

# Report to the Greater Milwaukee Business Foundation on Health

Key Factors Influencing 2003 – 2011  
Southeast Wisconsin Commercial Payer  
Hospital Payment Levels

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# Background

- An initial study based on 2003 data for Milwaukee, Ozaukee, Washington, and Waukesha counties identified interplay of the following factors as contributing to the Milwaukee area's high health care costs:
  - Health system commercial market concentration
  - Hospital operating cost levels
  - Distribution of cost shift burden among health systems
  - Fixed hospital payment methods
  - Commercial payer market concentration
- Previous studies measured changes in average hospital commercial payment levels and three of the five factors for an expanded seven county area from 2003 through 2010
  - Data to measure fixed payment methods and commercial payer market concentration was not available for any of the studies

# 2011 Study Objectives

- This study provides updated measures through 2011 for each measure in the previous studies
  - Average hospital commercial payment levels
  - Hospital operating cost levels
  - Distribution of cost shift burden among health systems
  - Health system commercial market concentration
- Measure change in each measure from 2003 through 2011
  - Emphasis is on results for 2009, 2010 and 2011

# Study Parameters

# Data Sources

- Wisconsin Hospital Association (WHA) Information Center:
  - FY 2003 - 2011
    - Wisconsin Hospital Fiscal Survey
    - Wisconsin Hospital Inpatient Discharge Data
  
- United States Bureau of Labor Statistics
  - Hospital Component of Consumer Price Index (Hospital CPI)
  - Hospital Producer Price Index (Hospital PPI)
  
- Centers for Medicare and Medical Services
  - Hospital Market Basket (CMS Market Basket)
  - CMS-DRG weights
  - Medicare 5% sample data set

# Included Hospitals and Health Systems

- Limited to health systems with substantial adult, acute care inpatient hospital operations in the following counties:
  - Milwaukee
  - Kenosha
  - Racine
  - Ozaukee
  - Washington
  - Walworth
  - Waukesha
- Includes specialty hospitals (Orthopedic Hospital of Wisconsin (CSM), Wisconsin Heart Hospital, and Midwest Orthopedic Specialty Hospital (Wheaton))
- Excludes Psychiatric, Rehabilitation, and LTAC hospitals
- Excludes Children's Hospital of Wisconsin

# Included Hospitals and Health Systems

- Hospital information from the following health systems was used as the basis for the comparisons:
  - Aurora Health Care (Aurora)
  - Columbia St. Mary's (CSM)
  - Froedtert Health (FH)
  - ProHealth Care (ProHealth)
  - United Hospital System (United)
  - Wheaton Franciscan Healthcare (Wheaton)
  
- Mercy Health Services (Lake Geneva and Janesville) and Columbia Center (Mequon) included for health system market concentration comparisons **ONLY**



# 2011 Study Interpretation Considerations

- The same hospitals were included in the 2010 and 2011 analyses
- As a result of the FY 2009 merger between SynergyHealth and Froedtert Health, the financial measures in the study have been combined and reported as “FH” results for 2003 through 2011:
  - Hospital commercial payment levels
  - Hospital operating cost levels
  - Distribution of cost shift burden among health systems
- SynergyHealth and Froedtert Health market concentration is reported on a combined basis for 2009-2011 **ONLY**
- Since the release of our previous studies, certain information sources have changed and additional information has become available. Certain 2003 measures have been modified from those presented in our previous reports to be consistent with our analysis of 2009 through 2011 data.

# Summary of Results

# Summary of Results

- From 2003 through 2011, the rate of increase in average Southeast Wisconsin hospital commercial payment levels was approximately 50% the rate of increase in the Hospital CPI
  - The average annual rate of increase in Southeast Wisconsin hospital commercial payment levels from 2008 through 2011 was about 2%
  - The average Southeast Wisconsin hospital payment levels **declined** slightly from 2010 to 2011 and are virtually unchanged from 2009
- Southeast Wisconsin hospital operating costs have also increased at a substantially slower rate than national indices during the same period
  - Annual increases in Southeast Wisconsin per-unit hospital costs averaged approximately 2% from 2003 through 2011
    - The total Southeast Wisconsin hospital per-unit cost increase from 2008 through 2011 was approximately 1% and average per-unit costs are virtually unchanged since 2009

# Summary of Results *(continued)*

- The average impact of government payment shortfalls and other cost shift burdens on commercial payment levels has remained relatively stable during the study period
  - Cost shift burdens account for approximately 1/3 of the total cost of hospital commercial services
  - Cost shift burdens are slightly more evenly distributed among health systems in recent years compared to 2003
  
- After several years of increasing levels of health system commercial market share concentration, the addition of new hospitals and other market changes appear to have caused reductions in the average Southeast Wisconsin “predominant” health system market shares in recent years

# Hospital Commercial Payment Comparisons

# Hospital Commercial Payment Comparisons – *Methods*

- Comparisons of total net commercial revenues (billed amounts after contractual discounts) as reported in the Wisconsin State Hospital Fiscal Survey, including:
  - Average commercial inpatient payments per case mix adjusted discharge,
  - Average commercial hospital outpatient payment levels as a percentage of Medicare payment levels, and
  - Average composite (blended inpatient and outpatient) commercial payment levels relative to the market average

# Hospital Commercial Payment Change Comparisons – *Methods*

- Average Southeast Wisconsin hospital commercial payments were converted to per-unit payment levels using “Adjusted Equivalent Discharges” (AED) to adjust for differences in:
  - Inpatient case mix and severity
  - Relative blend of inpatient / outpatient business
  - Outpatient service mix
- Changes in Southeast Wisconsin average payment levels were compared to changes in the Hospital Component of National Consumer Price Index (Hospital CPI)
  - Hospital CPI represents the annual change in hospital payments from commercial payers

# Potential Causes of Changes in Average Commercial Payment Levels

- Most changes in average payment levels are at least partially due to changes in contracted payment rates
- Shifts in the distribution of commercial business among hospitals with different average payment levels also are a major cause of changes in average payment levels
- Other potential causes of changes in average payment levels include the following:
  - Changes in payment rate structures (discounted charges, fee schedules, population based payments, etc.)
  - Changes in performance under incentive payment programs
  - Mix changes if average payment rates differ among services

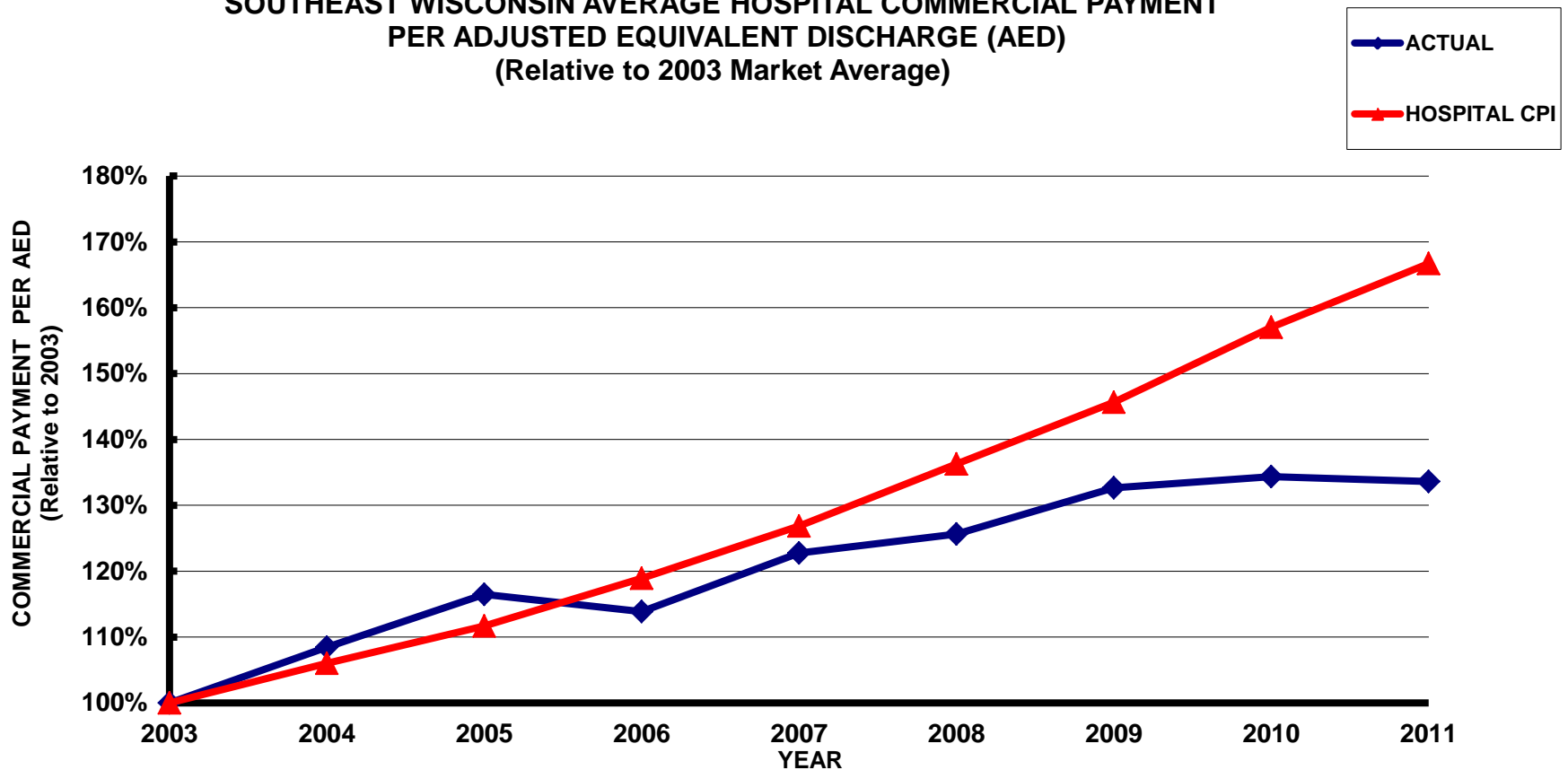


# Hospital Commercial Payment Change Comparisons – *Aggregate Results*

- 2011 average Southeast Wisconsin hospital commercial payment levels ***decreased*** approximately 0.5% from 2010 levels.
- The total increase in average payment levels for Southeast Wisconsin hospitals from 2008 through 2011 was 6.3% (about 2% annually)
- Average Southeast Wisconsin hospital commercial payment levels increased approximately 34% (3.7% annually) from 2003 through 2011
  - The increase is approximately half of the 67% total increase in the national Hospital CPI for the same period

# Aggregate Change in Average SE WI Hospital Commercial Payments Compared to National Hospital CPI

SOUTHEAST WISCONSIN AVERAGE HOSPITAL COMMERCIAL PAYMENT  
PER ADJUSTED EQUIVALENT DISCHARGE (AED)  
(Relative to 2003 Market Average)

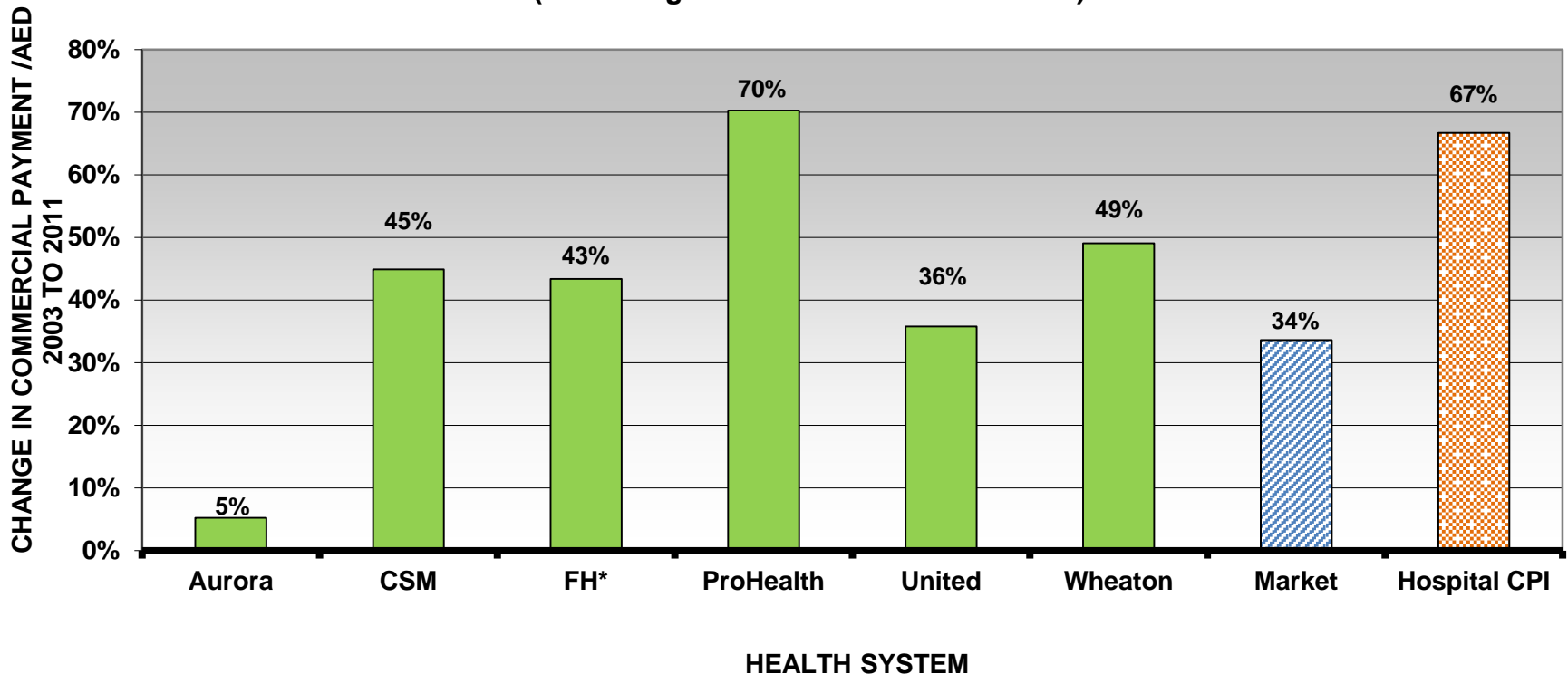


# Average 2003 - 2011 Health System Hospital Commercial Payment Change Comparisons

- Aurora's total increase (5%) was substantially less than the Hospital CPI (67%) during this period
- ProHealth's total increase (70%) was similar to the Hospital CPI increase
- All other Southeast Wisconsin health system increases were between the Southeast Wisconsin average (34%) and Hospital CPI (67%) increases for the same period

# Aggregate Southeast Wisconsin Hospital Commercial Payment Increases (2003 – 2011)

SOUTHEAST WISCONSIN HEALTH SYSTEM  
COMMERCIAL PAYMENT PER ADJUSTED EQUIVALENT DISCHARGE (AED)  
(Percentage Increase from 2003 to 2011)



\* Includes results for SynergyHealth for all years

# Average 2008 - 2011 Health System Hospital Commercial Payment Change Comparisons

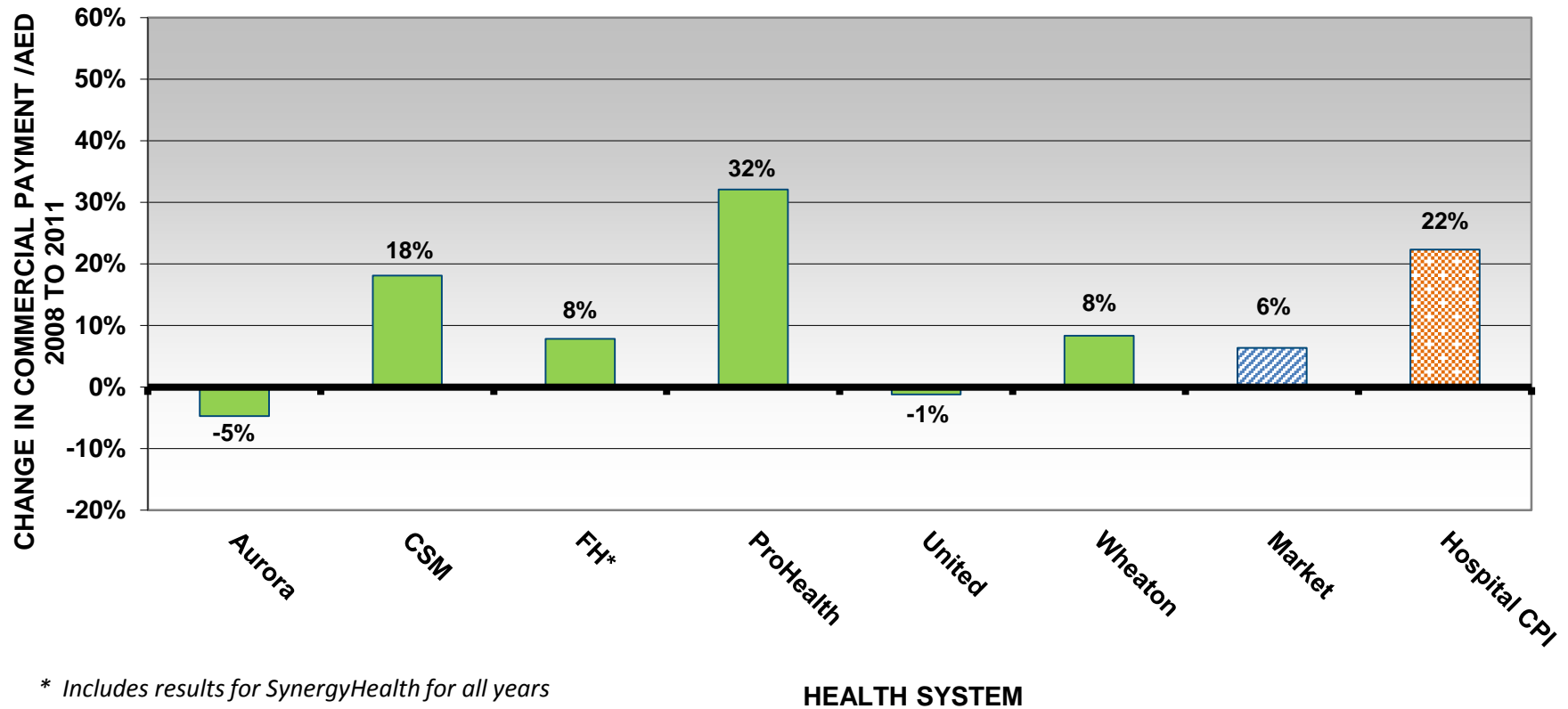
- Hospital CPI increased 22% (approximately 7% annually) from 2008 through 2011
  - 2011 CPI increase was approximately 6%
- Aurora (5%) and United (1%) had net payment level **decreases** from 2008 through 2011
  - Aurora's average payment levels decreased 8% in 2011
- FH and Wheaton experienced total payment level increases of approximately 8% (2.6% annually) from 2008 through 2011
  - Net increase for each health system was approximately 36% of the increase in Hospital CPI for the same period
  - Wheaton's average increase in 2011 was approximately 1%

# Average 2008 - 2011 Health System Hospital Commercial Payment Change Comparisons

- CSM's total increase of 18% (5.7% annually) from 2008 through 2011 is slightly lower than the Hospital CPI increase for the same period
- ProHealth's total increase of 32% (9.7% annually) from 2008 through 2011 exceeded the Hospital CPI increase by 45%, primarily due to higher increases in 2009 and 2010
  - ProHealth's 2011 increase was 5%

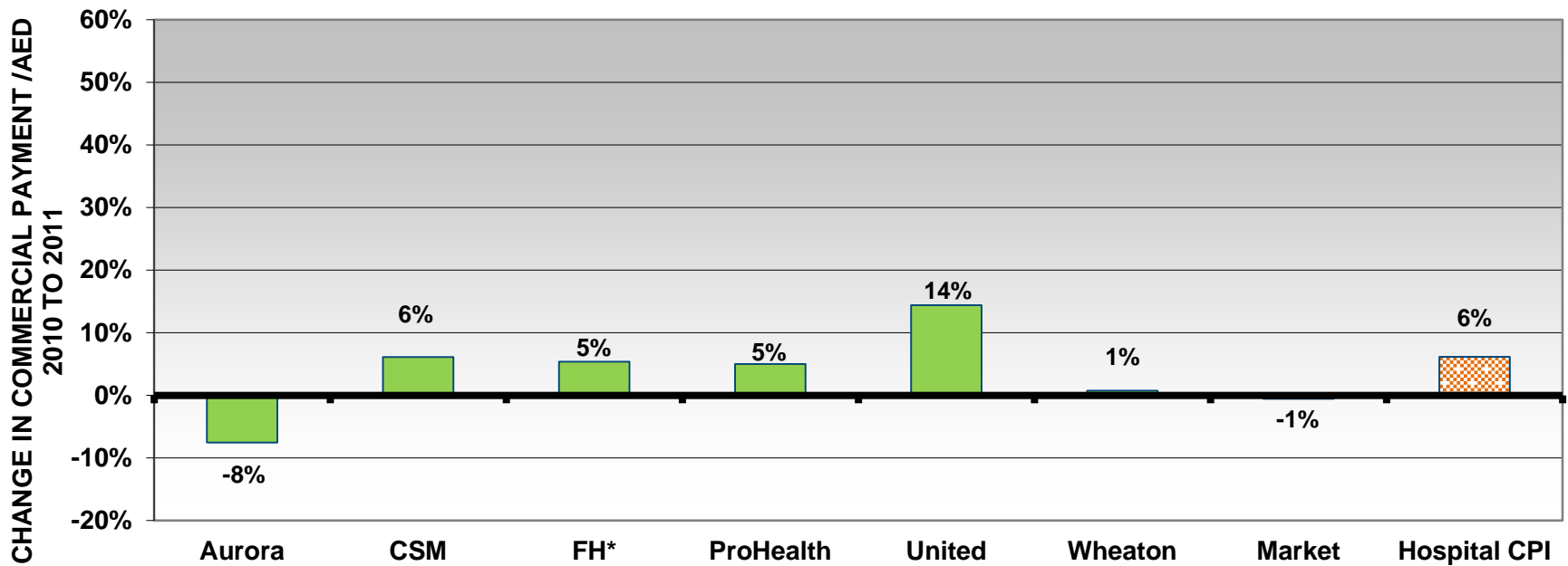
# Aggregate Southeast Wisconsin Hospital Commercial Payment Changes (2008 – 2011)

SOUTHEAST WISCONSIN HEALTH SYSTEM  
 COMMERCIAL PAYMENT PER ADJUSTED EQUIVALENT DISCHARGE (AED)  
 (Percentage Increase from 2008 to 2011)



# Aggregate Southeast Wisconsin Hospital Commercial Payment Changes (2010 – 2011)

SOUTHEAST WISCONSIN HEALTH SYSTEM  
COMMERCIAL PAYMENT PER ADJUSTED EQUIVALENT DISCHARGE (AED)  
(Percentage Increase from 2010 to 2011)



\* Includes results for SynergyHealth for all years

HEALTH SYSTEM



# Health System Hospital Commercial Payment Level Comparisons – *Methods*

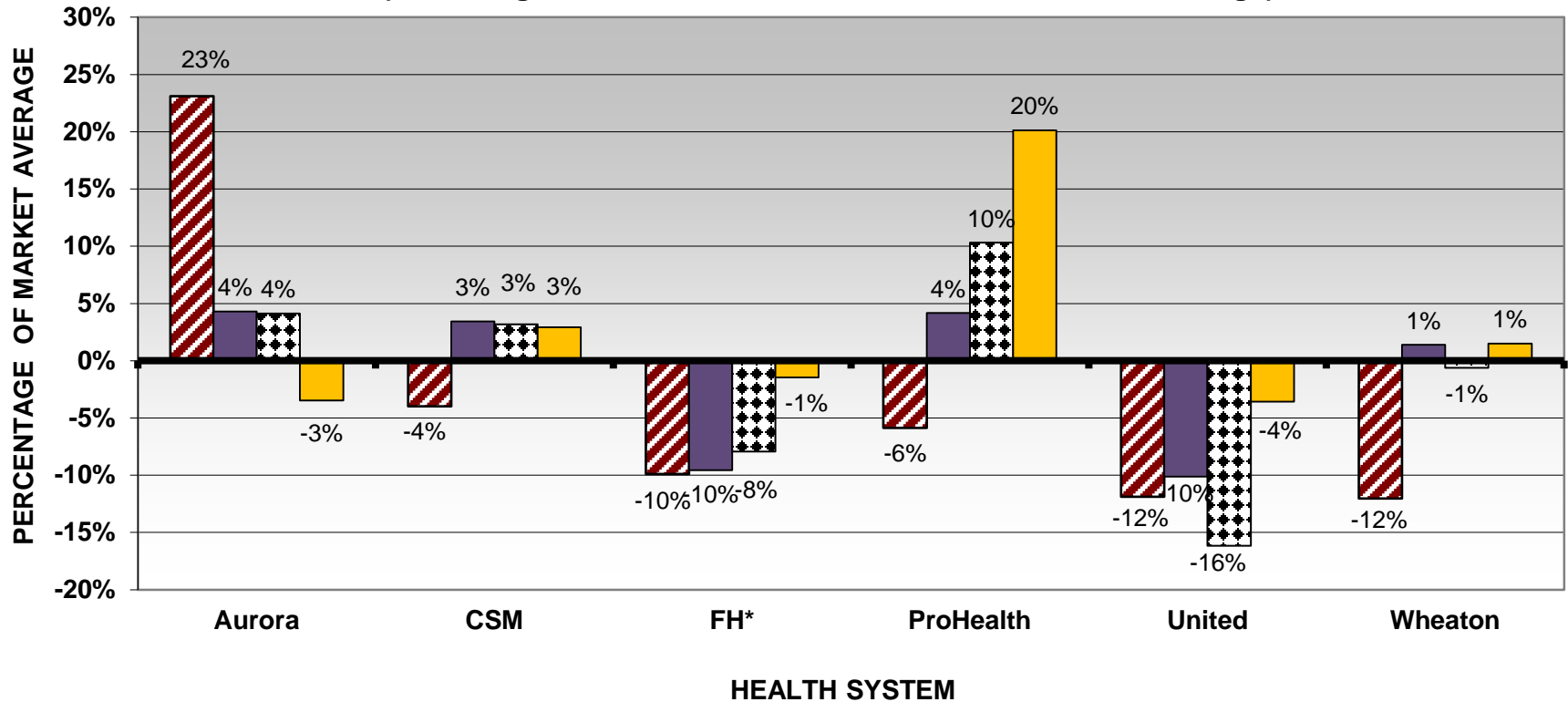
- Total inpatient hospital net commercial revenues were converted to per-unit payment levels using inpatient commercial discharges adjusted for differences in inpatient case mix
- Outpatient hospital commercial payment levels were estimated as a percentage of each hospital's average Medicare outpatient payment levels
- Composite commercial payment levels were developed by blending each health system's relative inpatient and outpatient payment levels (compared to market averages) using the market average mix of commercial inpatient and outpatient billed charges
  - Blend of approximately 38% inpatient / 62% outpatient in 2011
    - 44% inpatient / 56% outpatient in 2003

# 2011 Health System Hospital Commercial Payment Level Comparisons - *Results*

- Since 2003, there has been considerable narrowing of the variation in average **composite** hospital commercial payment levels among Southeast Wisconsin Health Systems
  - In 2003 only one health system (CSM) was within 5% of the market average
  - In 2011 5 of 6 health systems were within 5% of the market average
    - ProHealth's average payment levels were 20% above the market average
- Considerable variation between 2011 average inpatient and outpatient payment levels existed among health system hospitals
  - Average **inpatient** payment levels ranged from 16% above to 13% below Southeast Wisconsin averages
  - Average **outpatient** payment levels ranged from 23% above to 7% below Southeast Wisconsin averages

# Average Composite Payment Levels Relative to the Southeast Wisconsin Hospital Average

**SOUTHEAST WISCONSIN HEALTH SYSTEM  
COMPOSITE COMMERCIAL HOSPITAL PAYMENT LEVELS  
(Percentage Difference from Southeast Wisconsin Area Average)**

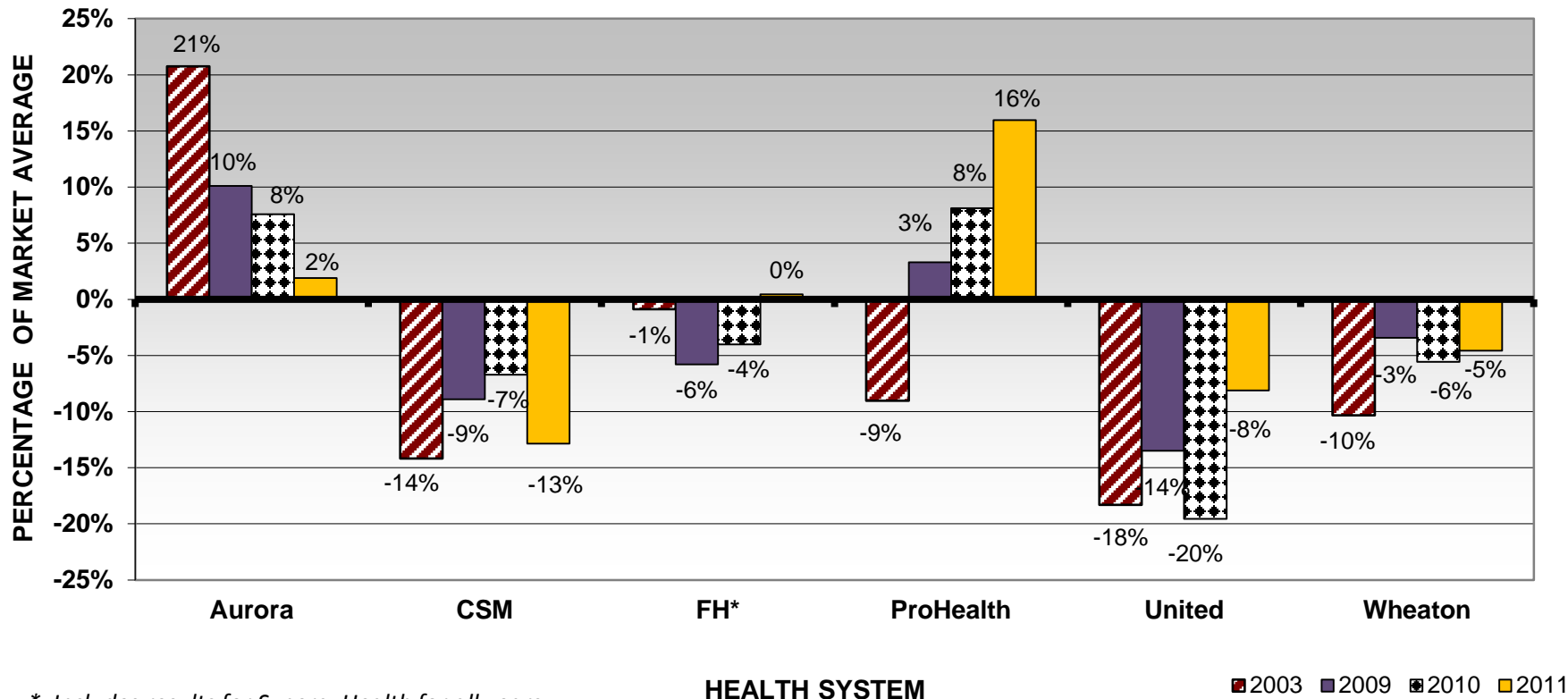


\* Includes results for SynergyHealth for all years

■ 2003 ■ 2009 ■ 2010 ■ 2011

# Average Inpatient Payment Levels Relative to Southeast Wisconsin Hospital Average

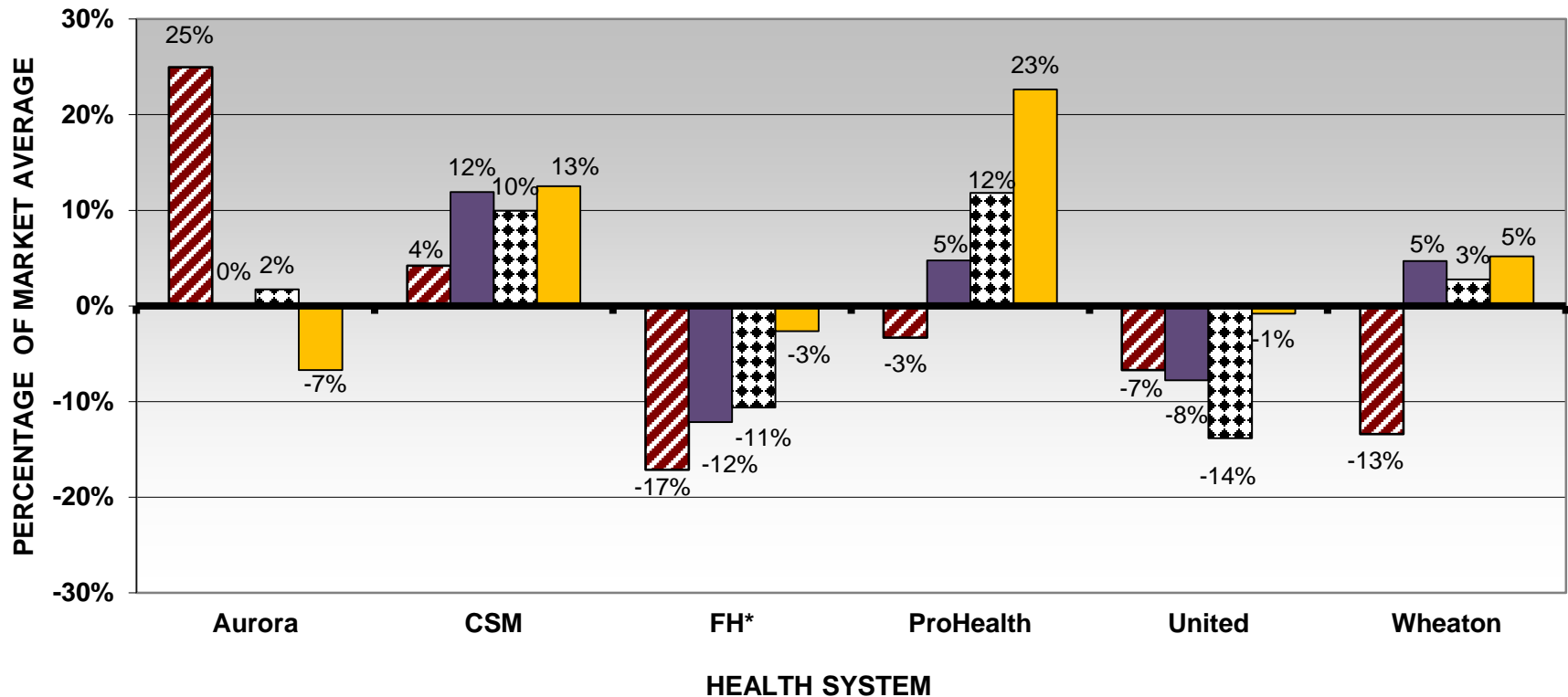
SOUTHEAST WISCONSIN HEALTH SYSTEM  
 COMMERCIAL INPATIENT PAYMENT PER CASE MIX ADJUSTED DISCHARGE  
 (Percentage Difference from Southeast Wisconsin Area Average)



\* Includes results for SynergyHealth for all years

# Average Outpatient Payment Levels Relative to Southeast Wisconsin Hospital Average

**SOUTHEAST WISCONSIN HEALTH SYSTEM  
AVERAGE COMMERCIAL OUTPATIENT PAYMENT LEVELS  
(Percentage Difference from Southeast Wisconsin Area Average)**



\* Includes results for SynergyHealth for all years

■ 2003 ■ 2009 ■ 2010 ■ 2011

# Hospital Operating Cost Comparisons

# Hospital Operating Cost Comparisons

- Our initial 2003 study estimated that 2003 Milwaukee area per-unit hospital operating costs were 14% to 26% higher than the hospital operating costs in some other Midwest cities with lower commercial hospital payment levels

# Hospital Operating Cost Comparisons – *Data Sources and Methods*

- Total hospital operating costs as reported in the Wisconsin State Hospital Fiscal Survey used as basis of comparisons
- Total hospital operating costs were converted to average per-unit costs using “Adjusted Equivalent Discharges” (AED) to adjust for differences in:
  - Relative blend of inpatient and outpatient business
  - Inpatient case mix and severity
  - Outpatient service mix
- Change in Southeast Wisconsin market average hospital operating costs compared to national inflation indices
  - CMS Hospital Market Basket
  - Hospital Producer Price Index (Hospital PPI)



# Potential Causes of Changes in Average Per-Unit Hospital Operating Costs

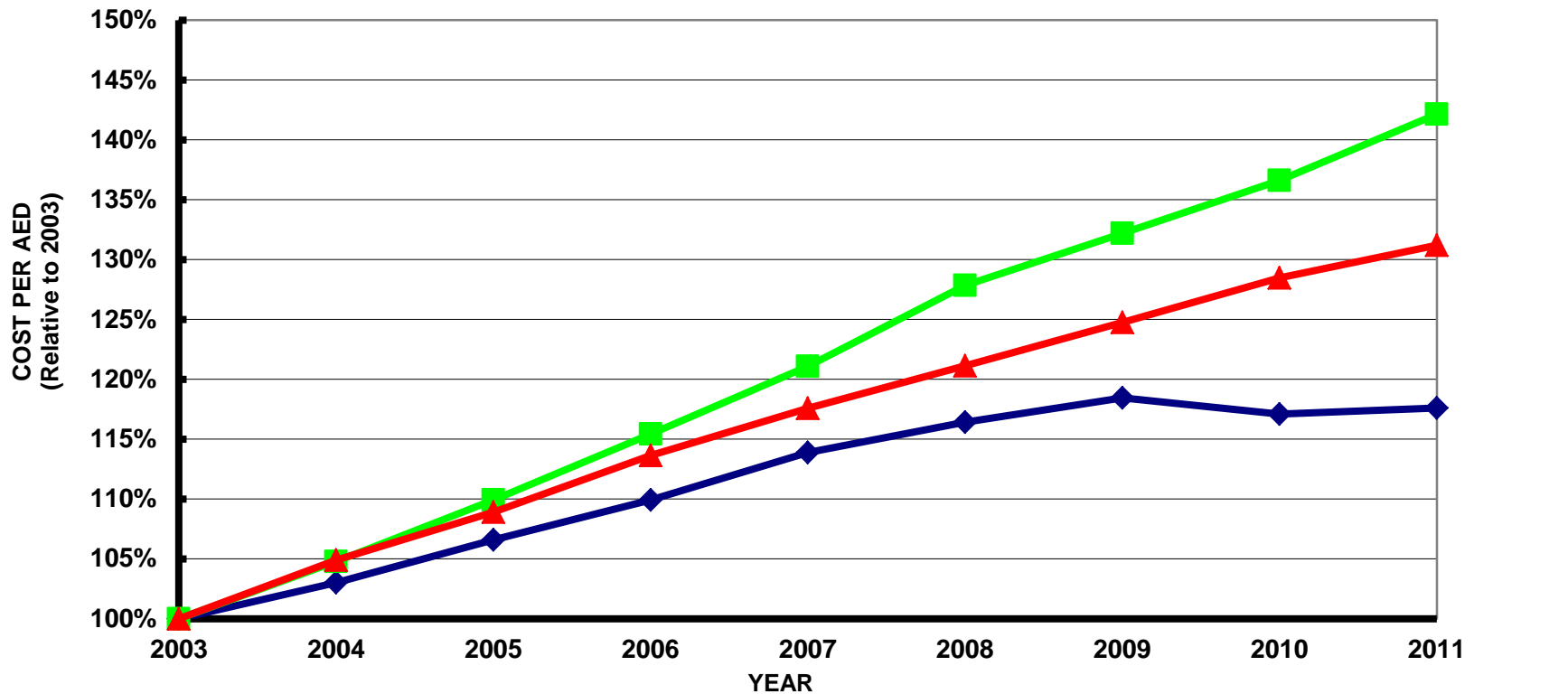
- Changes in the quantity or price of labor, supply, facility or other costs used by each health system to treat its patients
- Changes in inpatient or outpatient volumes may also significantly affect the per-unit allocation of fixed costs
  - Includes changes in case mix or mix of provided services
- Shifts in the relative distribution of business among hospitals with different average operating cost levels (among or within health systems) may also cause of changes in average operating cost levels

# Hospital Operating Cost Change Comparisons (2003 - 2011)

- Average Southeast Wisconsin hospital operating costs increased 18% from 2003 to 2011 (approximately 2% annually)
  - The Hospital PPI increased 31% and CMS Hospital Market Basket increased 42% during the same period
- Each health system had average cost increases less than the CMS Hospital Market Basket increase from 2003 - 2011
  - Aurora's average costs per unit remained essentially unchanged during this period
  - Average cost increases for United and Wheaton were less than 50% of the CMS Market Basket increase
  - CSM, FH and ProHealth cost increases were between approximately 70% and 85% of the CMS Market Basket increase

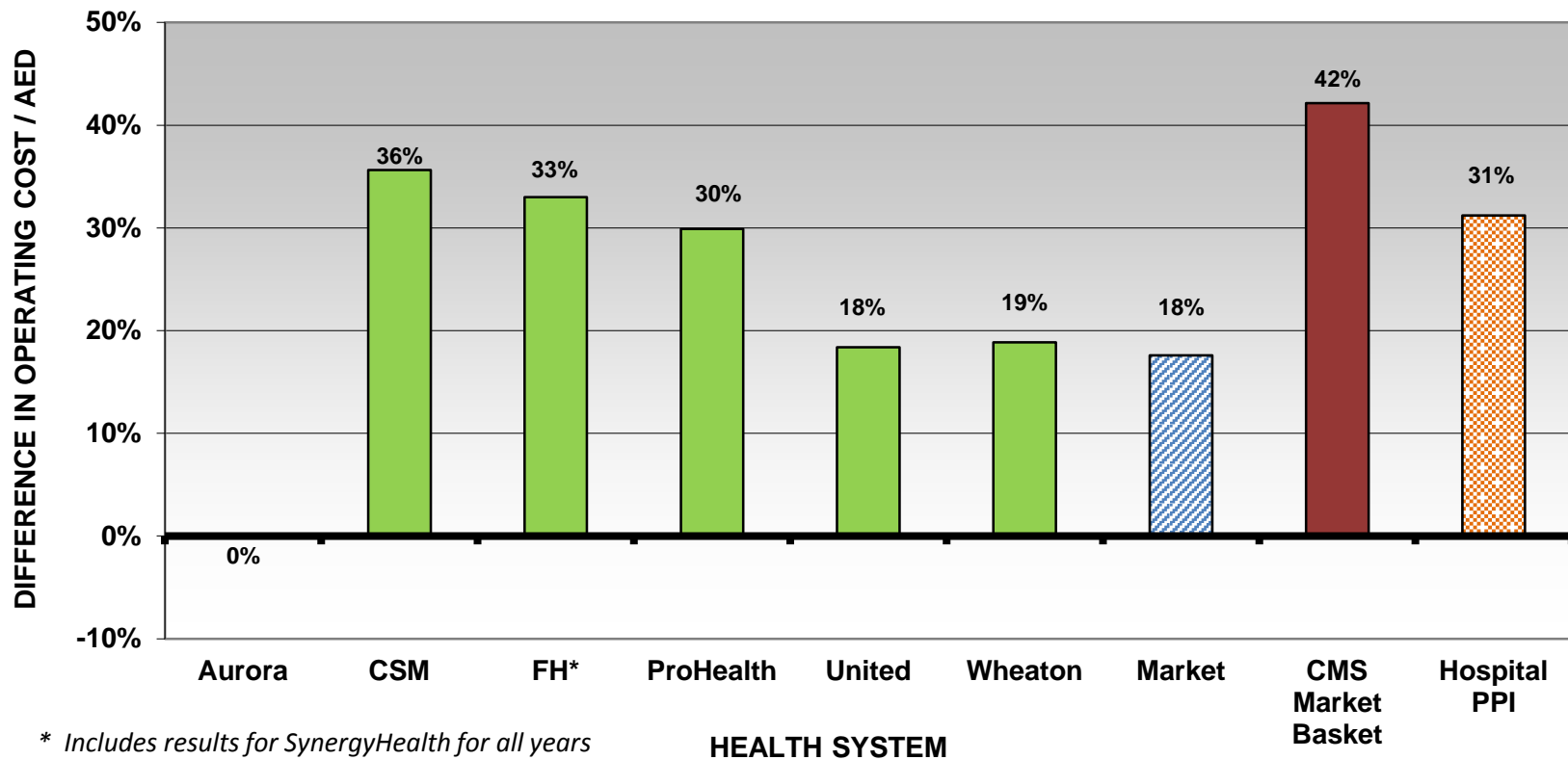
# Comparison of Average Southeast Wisconsin Hospital Operating Costs to Inflation Indices

SOUTHEAST WISCONSIN AVERAGE HOSPITAL OPERATING COST  
PER ADJUSTED EQUIVALENT DISCHARGE (AED)  
(Annual Market Average)



# Southeast Wisconsin Health System Hospital Operating Cost Changes (2003 – 2011)

SOUTHEAST WISCONSIN HEALTH SYSTEM  
 HOSPITAL OPERATING COST PER ADJUSTED EQUIVALENT DISCHARGE (AED)  
 (Percentage Increase from 2003 to 2011)

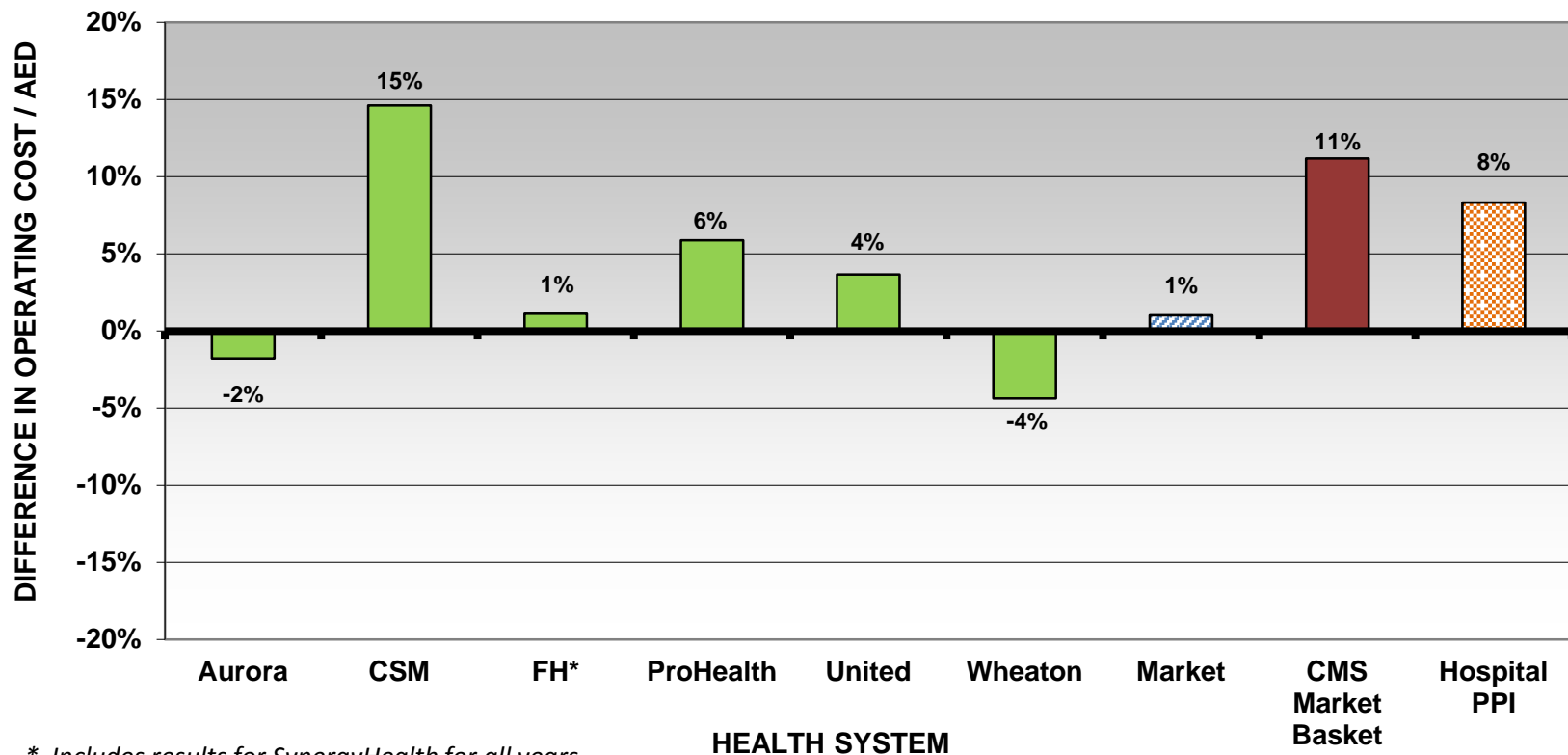


# Hospital Operating Cost Change Comparisons (2008 - 2011)

- Average Southeast Wisconsin hospital operating costs per-unit increased approximately 1% from 2008 to 2011 and were essentially unchanged from 2010 to 2011
  - Hospital PPI increased 8% and CMS Hospital Market Basket increased 11% from 2008 through 2011
- Average per-unit increases for most health systems were less than both national indices
  - Wheaton (4%) and Aurora (2%) **reduced** per-unit costs during this period, primarily as a result of changes occurring in 2011
  - Froedtert (1%), United (4%) and ProHealth (6%) per-unit increases were lower than both indices for the period
  - CSM's per-unit cost increase (15%) from 2008 through 2011 was higher than both indices

# Southeast Wisconsin Health System Hospital Operating Cost Changes (2008 - 2011)

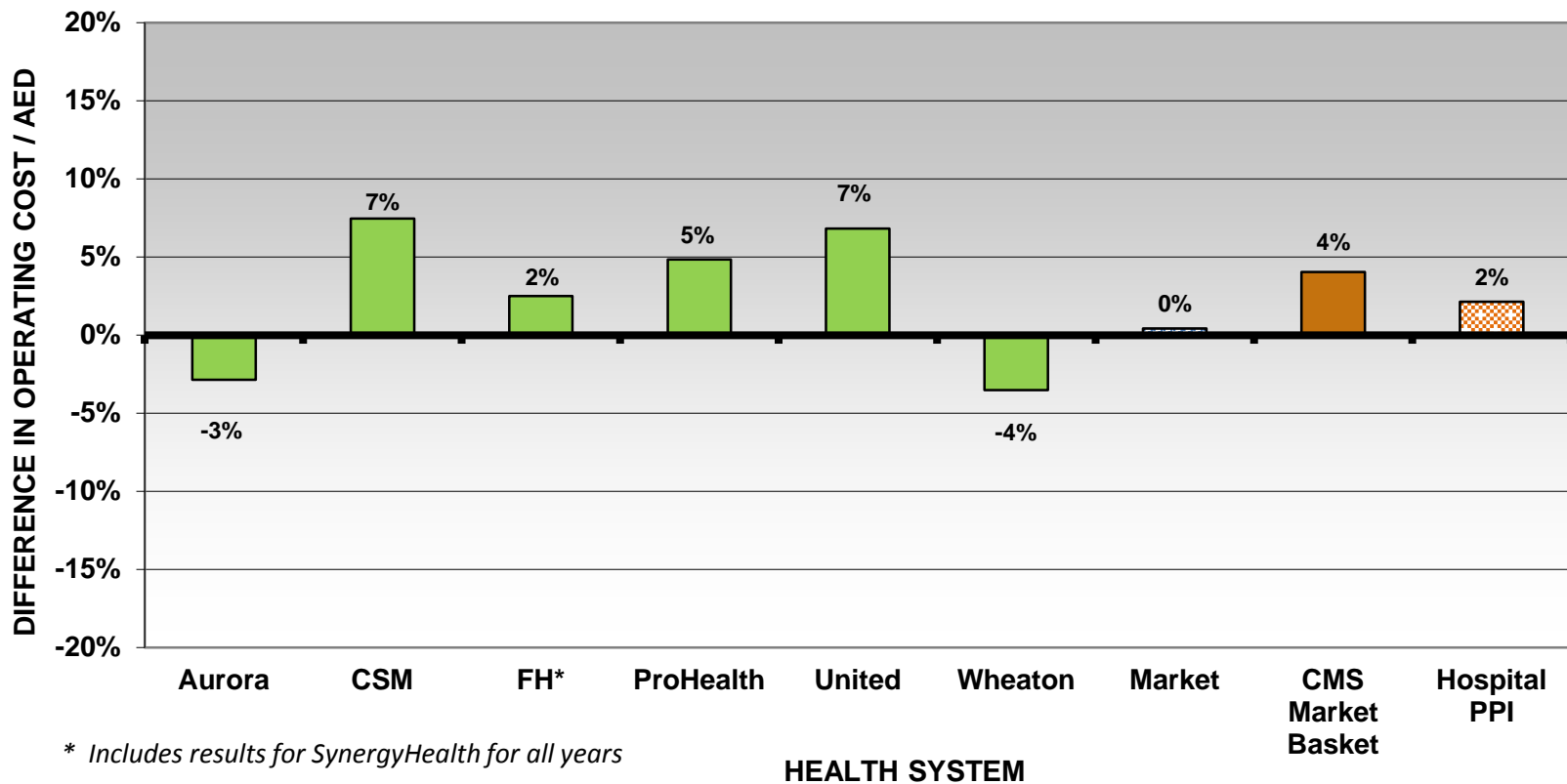
SOUTHEAST WISCONSIN HEALTH SYSTEM  
 HOSPITAL OPERATING COST PER ADJUSTED EQUIVALENT DISCHARGE (AED)  
 (Percentage Increase from 2008 to 2011)



\* Includes results for SynergyHealth for all years

# Southeast Wisconsin Health System Hospital Operating Cost Changes (2010 - 2011)

SOUTHEAST WISCONSIN HEALTH SYSTEM  
HOSPITAL OPERATING COST PER ADJUSTED EQUIVALENT DISCHARGE (AED)  
(Percentage Increase from 2010 to 2011)



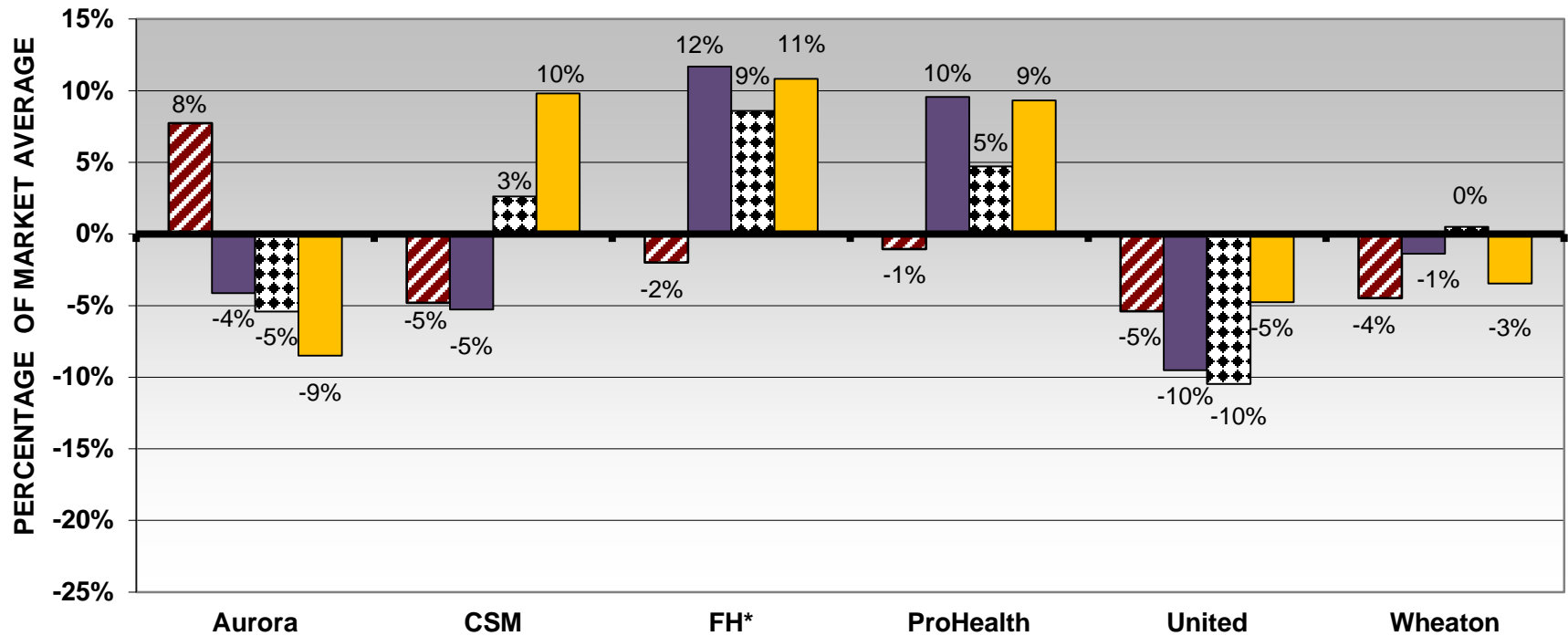
# 2011 Health System Hospital Operating Cost Comparisons

- Relative position of individual health systems has changed significantly from 2003 to 2011
  - Aurora has moved from the highest cost position in 2003 to the lowest cost position in 2011
    - 2011 per-unit costs held at 2003 levels
  - CSM, FH and ProHealth had below average per-unit costs in 2003 and have the highest cost levels in 2011
    - Average per-unit cost increases for each health system were consistent with change in national cost indices
    - Significant changes in CSM and ProHealth relative position occurred in 2010 and/or 2011
  - Wheaton and United 2011 relative cost position generally consistent with 2003



# Southeast Wisconsin Hospital Operating Comparisons

**SOUTHEAST WISCONSIN HEALTH SYSTEM  
HOSPITAL OPERATING COST PER ADJUSTED EQUIVALENT DISCHARGE (AED)  
(Percentage Difference from Southeast Wisconsin Area Average)**



\* Includes results for SynergyHealth for all years

HEALTH SYSTEM

■ 2003 ■ 2009 ■ 2010 ■ 2011

# Distribution of Hospital Cost Shift Burden

# Hospital Cost Shift Burden Distribution

- Our initial 2003 study identified the proportionately greater hospital cost shift burden borne by the Milwaukee area's larger health systems as a factor that contributed to higher commercial hospital payment levels in the Milwaukee area

# Hospital Cost Shift Burden – *Methods*

- Government cost shift burden was estimated as the difference between payments (net of bad debt adjustments) and related operating costs (including a pro rata share of operating profits) for Medicare, Medicaid, GAMP, and Charity Care patients
- Health system actual operating costs and bad debts are assumed to be “necessary”
  - Operating cost levels may reflect different degrees of cost management
  - Bad debt amounts may be affected by the effectiveness of each health system’s billing and collection practices
- Aggregate cost shift burden is affected over time by changes in:
  - Government payer payment levels and patient volumes
  - Hospital operating cost and profit levels
  - Local economic conditions

# Southeast Wisconsin Aggregate Hospital Cost Shift Burden – *Results*

- Total Southeast Wisconsin cost shift burdens accounted for 34% of the commercial payments for hospital services in 2011
  - Slight decrease in total cost shift burden from 2010 to 2011
  - Relatively consistent percentage of total commercial payments from 2003 through 2011
- The relative mix of the sources of hospital cost shift burdens has remained generally consistent in 2009, 2010 and 2011.
  - Medicare patients account for roughly half of total Southeast Wisconsin hospital cost shift burdens during this period
  - Non-governmental sources (charity care and bad debts) accounted for slightly more than 30% of total cost shift burdens in each year
    - Represents substantial increase in non-governmental sources from 2003 (22% non-governmental)

# Southeast Wisconsin Aggregate Hospital Cost Shift Burden

<b>TOTAL SOUTHEAST WISCONSIN AREA HOSPITAL COST SHIFT BURDEN</b>				
<b>(IN MILLIONS OF DOLLARS)</b>				
	<b>2003</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
<b>MEDICARE</b>	429	643	594	596
<b>MEDICAID</b>	165	134	257	205
<b>GAMP</b>	20	1	0	0
<b>TOTAL GOVERNMENT COST SHIFT BURDEN</b>	614	778	851	802
<b>CHARITY CARE COST</b>	36	72	67	80
<b>BAD DEBT</b>	133	290	299	300
<b>TOTAL NON-GOVERNMENT COST SHIFT BURDEN</b>	169	362	366	380
<b>AGGREGATE COST SHIFT BURDEN</b>	782	1,140	1,217	1,182
<b>% of Commercial Payments (Total Government)</b>	25.2%	22.9%	24.5%	23.1%
<b>% of Commercial Payments (Total Non-Government)</b>	6.9%	10.6%	10.5%	10.9%
<b>% of Commercial Payments (Aggregate)</b>	32.1%	33.5%	35.0%	34.0%

See Attachment 1 of Appendix for individual health system cost shift burden impacts

# Relative Southeast Wisconsin Hospital Cost Shift Burden Comparison - *Method*

- Estimates the impact on total commercial payments resulting from the difference between the individual health system's actual cost shift burden and the market average cost shift burden
- Health system and market average cost shift burdens measured as a percentage of total commercial payments
- Difference in health system and market average cost shift burden rates applied to health system's actual total commercial payments

# Factors Affecting Health System Relative Hospital Cost Shift Burdens

- Percentage of Medicare, Medicaid or Charity Care “business” relative to the Southeast Wisconsin average percentage
- Differences in hospital Medicare and Medicaid payment levels including disproportionate share, medical education or other enhanced payments
- Hospital operating cost levels relative to the Southeast Wisconsin average
- Relative effectiveness of collection practices
- Differences in Charity Care policies

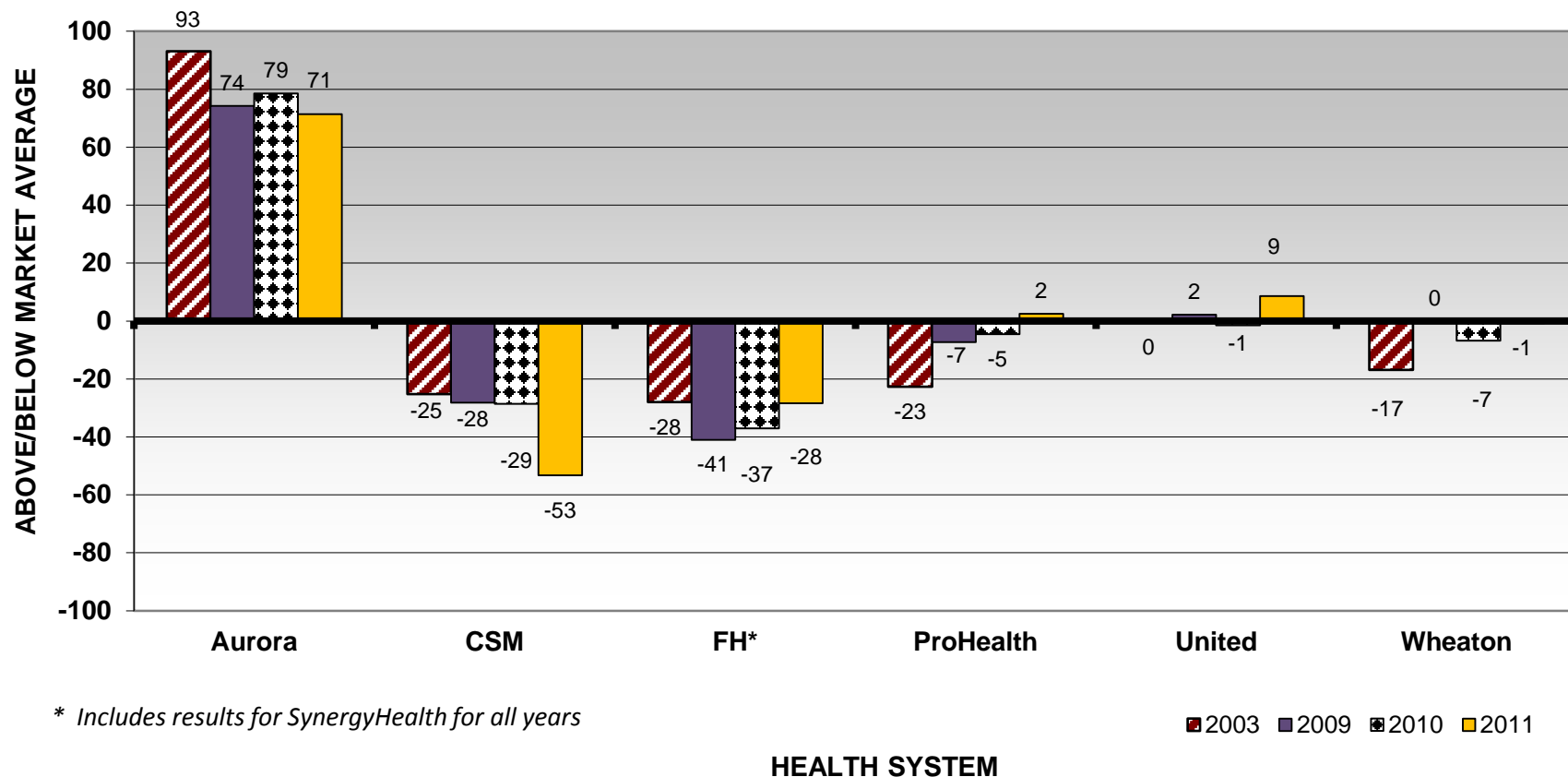


# 2011 Distribution of Southeast Wisconsin Hospital Relative Cost Shift Burden

- Aurora and United had higher relative levels of total cost shift burden than the other Southeast Wisconsin health systems in 2011
  - Both health systems have higher Medicare, Medicaid and Bad Debt cost shift burdens than the market average burdens from these sources
    - Lower relative operating cost levels for both systems help limit amount of total cost shift burdens from Medicare and Medicaid sources
    - Aurora's aggregate cost shift burdens are lower than in 2003
- CSM and FH have proportionately lower levels of cost shift burden than the other Southeast Wisconsin health systems in 2011
  - Both health systems have lower Medicare, Medicaid and Bad Debt cost shift burdens than the market average burdens from these sources
- Wheaton and ProHealth 2011 relative cost shift burdens are consistent with the market averages

# Distribution of Relative Hospital Cost Shift Burden Among Health Systems

Southeast Wisconsin Health System Cost Shift Burden  
(\$ Millions Above/Below Market Average)



# Commercial Market Concentration

# Commercial Market Concentration

- Our initial 2003 study identified the high geographic concentration of hospitals within individual Milwaukee area health systems as a factor contributing to Milwaukee's higher commercial hospital payment levels
- Previous studies measured changes in market shares of “predominant” health systems
  - “Predominant” health system defined as health system with largest inpatient market share
  - Measured separately for each zip code
- Measurement area experienced a 32% decline in total commercial discharges from 2003 through 2011
  - Represents impact of utilization and insurance coverage changes

# Commercial Market Concentration – *Background*

- Each health system's average commercial market shares appear to be the result of relatively higher market shares in a small number of zip codes
  - The overall commercial market share of the largest health system in Southeast Wisconsin (Aurora) was 35% in 2011 while it averaged about 54% in zip codes where it was the “predominant” health system
    - Other health systems exhibited similar patterns
- Preference for Closest Hospitals
  - Health system commercial market shares appeared to be related to hospital proximity in most zip codes
  - “Predominant” health system commercial market shares tended to be higher when competitors were located farther away
  - Pattern is consistent throughout duration of study period (2003 – 2011)

# Commercial Market Concentration – *Data*

- Measures used WHA hospital inpatient discharge data
- Included only commercial discharges of residents from the seven county area to “Included Hospitals,” Mercy Health Services (Lake Geneva or Janesville hospitals), and Columbia Center (Mequon)
  - Excluded Medicare, Medicaid, GAMP, Charity, Self Pay, and other non-commercial discharges
  - Excluded seven county area residents discharged from hospitals in other markets (Madison, Green Bay, Fond du Lac, Chicago, etc.)
- Effective with their merger in 2009, market shares for Synergy Health and Froedtert Health were calculated on a combined basis (presented as Froedtert Health)
  - Calculated separately prior to 2009

# Commercial Market Concentration – *Method*

- Based on analysis of health system inpatient commercial discharge market shares within each Southeast Wisconsin zip code (113 zip codes)
- Health system with the highest commercial market share in each zip code was defined as the “predominant” health system for that zip code
- Market average comparisons were developed using the weighted averages of “predominant” health system commercial market shares for each zip code
- Market segment analysis was based on changes in the distribution of commercial discharges among Low, Limited, Moderate, and High Competition market share categories

# Commercial Market Share Segment Descriptions

## ▪ Low Competition

- “Predominant” health system market share is > 65%
  - Typically near single health system hospitals located relatively far from competitor hospitals (Waukesha, Burlington, Racine, Menomonee Falls)

## ▪ Limited Competition

- “Predominant” health system market share is 50% to 65%
  - Typically located in similar proximity to hospitals from only two competitor health systems (Kenosha, Hales Corners, Oak Creek)



# Commercial Market Share Segment Descriptions

## ▪ Moderate Competition

- “Predominant” health system market share is 35% to 50%
  - Primarily zip codes in similar proximity to hospitals from at least two (but usually three) competitor health systems (Hartland, New Berlin, Muskego, Waterford)

## ▪ High Competition

- “Predominant” health system market share is < 35%
  - Limited number of Milwaukee County zip codes located in similar proximity to hospitals from several health systems

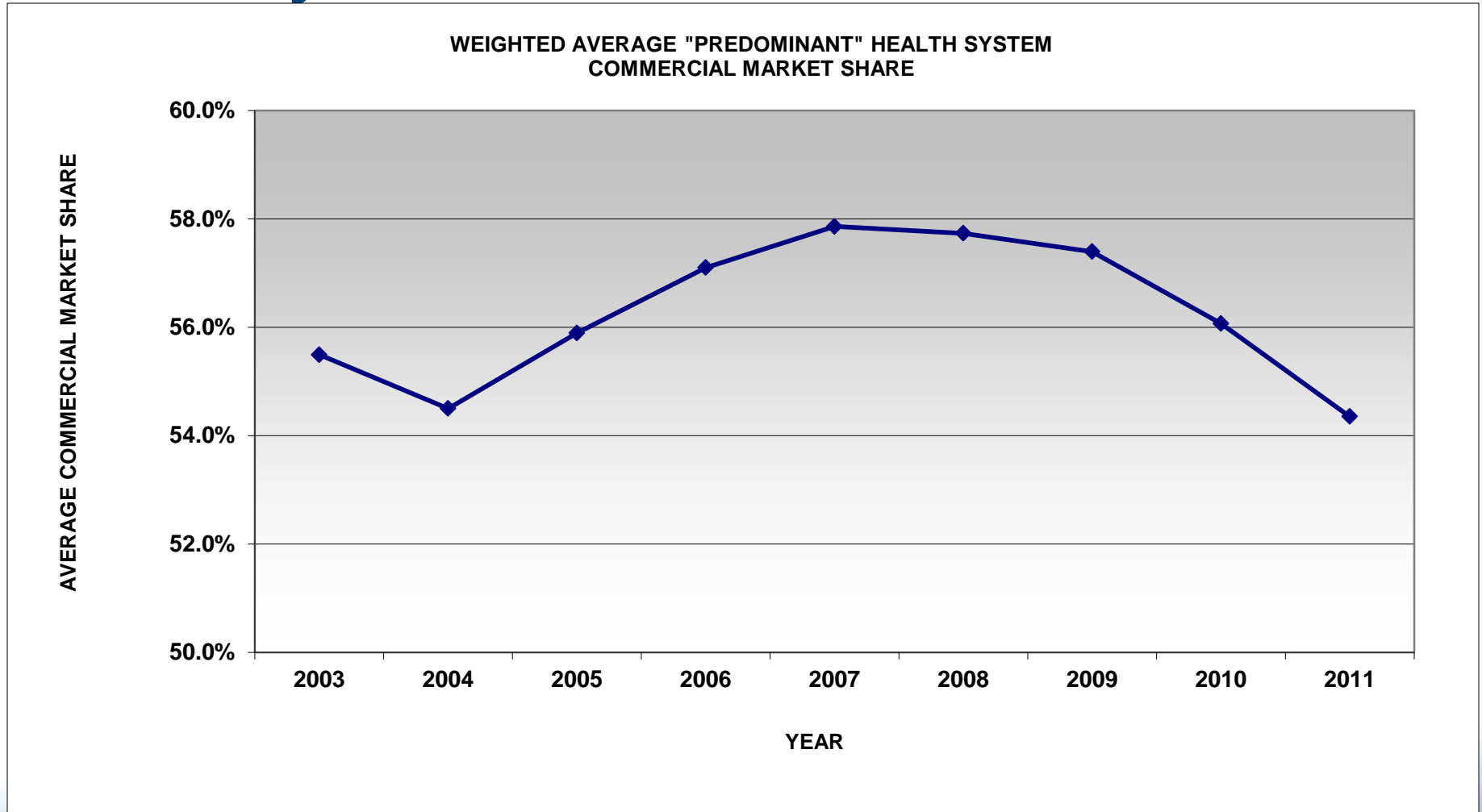
# Commercial Market Concentration Changes

- From 2004 through 2007 commercial market shares for “predominant” health systems generally increased
  - Weighted average and percentage of Limited and Low Competition discharges increased during measurement period
- From 2008 through 2011 overall market concentration has declined
  - 2011 weighted average market share declined to 2004 level, the previous lowest point in the study
  - Percentage of commercial discharges from “Low” competition zip codes decreased by more than 1/3 from 2009 through 2011
  - Percentage of commercial discharges from “Low” and “Limited” zip codes decreased from 73% in 2010 to 68% in 2011
    - This is the first decrease in this measure since 2004

# Commercial Market Concentration Changes

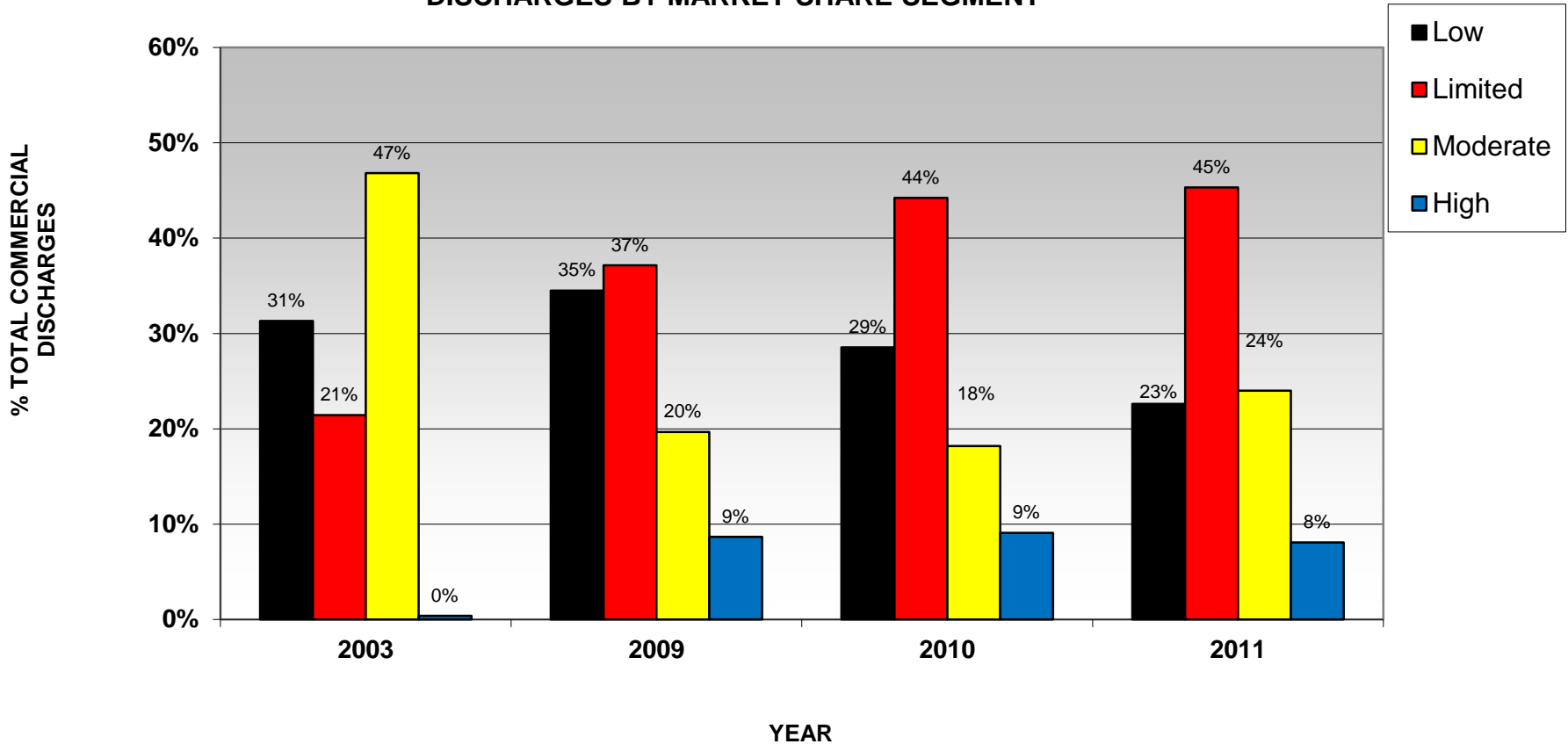
- Health system market share shifts in areas where new hospitals opened in recent years (Ozaukee, Waukesha and northern and southern Milwaukee counties) appear to be one of the primary causes of the reduction in average predominant health system market shares from 2009 through 2011
  - Portions of Walworth county are also affected in a similar manner
- The Racine area is the primary market where predominant health system market shares increased by more than 5% since 2009

# Southeast Wisconsin Average “Predominant” Health System Market Shares



# Southeast Wisconsin Commercial Discharges by Market Share Segment

PERCENT OF SOUTHEASTERN WISCONSIN COMMERCIAL DISCHARGES BY MARKET SHARE SEGMENT



# Caveats and Use of This Report

# Caveats

- Hospital commercial payment and operating cost comparisons are based on hospital financial reports filed with WHA. To the extent health systems use different methods to account for the commercial payments or operating costs of its hospitals, or include non-hospital costs or payments in their reports to WHA, our comparisons may not be valid.
- Cost shift burden results pertain to aggregate commercial and governmental hospital payment levels only and do not reflect cost shift burden from non-hospital services (Physicians, Home Health, Retail Pharmacy).

## Caveats *(continued)*

- Our comparisons of health system geographic market concentration are based on commercial inpatient discharge data only. Health system market shares for outpatient services and / or non-commercial payers may be different.
- Results were developed using data that we did not audit, but we did review the data for general reasonableness.



# Use of This Report

- This report is intended for use in collaborative quality and cost improvement initiatives. We ask that it not be used for public relations or general media purposes.
- Please review the full report (including the Appendix and its Attachments) and use the information in its entirety. Market comparisons using only one measure or even a limited number of comparisons can be misleading.

# *Thank You*

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**Greater Milwaukee Business Foundation on Health  
Key Factors Influencing 2003 – 2011  
Southeast Wisconsin Commercial  
Payer Hospital Payment Levels**

**Appendix**

Prepared for:  
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<b>ATTACHMENT 1</b>	<b>Southeast Wisconsin Health System Cost Shift Burden Comparisons</b>
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This appendix describes the data, methods, assumptions, and tools Milliman used to compare Southeast Wisconsin market average and health system specific hospital commercial payment levels, total hospital operating cost levels, cost shift burden from non-commercial payers (including charity care and bad debts), and overall levels of geographic commercial market concentration among Southeast Wisconsin health systems from 2003 through 2011. Measuring hospital commercial payment and operating cost levels, impacts of commercial and governmental payments to hospitals, and market share concentrations is complicated and often controversial. Therefore, the descriptions in this appendix are crucial to the effective use of this hospital comparison. Milliman's comparison of Milwaukee hospital commercial payment and operating cost levels, cost shift burden, and market concentrations should only be considered in its entirety and only after consideration of the information included in this appendix.

## I. OVERVIEW

The Greater Milwaukee Business Foundation on Health (the Foundation) commissioned Milliman to provide updated comparisons of five market factors previously identified by Milliman as contributing to higher commercial hospital payment levels in the Milwaukee area (Milwaukee, Ozaukee, Washington, and Waukesha counties) compared to other Midwest cities in 2003. This report provides comparisons of 2003 baseline measures for Southeast Wisconsin (Milwaukee, Kenosha, Racine, Ozaukee, Washington, Walworth, and Waukesha counties) commercial hospital payment levels and three of the five factors (hospital operating cost levels, cost shift burden, and geographic commercial market concentration) to similar market and individual health system measures for 2009, 2010 and 2011. Milliman's previous report issued in 2011 included annual comparisons of the same measures from 2003 through 2010. Information necessary to measure the other two factors identified as impacting the 2003 hospital costs was not available for comparison after 2005 and is not included in either study.

The Foundation's goals for these comparisons are to:

- > Provide overall market average and individual health system hospital commercial payment level, operating cost, and cost shift comparisons,
- > Provide measures of the geographic concentration of health systems operating in Southeast Wisconsin, and
- > Measure changes in each factor from 2003 through 2011 with particular emphasis on changes occurring in 2009, 2010 and 2011.

Individual health system inpatient hospital commercial payment comparisons are based on a hospital's total inpatient commercial net revenues (allowed amounts), as reported in hospital financial statements, measured on a per-unit basis. We adjusted each hospital's per-unit commercial payments for differences in commercial inpatient case mix. Outpatient hospital commercial payment comparisons are based on commercial outpatient payment rates as a percentage of each hospital's Medicare outpatient payment rates (both expressed as a percentage of each hospital's billed charges). Average composite (blended inpatient and outpatient) commercial payment levels were reported relative to the market average.

Comparisons of changes in average market commercial payment levels to the Hospital CPI were developed based on changes in the Southeast Wisconsin average per-unit commercial payments adjusted for differences in commercial inpatient case mix and severity, relative percentages of commercial inpatient and outpatient business, and mix of commercial outpatient services among each year.

Hospital operating cost comparisons are based on a hospital's underlying total expenses incurred in providing services to all patients as reported in hospital financial statements, measured on a per-unit basis. We adjusted each hospital's per-unit expenses for differences in inpatient case mix and severity, relative percentages of inpatient and outpatient business, and mix of outpatient services among all hospitals.

Comparisons of "cost shift burden" are based on the impact to commercial payers resulting from government payment shortfalls to Milwaukee area hospitals. "Cost shift burden" is defined as the increase in hospital commercial insurance payment levels necessary to offset the impact of government payments, charity care and bad debts that do not fully cover a pro rata share of operating costs, and operating profit.

Market share concentration measurements are based on health system commercial inpatient discharge market shares of residents in each of the 113 zip codes with reported commercial discharge volumes in Milwaukee, Kenosha, Racine, Ozaukee, Washington, Walworth, and Waukesha counties. Results of the analyses of individual zip code market shares are weighted by the number of commercial discharges in each zip code when providing overall market comparisons.

## II. DEFINITION OF SOUTHEAST WISCONSIN HEALTH SYSTEMS

Our analyses of hospital operating costs and cost shift burden include all adult, general acute care hospitals with 25 or more facility beds located in Milwaukee, Kenosha, Racine, Ozaukee, Washington, Walworth, and Waukesha counties.

Our analysis of Southeast Wisconsin health system geographic market share concentration includes all adult, general, acute care hospitals with health system commercial market shares of at least 10% in any individual zip codes located in Milwaukee, Kenosha, Racine, Ozaukee, Washington, Walworth, and Waukesha counties.

Children's Hospital and Health System and Columbia Center (Columbia Health System) are not included in the analyses or in Southeast Wisconsin averages because of their unique demographic and service characteristics. Mercy Health System is not included in the operating cost and cost shift analyses because of the unique configuration of its Mercy Walworth Hospital and Medical Center (six beds), its only hospital located within the study area. Discharges from Mercy Health System's Lake Geneva and Janesville, in addition to Columbia Center hospitals, are included in our analysis of geographic concentration of health systems. Information for sub-acute care and non-medical / surgical specialty hospitals (e.g., behavioral health, rehabilitation, and long-term acute care) is also excluded from the analyses.

SynergyHealth and Froedtert Health (FH) merged on July 1, 2008, the first day of SynergyHealth's 2009 fiscal year. Accordingly, we combined the 2003 and 2008 commercial payment levels, operating cost, and cost shift comparison results for both organizations (i.e., Synergy information included with FH) in this report. SynergyHealth and FH market share results were not combined prior to 2009 in our market concentration measurements.

The following table details the individual hospitals from each Southeast Wisconsin health system included in our analyses.

Southeast Wisconsin Comparisons Included Hospitals and Health Systems	
Health System	Included Hospitals
Aurora Health Care (Aurora)	Aurora Medical Center – Grafton Aurora Medical Center – Kenosha Aurora Medical Center – Summit Aurora Medical Center of Washington County (Hartford) Aurora Sinai Medical Center Aurora St. Luke’s Medical Center (Oklahoma Campus) Aurora St. Luke’s Medical Center (South Shore Campus) Aurora West Allis Medical Center
Columbia St. Mary’s (CSM)	Columbia St. Mary’s Hospital – Milwaukee Columbia St. Mary’s Hospital – Ozaukee Orthopedic Hospital of Wisconsin
Froedtert Health (FH)	Community Memorial Hospital (Menomonee Falls) Froedtert and Medical College of Wisconsin St. Joseph’s Hospital (West Bend) – formerly SynergyHealth
United Hospital System (United)	Kenosha Medical Center Campus St. Catherine’s Medical Center Campus
ProHealth Care (ProHealth)	Oconomowoc Memorial Hospital Waukesha Memorial Hospital
Wheaton Franciscan Healthcare (Wheaton)	Midwest Orthopedic Specialty Hospital St. Michael Hospital (closed in 2006) Wheaton Franciscan Healthcare – All Saints Wheaton Franciscan Healthcare – Elmbrook Memorial Wheaton Franciscan Healthcare – Franklin Wheaton Franciscan Healthcare – St. Francis Wheaton Franciscan Healthcare – St. Joseph Wheaton Franciscan Healthcare – Wisconsin Heart Hospital



### III. DATA SOURCES AND TIME PERIOD

We used hospital inpatient claims data and information included in the Wisconsin Hospital Fiscal Survey, as reported by each hospital obtained from the Wisconsin Hospital Association (WHA) Information Center, as the basis for each analysis.

CMS-DRG weights obtained from the Centers for Medicare and Medicaid Services (CMS) were used to calculate inpatient case-mix adjustments.

The hospital commercial payment, operating cost, and cost shift burden comparisons are based on inpatient claims and financial report data from each health system's fiscal year as reported in the WHA Discharge Database. Southeast Wisconsin health systems have different fiscal years ending from June 30 through December 31 of each year. We do not believe the differences in health system fiscal years are likely to have a material impact on our comparisons. Individual hospital system information included in the comparisons was developed from summaries of the respective individual Wisconsin Hospital Fiscal Survey reports. These summaries may differ from other publicly available financial information from each hospital system, due to exclusion of non-hospital subsidiaries or accounting treatment of intercompany revenues and expenses. Hospital service and payer mix, reimbursement levels (i.e., discounts), operating costs, and profit levels may change over time. The results of this comparison may be different if the analysis was performed on more recent data.

Hospital Medicare payment percentages were developed using information from the Wisconsin Hospital Fiscal Survey and the Medicare 5% sample. We excluded inpatient psychiatric, rehabilitation, and transfer patients from each hospital's data. Newborn infants and their mothers were counted as single discharges for the purpose of this analysis. Estimated commercial payments and costs of the excluded patients were removed from each hospital's total commercial payments or expenses, based on each hospital's overall ratio of commercial payments or operating costs to charges.

The measures of geographic market share concentration among health systems are based on commercial inpatient discharge data for residents of Milwaukee, Kenosha, Racine, Ozaukee, Washington, Walworth, and Waukesha counties admitted to Included Hospitals or Mercy Health Services' Lake Geneva or Janesville hospitals from January 1 through December 31 of each measurement year.

#### **IV. HOSPITAL SERVICES FORM THE BASIS OF COMPARISON**

The hospital commercial payment, operating cost, cost shift, and market share comparisons are based solely on hospital services, payments, costs, and profits. The comparisons do not include commercial payments, operating costs, cost shift burden, or market shares related to other types of health care services such as physicians, home health agencies, pharmacies, and other providers that are not included in each health system's hospital financial statements as reported to WHA. To the extent that any of the health systems have included non-hospital payments or costs in their reports to WHA, our results may not be valid.

The reader of this report should consider all elements of health care costs before drawing conclusions from this report.

## V. QUALITY COMPARISONS

Our analysis did not include any comparisons of quality or outcomes information because such data was outside the scope of the comparisons. Quality information is a critical component of provider evaluation and should be considered when evaluating hospital performance.

## VI. METHODOLOGY AND ASSUMPTIONS

### HOSPITAL COMMERCIAL PAYMENT COMPARISONS

Inpatient hospital commercial payment levels were calculated for each health system by dividing total hospital inpatient commercial payments (billed commercial charges less corresponding contractual allowances) by each health system's commercial case mix adjusted discharges. Case mix adjusted discharges are a standardized unit of measure used to adjust each hospital's commercial inpatient payment levels for differences in service mix among the hospitals. Each hospital's case mix is developed using MSDRGs and reflects relative differences among admission types. Normalizing for these differences allows for a consistent comparison of inpatient discharges from one hospital to another.

Outpatient hospital commercial payment levels were estimated as a percentage of each hospital's average Medicare outpatient payment levels. Hospitals in Southeast Wisconsin are generally paid on a uniform outpatient fee schedule by Medicare. Our estimates of commercial payment levels as a percentage of Medicare payment levels were developed by comparing the relative average commercial outpatient payment levels (expressed as a percentage of billed charges) to the average Medicare outpatient payment levels (also expressed as a percentage of billed charges).

The composite (blended inpatient and outpatient) commercial payment levels were developed by blending each health system's relative inpatient and outpatient payment levels (relative to market averages) using the average mix of inpatient and outpatient billed charges for all hospitals included in our analysis.

We compared changes in Southeast Wisconsin average hospital commercial payment levels to estimated changes in national average commercial hospital payments using the United States Bureau of Labor Statistics Hospital Services component of the All Urban Consumer Price Index for each year. These comparisons relied on per-unit hospital commercial payment levels, calculated for each health system by dividing total hospital commercial payments (billed commercial charges less corresponding contractual allowances) by each health system's commercial adjusted equivalent discharges. Adjusted equivalent discharges are a standardized unit for measuring each hospital's combined inpatient and outpatient activity adjusting for differences in inpatient case-mix and severity, outpatient service mix, and relative mix of inpatient and outpatient business mix among hospitals.

### HOSPITAL OPERATING COST COMPARISONS

Per-unit hospital operating cost levels were calculated for each health system by dividing total hospital operating costs (net of other operating revenues) by each health system's total adjusted equivalent discharges. Adjusted equivalent discharges are a standardized unit for measuring each hospital's combined inpatient and outpatient activity adjusting for differences in inpatient case-mix and severity, outpatient service mix, and relative mix of inpatient and outpatient business mix among hospitals.

We compared changes in Southeast Wisconsin average hospital operating cost levels to estimated changes in national average hospital costs using the Centers for Medicare and Medicaid Services' Hospital Market Basket Index and the United States Bureau of Labor Statistics Hospital Producer Price Index for each year.

## **COST SHIFT BURDEN ESTIMATES**

Southeast Wisconsin hospital cost shift burden is calculated for Medicare, Wisconsin Medicaid, Milwaukee County General Assistance (GAMP), and Charity Care patient activity at each hospital. We also included each hospital's bad debts as source of cost shift burden in each year. Effective January 1, 2009 GAMP enrollees in Milwaukee County were transitioned into the Wisconsin Medicaid program. Accordingly, GAMP cost shift burden is not reported separately for fiscal years 2010 and 2011.

Cost shift burden related to patients covered by other governmental payers, such as CHAMPUS or non-Wisconsin Medicaid, are not reported separately in the comparisons due to the relatively immaterial impact of these patients on Southeast Wisconsin hospital overall cost shift burden levels.

Medicare, Medicaid, GAMP, charity care, and bad debt Cost Shift Burden estimates were developed using hospital specific Wisconsin Hospital Fiscal Survey data for each payer summarized by health system to provide the information presented in the market and hospital system comparisons. The payer specific cost shift burden for each health system was estimated by comparing total reimbursement from each payer to a pro rata share of the net operating cost (net of bad debt adjustments) and hospital operating profit for all health system hospitals. Hospital net operating costs and profits were allocated among payment sources based on the ratio of each hospital's operating costs or operating profits to gross patient revenues (billed charges). Total hospital operating expenses were reduced by non-payer sources of revenue (other operating revenue) to calculate the net operating costs used to develop the cost shift burden estimates for each health system. As bad debts represent actual uncollected amounts due to each hospital, we included the full amount of each hospital's reported bad debt expense in our estimates.

The detailed Southeast Wisconsin health system cost shift burden comparisons are included in Attachment 1 to this appendix.

## **GEOGRAPHIC MARKET CONCENTRATION COMPARISONS**

The analysis of health system geographic market concentration was based on health system market share calculations using commercial discharge data from residents of each zip code in Milwaukee, Kenosha, Racine, Ozaukee, Washington, Walworth, and Waukesha counties (113 total zip codes) for each of the Included Hospitals and Mercy Health Services hospitals in Lake Geneva or Janesville, Wisconsin. The analysis was limited to commercial data in order to better illustrate market characteristics and changes impacting commercial insurance and self-funded health plans.

We measured changes in the overall geographic market concentration of health systems in Southeast Wisconsin by comparing measures of "predominant" health system market shares across all zip codes included in the study. The "predominant" health system was defined as the health system with the highest commercial inpatient discharge market share within each zip code. Overall measures of Southeast Wisconsin geographic market concentration were developed by summarizing total commercial inpatient hospital discharge volumes from each zip code based on the "predominant" health system market share within the zip code. Market average comparisons were developed using the weighted averages of "predominant" health system commercial market shares for each zip code.

"Predominant" health system market share measures for each zip code are included in Attachment 2 to this appendix.

## VII. USES OF INFORMATION

The Foundation and Milliman encourage the business, provider, and government communities to use this information to collaborate on quality and cost improvement initiatives. We did not create this information for, and we ask that it not be used in, hospital-specific public relations efforts or for general media purposes. We also ask that this information be reviewed and used in its entirety. Market comparisons using only one measure or even a limited number of measures can be misleading. An informed comparison of health care market characteristics should also incorporate other information, particularly additional quality measures, not included in this report. This information is designed for use by the business community and health care providers, not individual consumers of health care services.

## VIII. CAVEATS AND LIMITATIONS ON USE

Milliman reviewed but did not audit information obtained from public data sources to develop the estimates and measures included in this report. To the extent this information is not accurate; the results of Milliman's analyses may not be accurate. Hospital commercial payment, operating cost and cost shift burden comparisons are based on hospital financial reports filed with WHA. To the extent any of the health systems used different methods to account for the payments or operating costs of its hospitals, or include non-hospital costs or payments in their reports to WHA, our comparisons may not be valid.

Cost shift burden results pertain to aggregate commercial and governmental hospital payment levels only and do not reflect cost shift burden from non-hospital services (Physicians, Home Health, and Retail Pharmacy), unless such information is included in any hospital's reports to WHA.

Our comparisons of health system geographic market concentration are based on commercial inpatient discharge data only. Health system market shares for outpatient services and / or non-commercial payers may be different. "Predominant" health system commercial market share measures are subject to random variation from year to year, which is most likely to have the greatest effect in zip codes with low numbers of commercial discharges.

This report is designed to measure changes in certain market factors affecting hospital commercial payment levels. This information may not be appropriate, and should not be used, for other purposes.

This report is intended for use by the Greater Milwaukee Business Foundation on Health. We do not intend this information to benefit any third party.

The terms of Milliman's Consulting Services Agreement with the Greater Milwaukee Business Foundation on Health signed on September 4, 2003 apply to this report and its use.

## IX. FOR FURTHER INFORMATION

Please contact Keith Kieffer, CPA, RPh, in the Milwaukee office of Milliman (Phone: 262-784-2250; Email: [keith.kieffer@milliman.com](mailto:keith.kieffer@milliman.com)) with questions and comments about the comparisons in this report.



**Greater Milwaukee Business Foundation on Health  
Key Factors Influencing 2003 – 2011  
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**Attachment 1**

**Southeast Wisconsin Health System Cost Shift Burden Comparison**

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**Attachment 1  
Aurora 2003 - 2011 Aggregate Cost Shift Burden**

<b>Aurora Cost Shift Burden (in \$Millions)</b>				
	<b>2003</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
MEDICARE	204	301	250	232
MEDICAID	89	65	130	120
GAMP	11	0	0	0
<b>TOTAL GOVERNMENT COST SHIFT BURDEN</b>	<b>305</b>	<b>366</b>	<b>380</b>	<b>351</b>
CHARITY CARE	11	14	24	23
BAD DEBT	46	95	106	119
<b>TOTAL NON-GOVERNMENT COST SHIFT BURDEN</b>	<b>57</b>	<b>109</b>	<b>130</b>	<b>142</b>
<b>AGGREGATE COST SHIFT BURDEN</b>	<b>361</b>	<b>475</b>	<b>510</b>	<b>493</b>
% of Commercial Payments (Total Government)	36.5%	30.6%	30.8%	28.3%
% of Commercial Payments (Total Non-Government)	6.8%	9.1%	10.5%	11.4%
% of Commercial Payments (Aggregate)	43.3%	39.7%	41.4%	39.7%

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**Attachment 1  
CSM 2003 - 2011 Aggregate Cost Shift Burden**

<b>CSM Cost Shift Burden (in \$Millions)</b>				
	<b>2003</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
MEDICARE	48	51	59	46
MEDICAID	16	13	29	1
GAMP	1	0	0	0
<b>TOTAL GOVERNMENT COST SHIFT BURDEN</b>	<b>64</b>	<b>64</b>	<b>88</b>	<b>47</b>
CHARITY CARE	4	11	9	12
BAD DEBT	15	55	43	37
<b>TOTAL NON-GOVERNMENT COST SHIFT BURDEN</b>	<b>19</b>	<b>66</b>	<b>52</b>	<b>49</b>
<b>AGGREGATE COST SHIFT BURDEN</b>	<b>83</b>	<b>129</b>	<b>140</b>	<b>96</b>
% of Commercial Payments (Total Government)	19.1%	13.5%	18.3%	10.7%
% of Commercial Payments (Total Non-Government)	5.6%	14.0%	10.8%	11.2%
% of Commercial Payments (Aggregate)	24.7%	27.5%	29.1%	21.9%

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**Attachment 1  
FH 2003 - 2011 Aggregate Cost Shift Burden**

<b>FH* Cost Shift Burden (in \$Millions)</b>				
	<b>2003</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
MEDICARE	54	90	99	115
MEDICAID	18	22	41	30
GAMP	4	0	0	0
<b>TOTAL GOVERNMENT COST SHIFT BURDEN</b>	<b>76</b>	<b>112</b>	<b>140</b>	<b>145</b>
CHARITY CARE	8	19	10	16
BAD DEBT	19	46	50	52
<b>TOTAL NON-GOVERNMENT COST SHIFT BURDEN</b>	<b>27</b>	<b>65</b>	<b>60</b>	<b>68</b>
<b>AGGREGATE COST SHIFT BURDEN</b>	<b>103</b>	<b>177</b>	<b>200</b>	<b>213</b>
% of Commercial Payments (Total Government)	18.6%	17.3%	20.7%	20.5%
% of Commercial Payments (Total Non-Government)	6.6%	10.0%	8.9%	9.6%
% of Commercial Payments (Aggregate)	25.3%	27.3%	29.5%	30.1%

\* Includes results for SynergyHealth for all years.

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**Attachment 1  
ProHealth 2003 - 2011 Aggregate Cost Shift Burden**

<b>ProHealth Cost Shift Burden (in \$Millions)</b>				
	<b>2003</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
MEDICARE	44	83	82	89
MEDICAID	5	3	13	7
GAMP	0	0	0	0
<b>TOTAL GOVERNMENT COST SHIFT BURDEN</b>	<b>49</b>	<b>86</b>	<b>95</b>	<b>96</b>
CHARITY CARE	1	4	5	6
BAD DEBT	9	25	23	22
<b>TOTAL NON-GOVERNMENT COST SHIFT BURDEN</b>	<b>10</b>	<b>29</b>	<b>28</b>	<b>28</b>
<b>AGGREGATE COST SHIFT BURDEN</b>	<b>59</b>	<b>115</b>	<b>123</b>	<b>124</b>
% of Commercial Payments (Total Government)	19.2%	23.6%	26.1%	26.8%
% of Commercial Payments (Total Non-Government)	4.0%	7.9%	7.6%	7.9%
% of Commercial Payments (Aggregate)	23.2%	31.5%	33.7%	34.7%

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**Attachment 1  
United 2003 - 2011 Aggregate Cost Shift Burden**

<b>United Cost Shift Burden (in \$Millions)</b>				
	<b>2003</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
MEDICARE	17	31	23	34
MEDICAID	5	6	11	14
GAMP	0	0	0	0
<b>TOTAL GOVERNMENT COST SHIFT BURDEN</b>	<b>22</b>	<b>37</b>	<b>34</b>	<b>48</b>
CHARITY CARE	2	4	4	4
BAD DEBT	5	14	15	16
<b>TOTAL NON-GOVERNMENT COST SHIFT BURDEN</b>	<b>6</b>	<b>18</b>	<b>19</b>	<b>20</b>
<b>AGGREGATE COST SHIFT BURDEN</b>	<b>28</b>	<b>55</b>	<b>53</b>	<b>68</b>
% of Commercial Payments (Total Government)	24.5%	23.4%	21.7%	27.5%
% of Commercial Payments (Total Non-Government)	7.2%	11.2%	12.2%	11.4%
% of Commercial Payments (Aggregate)	31.7%	34.6%	33.9%	38.9%

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**Attachment 1  
Wheaton 2003 - 2011 Aggregate Cost Shift Burden**

<b>Wheaton Cost Shift Burden (in \$Millions)</b>				
	<b>2003</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
MEDICARE	63	87	80	81
MEDICAID	32	25	34	34
GAMP	4	1	0	0
<b>TOTAL GOVERNMENT COST SHIFT BURDEN</b>	<b>99</b>	<b>113</b>	<b>114</b>	<b>115</b>
CHARITY CARE	10	20	14	19
BAD DEBT	40	55	62	55
<b>TOTAL NON-GOVERNMENT COST SHIFT BURDEN</b>	<b>49</b>	<b>75</b>	<b>76</b>	<b>74</b>
<b>AGGREGATE COST SHIFT BURDEN</b>	<b>148</b>	<b>189</b>	<b>190</b>	<b>188</b>
% of Commercial Payments (Total Government)	19.2%	20.1%	20.2%	20.6%
% of Commercial Payments (Total Non-Government)	9.6%	13.4%	13.5%	13.3%
% of Commercial Payments (Aggregate)	28.8%	33.5%	33.7%	33.9%

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**Attachment 2**

**Predominant Health System Commercial Market Share by Zip Code**



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**Attachment 2**  
**Market Concentration**

Predominant Health System Key			
A - Aurora	P - ProHealth		
C - CSM	S - Synergy		
F-FH*	U - United		
M - Mercy	W - Wheaton		

\* SynergyHealth merged with Froedtert Health in 2009.

**"Predominant" Health System Market Share by ZIP Code**

ZIP Code			Predominant Health System Market Share				Predominant Health System				Commercial Discharges			
City	County	Zip	2003	2009	2010	2011	2003	2009	2010	2011	2003	2009	2010	2011
Allenton	Washington	53002	45.5%	75.3%	69.4%	63.2%	S	F	F	F	145	89	85	68
Belgium	Ozaukee	53004	83.0%	85.4%	79.6%	44.2%	C	C	C	A	153	157	108	120
Brookfield	Waukesha	53005	49.3%	29.7%	32.0%	37.2%	W	F	F	W	900	664	725	716
Butler	Waukesha	53007	46.0%	57.5%	68.8%	53.9%	F	F	F	F	113	120	64	76
Cedarburg	Ozaukee	53012	75.6%	66.7%	69.0%	52.8%	C	C	C	C	817	616	654	669
Colgate	Washington	53017	60.2%	69.1%	68.2%	73.3%	F	F	F	F	266	262	233	221
Delafield	Waukesha	53018	69.2%	66.6%	54.5%	49.8%	P	P	P	P	289	290	257	237
Fredonia	Ozaukee	53021	69.2%	72.5%	65.5%	45.2%	C	C	C	A	247	182	226	197
Germantown	Washington	53022	63.1%	70.8%	65.1%	69.9%	F	F	F	F	1,097	809	727	715
Grafton	Ozaukee	53024	80.5%	79.2%	70.1%	43.6%	C	C	C	C	844	663	653	716
Hartford	Washington	53027	42.0%	47.1%	49.4%	50.5%	A	F	F	F	1,209	1,026	933	882
Hartland	Waukesha	53029	60.4%	61.5%	49.2%	45.0%	P	P	P	P	962	753	801	658
Hubertus	Washington	53033	68.7%	69.8%	72.7%	70.3%	F	F	F	F	284	202	198	195
Jackson	Washington	53037	35.8%	70.2%	62.5%	61.9%	F	F	F	F	481	439	419	433
Kewaskum	Washington	53040	61.2%	72.0%	74.0%	79.3%	S	F	F	F	330	318	327	285
Brookfield	Waukesha	53045	53.1%	38.3%	37.7%	33.4%	W	W	W	W	966	728	750	677
Lannon	Waukesha	53046	69.2%	71.4%	57.1%	78.0%	F	F	F	F	13	28	28	50
Menomonee Falls	Waukesha	53051	68.4%	68.1%	69.2%	72.3%	F	F	F	F	2,142	1,539	1,547	1,403
Nashotah	Waukesha	53058	64.7%	68.6%	49.4%	52.5%	P	P	P	P	190	118	87	101
Oconomowoc	Waukesha	53066	78.7%	78.5%	55.5%	52.0%	P	P	P	P	1,579	1,434	1,309	1,239
Pewaukee	Waukesha	53072	52.6%	51.1%	50.9%	50.7%	P	P	P	P	1,231	982	962	892
Port Washington	Ozaukee	53074	86.1%	84.4%	77.2%	47.8%	C	C	C	A	617	480	500	485
Richfield	Washington	53076	65.3%	69.1%	77.6%	69.3%	F	F	F	F	173	136	125	150
Saukville	Ozaukee	53080	78.8%	74.9%	70.2%	45.1%	C	C	C	A	312	203	238	224
Slinger	Washington	53086	37.7%	59.4%	57.8%	61.8%	A	F	F	F	374	387	339	353
Sussex	Waukesha	53089	45.6%	47.8%	50.8%	46.1%	F	F	F	F	928	730	716	786
West Bend	Washington	53090	50.9%	71.9%	70.1%	70.6%	S	F	F	F	271	918	863	814
Thiensville	Ozaukee	53092	70.2%	69.9%	61.6%	55.2%	C	C	C	C	953	668	658	714
West Bend	Washington	53095	49.9%	71.5%	71.9%	68.7%	S	F	F	F	1,424	1,057	1,025	987
Mequon	Ozaukee	53097	68.6%	56.6%	52.2%	48.0%	C	C	C	C	188	182	201	179
Big Bend	Waukesha	53103	59.5%	60.5%	52.1%	47.3%	P	P	P	P	190	172	169	148
Bristol	Kenosha	53104	47.4%	42.3%	43.1%	42.2%	A	U	U	U	209	194	160	173
Burlington	Racine	53105	74.8%	73.8%	73.3%	72.4%	A	A	A	A	1,334	1,078	961	941
Caledonia	Racine	53108	65.8%	43.9%	51.6%	53.8%	W	A	A	W	187	107	126	106
Cudahy	Milwaukee	53110	46.7%	63.6%	63.5%	63.8%	A	A	A	A	1,018	777	690	660
Darien	Walworth	53114	61.2%	55.7%	57.1%	61.0%	A	A	A	A	98	79	84	59
Delavan	Walworth	53115	72.4%	68.3%	59.1%	55.5%	A	A	A	A	671	515	428	400
Dousman	Waukesha	53118	77.7%	72.7%	56.4%	47.0%	P	P	P	P	341	256	202	247
Eagle	Waukesha	53119	69.9%	66.8%	65.2%	75.5%	P	P	P	P	312	214	181	188
East Troy	Walworth	53120	48.8%	55.1%	46.4%	50.3%	P	P	P	P	545	379	392	344
Elkhorn	Walworth	53121	74.5%	71.1%	64.2%	65.4%	A	A	A	A	933	672	640	596
Elm Grove	Waukesha	53122	43.4%	35.3%	37.5%	38.0%	W	W	W	W	249	207	192	184
Fontana	Walworth	53125	77.6%	69.8%	76.5%	53.1%	A	A	A	A	76	53	34	32
Franksville	Racine	53126	60.4%	47.3%	50.4%	50.2%	W	A	W	W	278	226	238	253
Genoa City	Walworth	53128	83.5%	84.7%	83.8%	83.0%	A	A	A	A	212	163	185	141
Greendale	Milwaukee	53129	46.5%	66.4%	66.1%	64.1%	A	A	A	A	709	494	442	493
Hales Corners	Milwaukee	53130	48.1%	60.7%	54.9%	62.1%	A	A	A	A	372	313	308	330

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A - Aurora	P - ProHealth
C - CSM	S - Synergy
F-FH*	U - United
M - Mercy	W - Wheaton

\* SynergyHealth merged with Froedtert Health in 2009.

**"Predominant" Health System Market Share by ZIP Code**

City	County	Zip	Predominant Health System Market Share				Predominant Health System				Commercial Discharges			
			2003	2009	2010	2011	2003	2009	2010	2011	2003	2009	2010	2011
Franklin	Milwaukee	53132	54.3%	63.5%	60.8%	56.7%	A	A	A	A	1,573	1,412	1,365	1,351
Kansasville	Racine	53139	45.8%	70.4%	43.8%	45.0%	A	A	A	A	168	81	105	80
Kenosha	Kenosha	53140	49.1%	53.9%	57.8%	54.0%	U	U	U	U	1,243	951	816	806
Kenosha	Kenosha	53141	50.0%	0.0%	0.0%	0.0%	W	A	A	A	14	-	-	-
Kenosha	Kenosha	53142	48.6%	53.1%	56.6%	51.6%	U	U	U	U	1,440	1,240	1,352	1,228
Kenosha	Kenosha	53143	51.3%	55.6%	56.1%	57.4%	U	U	U	U	1,206	851	763	728
Kenosha	Kenosha	53144	43.8%	49.9%	56.9%	47.9%	U	U	U	U	1,094	969	837	852
New Berlin	Waukesha	53146	31.8%	31.0%	32.6%	38.9%	P	P	P	P	390	284	267	275
Lake Geneva	Walworth	53147	78.6%	80.1%	75.5%	67.9%	A	A	A	A	635	523	368	368
Mukwonago	Waukesha	53149	67.2%	67.7%	65.7%	68.1%	P	P	P	P	966	737	709	711
Muskego	Waukesha	53150	36.0%	45.8%	43.8%	42.6%	A	A	A	A	1,168	952	1,065	942
New Berlin	Waukesha	53151	36.1%	41.9%	39.7%	38.9%	A	A	A	A	1,624	1,231	1,219	1,212
North Prairie	Waukesha	53153	75.2%	79.0%	64.0%	70.9%	P	P	P	P	121	119	86	86
Oak Creek	Milwaukee	53154	48.6%	63.2%	60.1%	58.3%	A	A	A	A	1,803	1,521	1,464	1,414
Pell Lake	Walworth	53157	84.4%	95.8%	0.0%	0.0%	A	A	A	A	45	24	-	-
Pleasant Prairie	Kenosha	53158	47.9%	57.7%	55.4%	55.2%	U	U	U	U	585	617	525	607
Salem	Kenosha	53168	54.6%	47.4%	47.1%	46.1%	A	A	A	A	416	331	365	284
Silver Lake	Kenosha	53170	68.6%	53.1%	45.3%	52.9%	A	A	A	A	86	81	86	87
South Milwaukee	Milwaukee	53172	49.3%	64.7%	67.2%	65.9%	A	A	A	A	1,139	827	839	740
Sturtevant	Racine	53177	80.2%	44.5%	55.0%	46.6%	W	W	W	W	354	220	280	264
Trevor	Kenosha	53179	66.1%	48.0%	49.0%	44.0%	A	A	A	A	177	175	143	159
Twin Lakes	Kenosha	53181	73.6%	67.4%	65.1%	70.6%	A	A	A	A	254	178	172	177
Union Grove	Racine	53182	61.5%	43.3%	50.3%	44.8%	W	W	W	W	452	326	386	317
Wales	Waukesha	53183	77.9%	77.7%	76.0%	60.5%	P	P	P	P	172	94	100	81
Walworth	Walworth	53184	70.6%	71.4%	76.0%	75.5%	A	A	A	A	180	126	104	110
Waterford	Racine	53185	46.8%	53.3%	48.7%	46.2%	A	A	A	A	961	734	741	715
Waukesha	Waukesha	53186	67.9%	68.3%	64.2%	66.2%	P	P	P	P	1,951	1,350	1,231	1,298
Waukesha	Waukesha	53188	75.6%	78.0%	74.5%	72.5%	P	P	P	P	1,928	1,539	1,437	1,389
Waukesha	Waukesha	53189	67.1%	75.0%	68.6%	67.8%	P	P	P	P	1,254	1,154	1,050	1,001
Whitewater	Walworth	53190	52.4%	53.9%	58.6%	58.2%	M	M	M	M	164	154	181	146
Williams Bay	Walworth	53191	84.1%	66.3%	60.3%	77.9%	A	A	A	A	107	80	78	77
Milwaukee	Milwaukee	53201	40.0%	36.4%	0.0%	0.0%	C	C	A	A	35	11	-	-
Milwaukee	Milwaukee	53202	60.4%	50.7%	53.0%	50.9%	C	C	C	C	732	503	575	607
Milwaukee	Milwaukee	53204	39.9%	49.1%	44.6%	43.1%	W	A	A	A	1,273	460	404	429
Milwaukee	Milwaukee	53205	39.3%	41.5%	31.1%	35.8%	W	A	F	C	354	176	183	148
Milwaukee	Milwaukee	53206	50.1%	33.9%	28.9%	29.4%	W	C	A	A	1,213	375	374	347
Milwaukee	Milwaukee	53207	41.6%	55.1%	52.0%	51.4%	A	A	A	A	2,018	1,409	1,391	1,503
Milwaukee	Milwaukee	53208	43.0%	32.7%	38.0%	38.1%	W	A	A	A	1,434	782	663	701
Milwaukee	Milwaukee	53209	45.5%	43.8%	42.6%	35.9%	W	C	C	C	2,464	1,213	1,125	1,124
Milwaukee	Milwaukee	53210	56.6%	32.0%	29.7%	29.5%	W	W	W	W	1,432	724	711	644
Milwaukee	Milwaukee	53211	70.8%	67.6%	66.9%	62.1%	C	C	C	C	1,276	840	855	877
Milwaukee	Milwaukee	53212	43.8%	51.5%	51.1%	51.7%	C	C	C	C	1,243	633	585	575
Milwaukee	Milwaukee	53213	38.9%	37.9%	34.1%	39.1%	W	F	F	F	1,445	1,092	968	996
Milwaukee	Milwaukee	53214	38.4%	51.2%	51.0%	51.4%	A	A	A	A	1,894	1,390	1,379	1,315
Milwaukee	Milwaukee	53215	40.0%	56.0%	56.0%	60.2%	W	A	A	A	2,582	1,403	1,258	1,187
Milwaukee	Milwaukee	53216	51.8%	29.2%	30.4%	34.0%	W	W	W	A	1,829	870	785	721
Milwaukee	Milwaukee	53217	66.6%	64.7%	62.3%	50.8%	C	C	C	C	1,559	1,137	1,155	1,126
Milwaukee	Milwaukee	53218	50.8%	27.1%	27.2%	30.4%	W	W	W	A	2,191	1,104	963	960

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"Predominant" Health System Market Share by ZIP Code

ZIP Code			Predominant Health System Market Share				Predominant Health System				Commercial Discharges			
City	County	Zip	2003	2009	2010	2011	2003	2009	2010	2011	2003	2009	2010	2011
Milwaukee	Milwaukee	53219	46.1%	65.0%	61.4%	64.5%	A	A	A	A	1,867	1,562	1,447	1,427
Milwaukee	Milwaukee	53220	50.2%	69.8%	66.8%	64.8%	A	A	A	A	1,422	1,172	1,038	1,069
Milwaukee	Milwaukee	53221	49.7%	61.2%	61.3%	61.6%	A	A	A	A	1,994	1,436	1,470	1,300
Milwaukee	Milwaukee	53222	51.5%	31.0%	34.5%	32.4%	W	W	F	F	1,469	1,205	1,114	1,088
Milwaukee	Milwaukee	53223	36.0%	40.3%	36.3%	30.7%	W	C	C	A	1,493	973	849	870
Milwaukee	Milwaukee	53224	36.0%	43.4%	43.2%	39.0%	W	F	F	F	1,050	648	623	618
Milwaukee	Milwaukee	53225	43.3%	38.9%	36.0%	35.5%	W	F	F	F	1,481	864	741	732
Milwaukee	Milwaukee	53226	43.2%	40.9%	35.2%	44.2%	W	F	F	F	940	768	753	832
Milwaukee	Milwaukee	53227	46.4%	57.5%	61.9%	59.6%	A	A	A	A	1,175	1,028	980	883
Milwaukee	Milwaukee	53228	50.4%	61.2%	59.4%	62.2%	A	A	A	A	738	603	522	584
Milwaukee	Milwaukee	53233	35.1%	60.9%	64.5%	50.6%	W	A	A	A	279	110	107	79
Milwaukee	Milwaukee	53235	45.6%	62.1%	54.7%	58.4%	A	A	A	A	432	398	393	370
Racine	Racine	53402	78.3%	54.1%	62.6%	63.7%	W	W	W	W	1,826	959	1,193	1,203
Racine	Racine	53403	82.5%	57.7%	69.3%	70.3%	W	W	W	W	1,312	591	792	782
Racine	Racine	53404	85.5%	70.3%	79.0%	77.0%	W	W	W	W	718	269	357	378
Racine	Racine	53405	81.2%	59.2%	72.0%	68.2%	W	W	W	W	1,496	764	948	1,035
Racine	Racine	53406	79.8%	57.5%	65.5%	62.0%	W	W	W	W	1,241	776	991	1,054
Sharon	Walworth	53585	61.9%	64.2%	53.2%	61.4%	A	A	A	A	63	53	62	44
Total											96,872	69,261	67,078	65,650