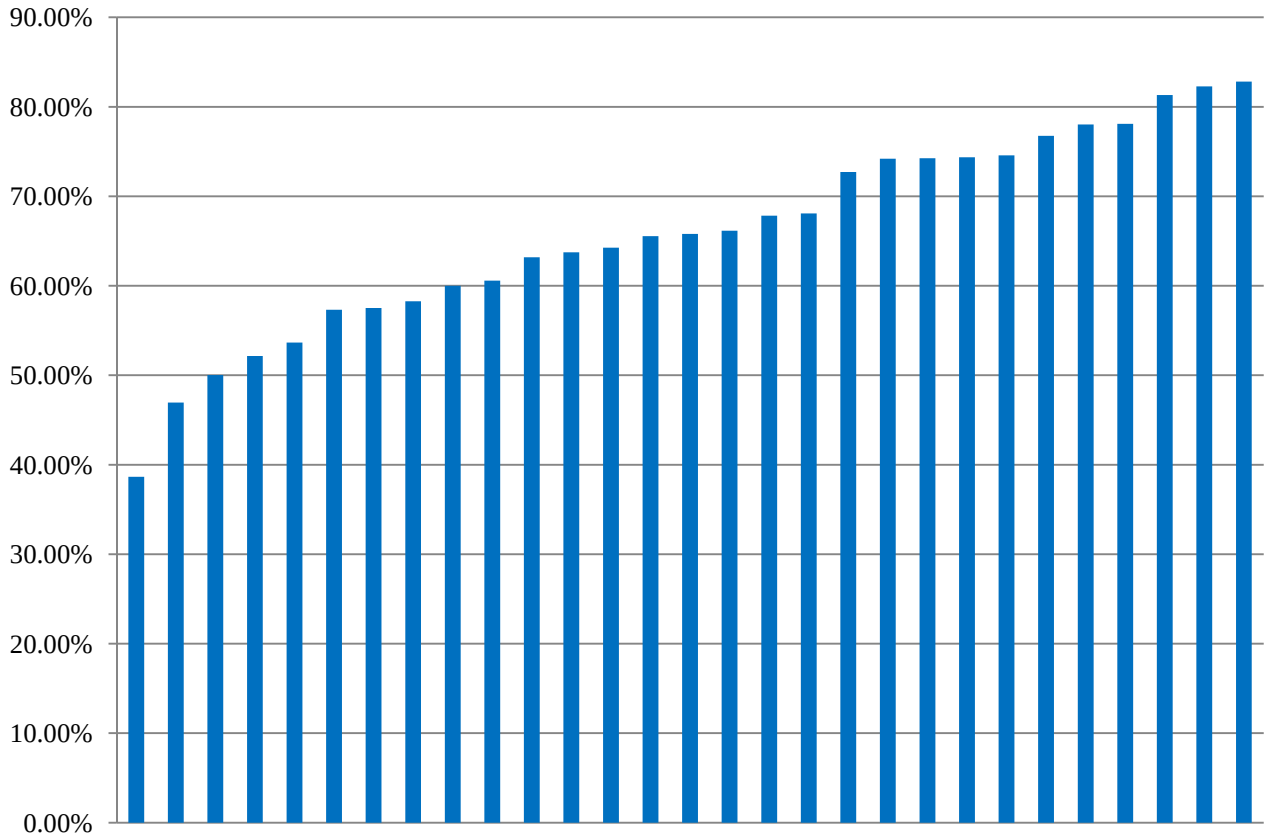
Total outpatient revenue
Total patient revenue

IN CAHs in 2009 Revenue: Patient deductions



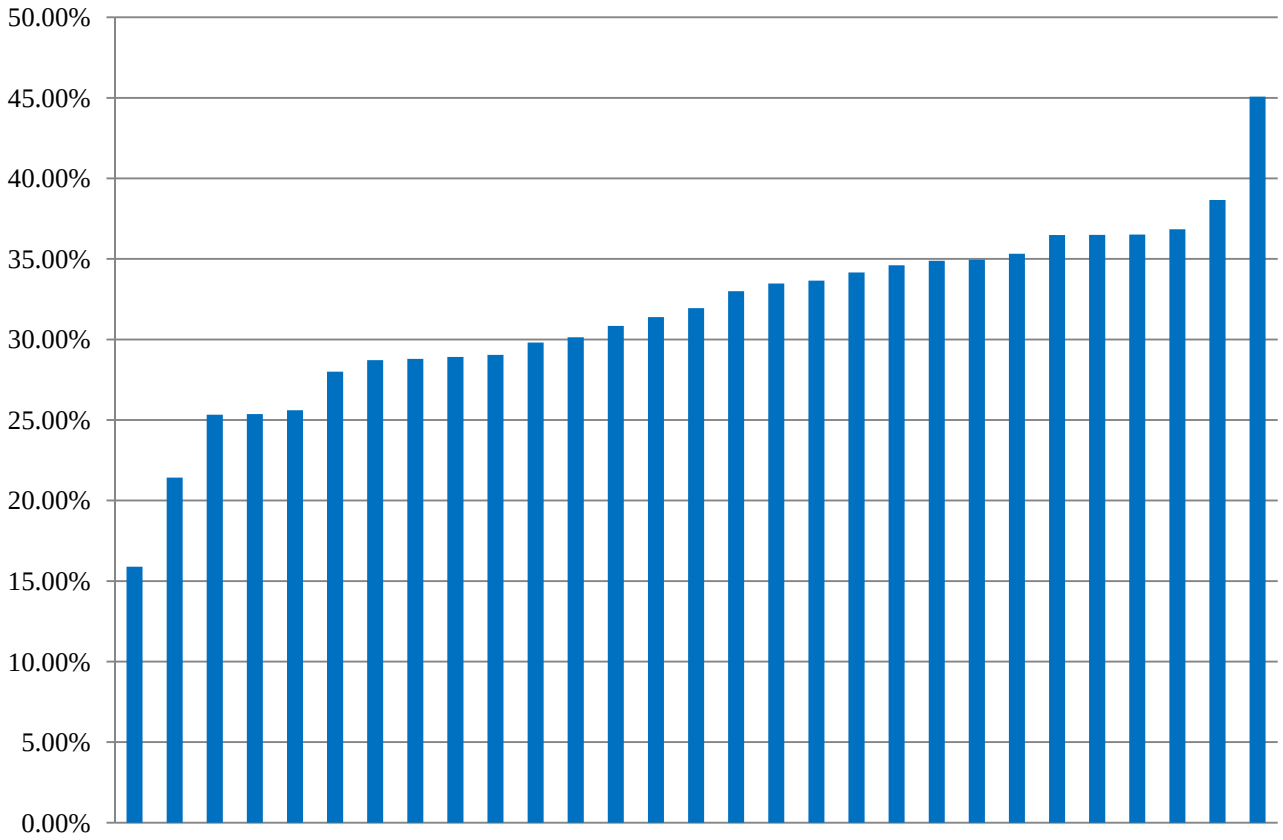
Contractual allowances and discounts
Gross total patient revenue

IN CAHs in 2009 Revenue: Medicare inpatient payer mix



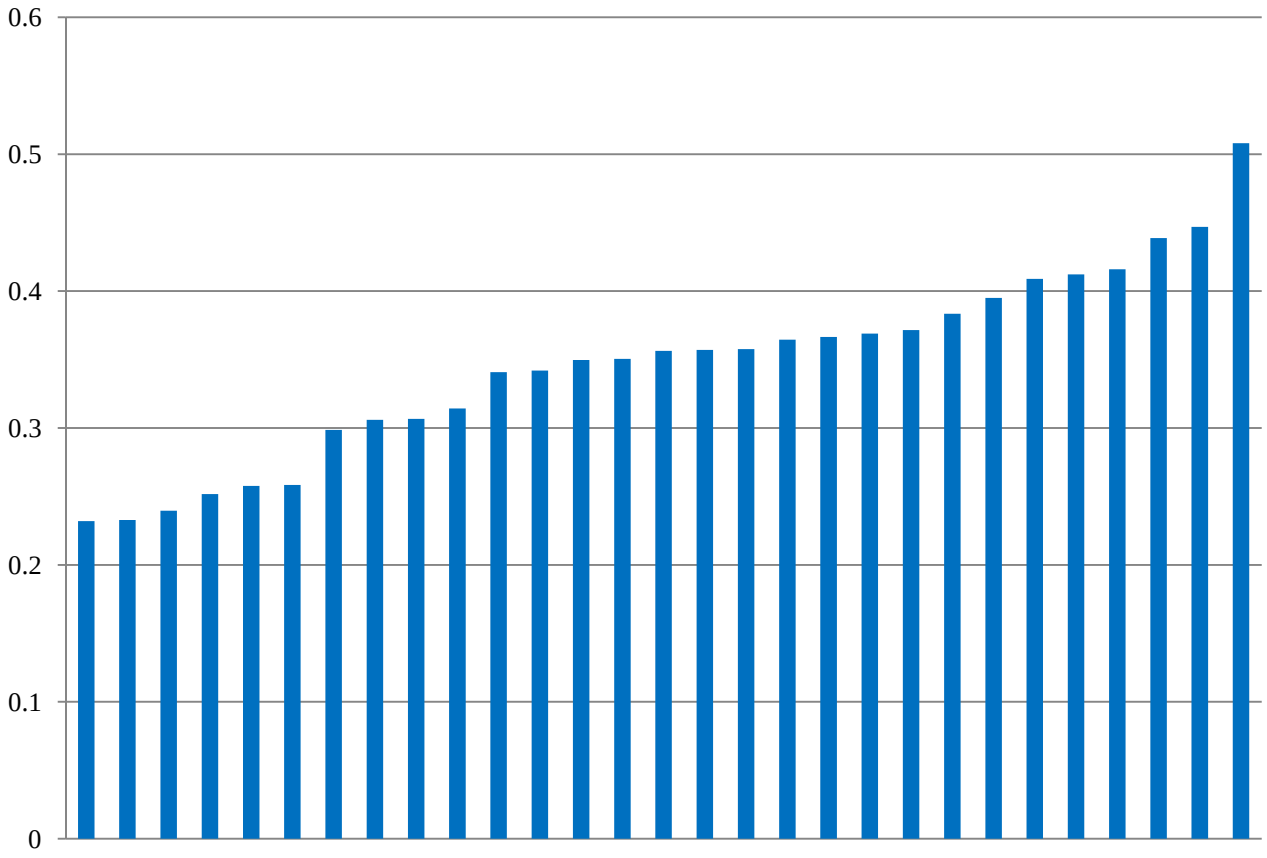
Medicare inpatient days
Total inpatient days – Nursery bed days – NF Swing bed days

IN CAHs in 2009 Revenue: Medicare outpatient payer mix



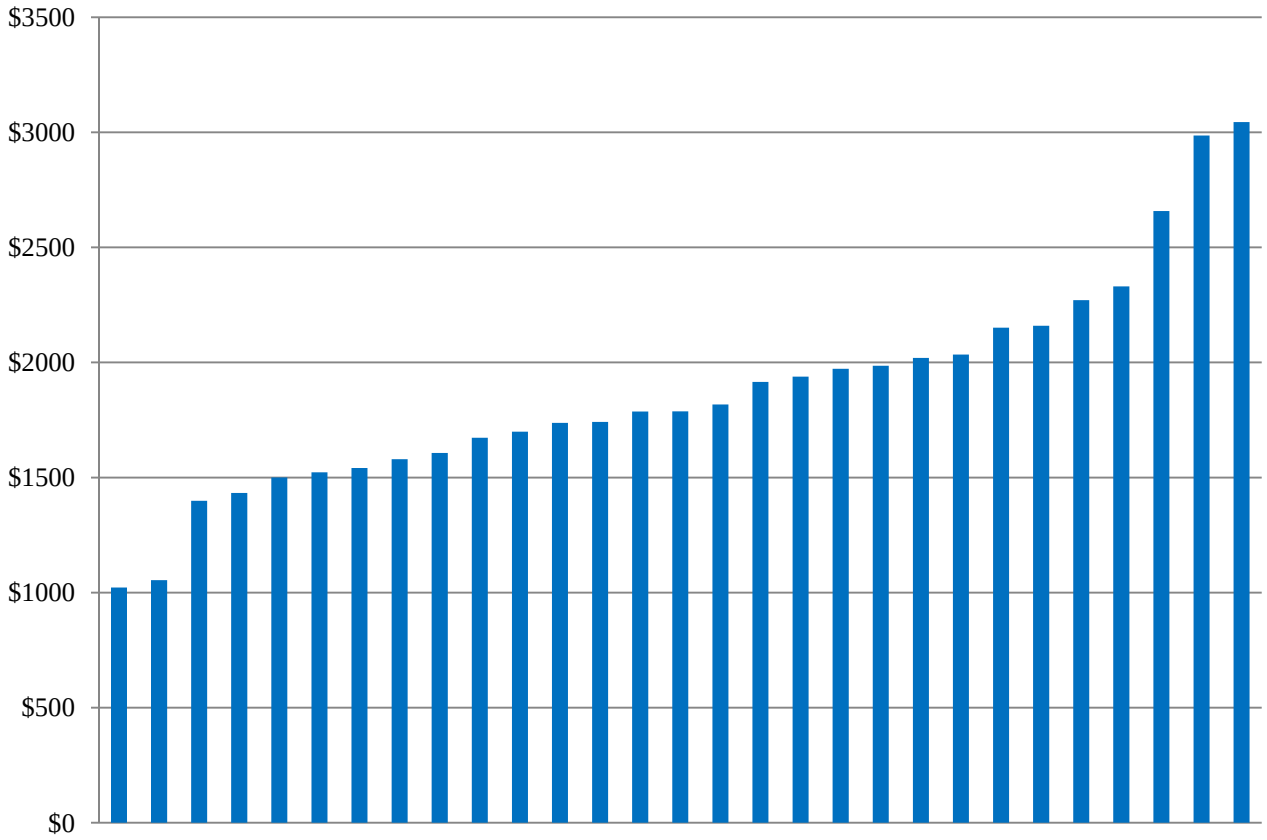
Outpatient Medicare charges
Total outpatient charges

IN CAHs in 2009
Revenue:
Medicare outpatient cost to charge



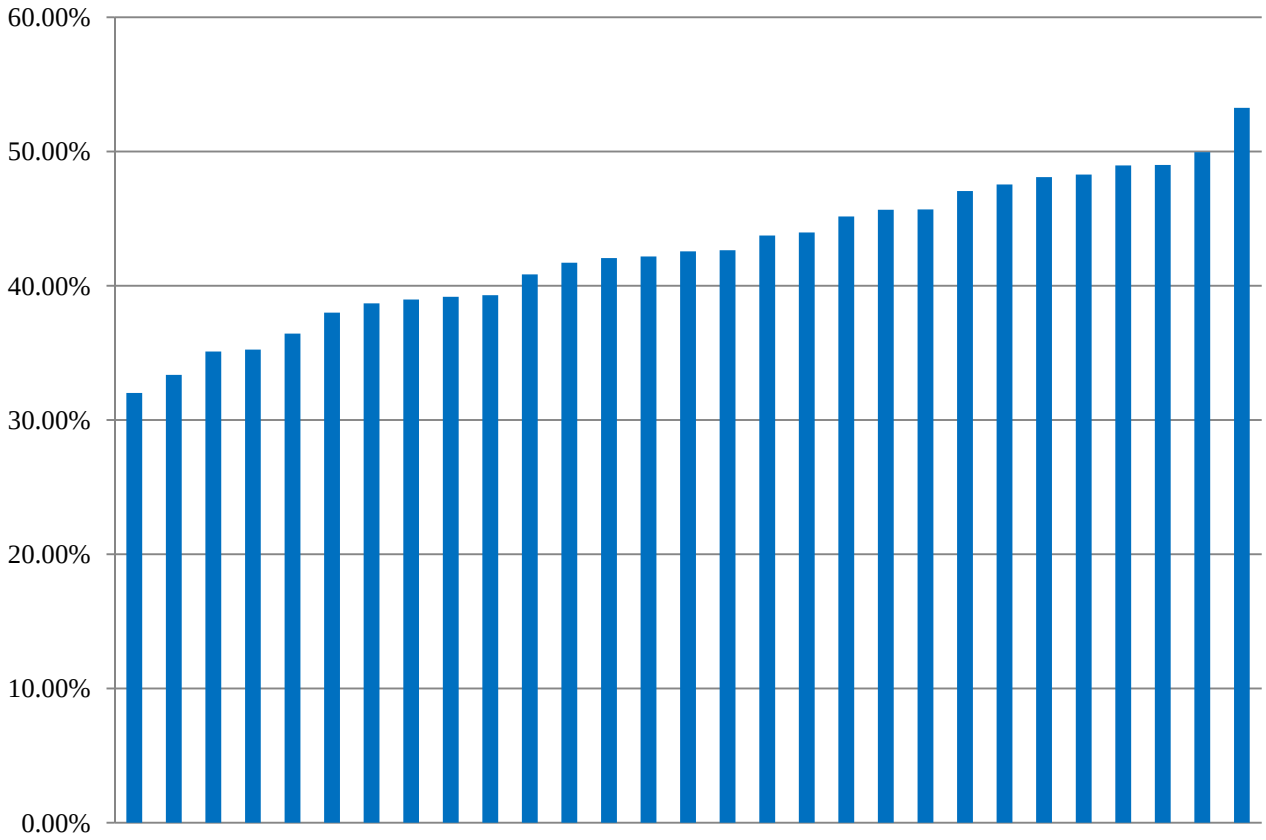
Outpatient Medicare costs
Outpatient Medicare charges

IN CAHs in 2009 Revenue: Medicare revenue per day



Medicare revenue
Medicare days – SNF Swing bed days

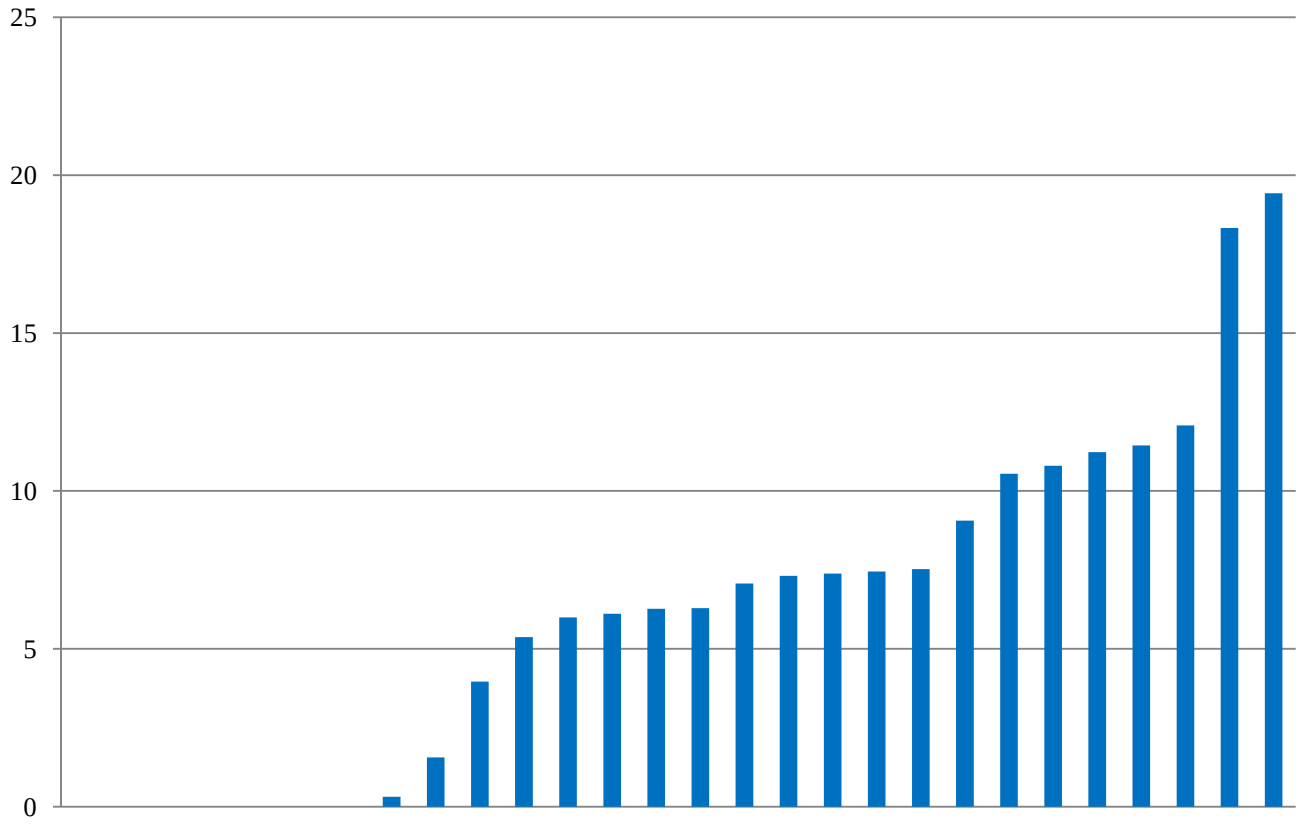
IN CAHs in 2009
Cost:
Salaries to total expenses



Salary expense
Total expenses

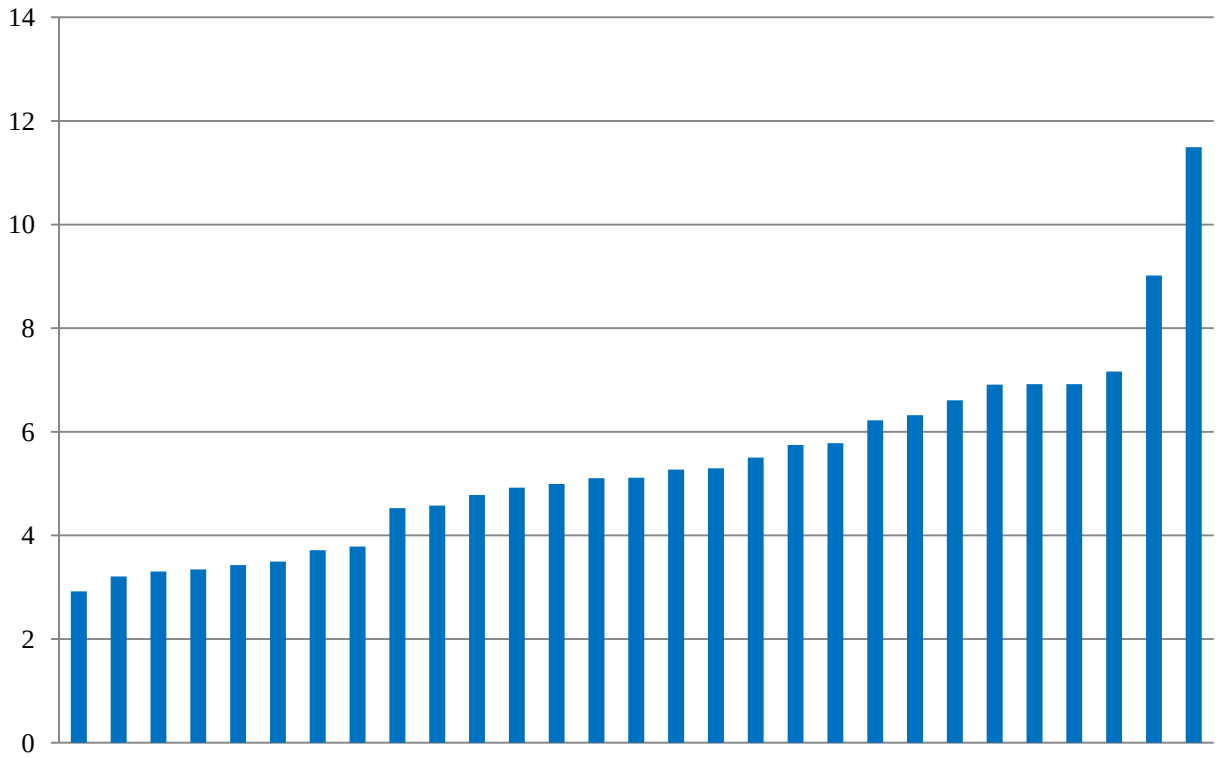
IN CAHs in 2009
Cost:
Average age of plant

Missing: 8



Accumulated depreciation
Depreciation expense

IN CAHs in 2009
Cost:
FTEs per adjusted occupied bed

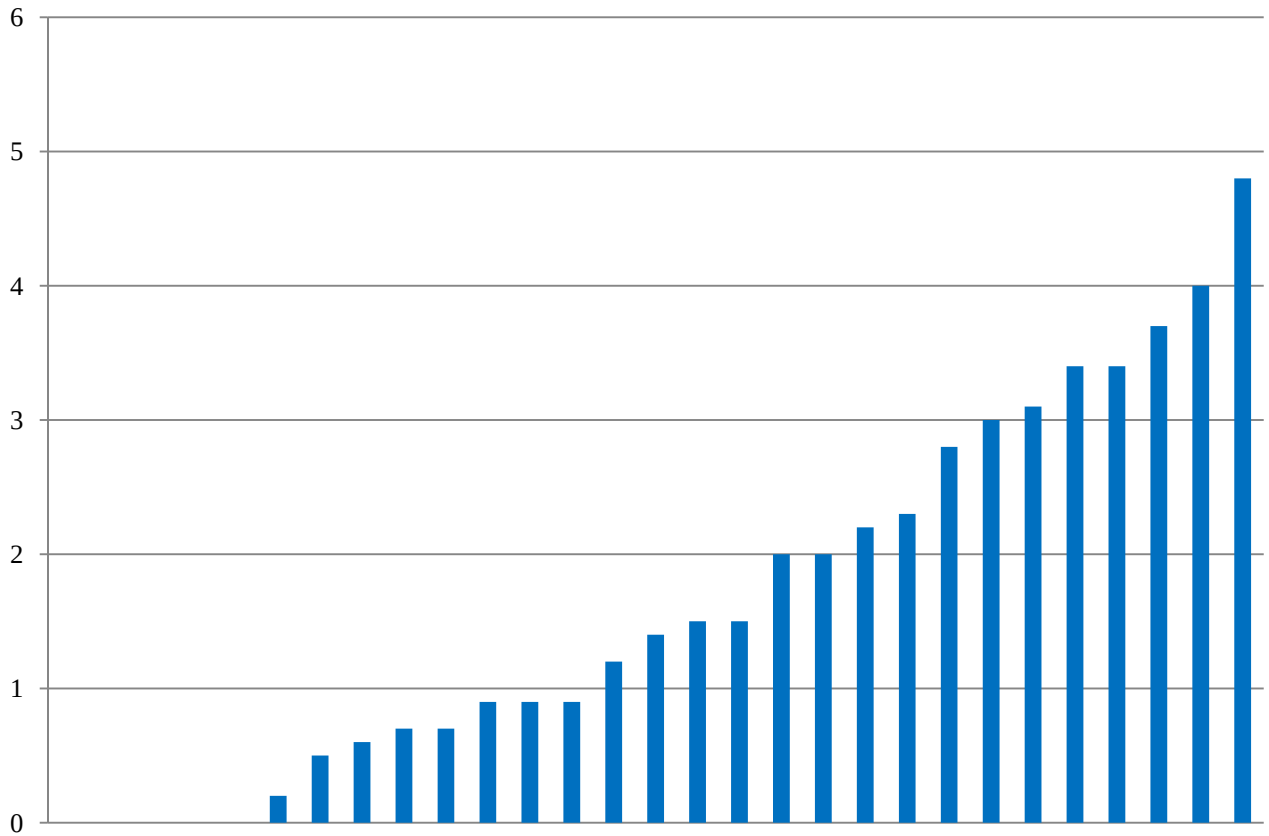


Number of FTEs
Adjusted occupied beds**

** (Inpatient days – NF Swing days – Nursery days) *
(Total patient revenue / (Total inpatient revenue – Inpatient NF revenue – Other LTC Revenue)) / Days in period

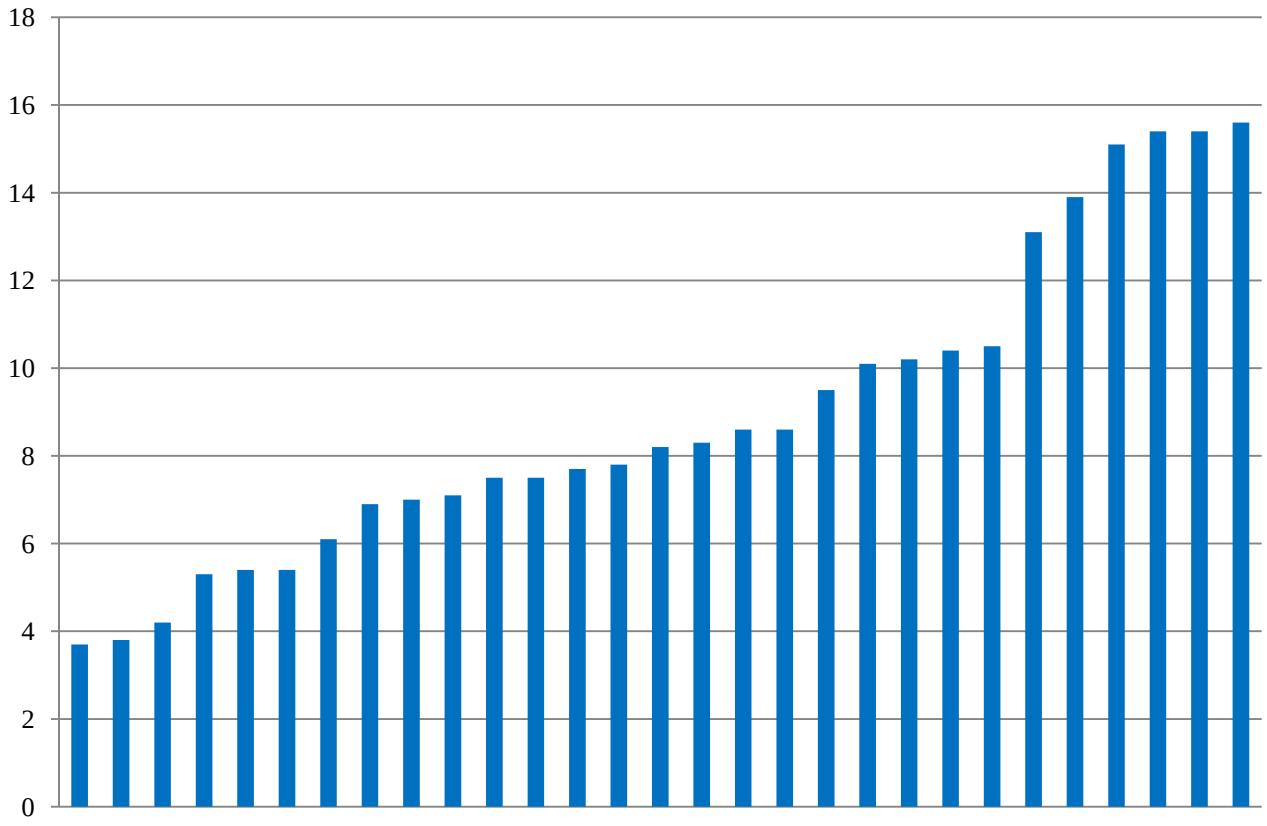
IN CAHs in 2009 Utilization: Average daily census swing/SNF beds

Missing: 5



Inpatient swing bed SNF days
Days in period

IN CAHs in 2009 Utilization: Average daily census acute beds



Inpatient acute care bed days
Days in period

Summary

- There is substantial variation in financial performance among CAHs in IN
- Although the median CAH in IN looks pretty good, there are several CAHs under financial siege

3. Financial performance of CAHs in IN against benchmarks

CAH-Specific Benchmarks

- Financial benchmarks for <50 bed hospitals exist, but not the right metric for CAHs
- Decided to create CAH-specific benchmarks of "high but attainable financial performance"
- Established by a large sample of informed practitioners versus academic black box or arbitrary rankings
- Focus on absolute vs. relative performance
- Provide CAHs with ongoing management tool

Benchmark Questionnaire

- Feedback from CAH administrators led to creation and validation of benchmarks for 5 indicators:
  - Cash flow margin (>5%)
  - Days cash on hand (>60 days)
  - Debt service coverage (>3)
  - Long-term debt to capitalization (<25%)
  - Medicare outpatient cost to charge (<0.55)
- Report included in *CAH Financial Indicators Report*

Benchmark performance: IN CAHs

- In 2009, the number of CAHs in IN that performed better than benchmark were:
  - 23 / 29 on profitability benchmark
  - 16 / 29 on liquidity benchmark
  - 12 / 29 on debt benchmark
  - 11 / 17 on debt service benchmark
  - 29 / 29 on revenue benchmark

Benchmark performance: IN CAHs

- In 2009, the number of CAHs in IN that performed better than:

5 benchmarks	4 hospitals
4 benchmarks	6 hospitals
3 benchmarks	12 hospitals
2 benchmarks	4 hospitals
1 benchmark	3 hospitals
Total	29 hospitals

4. What's next?

In August 2010

- You should have received a snail-mail letter from us with your username and password to download the 7th issue of the *CAH Financial Indicators Report* AND
- *Hospital Indicator Graphs by State and Peer Group*
  - Graphs that show every CAH in your state
  - Graphs that show every CAH in your peer group
  - Your hospital is highlighted and others are not identified

CAHFIR Products Available to CAHs

- PowerPoint **Presentation** of the *Report*
- Excel **Calculator** that produces *Report* indicator values using data that you enter
- PowerPoint **Primer** about ratio analysis and the *Report*
- Acrobat (pdf) summary of **State Medians** by indicator and state
- Acrobat (pdf) document of **Hospital Graphs** by indicator and your state (hospitals are not identified in the graph)

Next Year

- A model to predict financial distress
  - Advice from BB&T, a large regional bank that is a substantial lender to small rural hospitals from MD, FL and IN
  - Rural hospital lending criteria from three other banks
  - Experimentation with different models and test whether model can predict hospitals in financial distress
- Factors associated with closure of obstetrics

CAH Financial Indicators Report Team

University of North Carolina at Chapel Hill

G. Mark Holmes, PhD

George H. Pink, PhD

To contact us: CAH.finance@schsr.unc.edu