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Greater Milwaukee Business Foundation on Health, Inc. GMBFH

Study of 2009 Southeast Wisconsin Community Healthcare Premium Costs

Greater Milwaukee Business Foundation on Health, Inc.

June 8, 2011

Services provided by Mercer Health & Benefits LLC

Uses of This Study

- 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 Appendices) and use the information in its entirety. Market comparisons using only one measure or even a limited number of comparisons can be misleading.

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Study Overview

Study Background

- Greater Milwaukee Business Foundation on Health, Inc. (GMBFH, Inc.) commissioned three previous studies comparing Southeast Wisconsin average commercial healthcare premium costs to Midwest average commercial healthcare premium costs.

- Southeast Wisconsin premium costs in relation to the Midwest average for the three previous studies are shown below

Calendar Year	Southeast Wisconsin cost in Relation to Midwest Average
2000	55% higher
2003	39% higher
2007	9% higher

Study Purpose

- GMBFH Inc. commissioned Mercer and Milliman to update the previous comparisons of Southeast Wisconsin healthcare premium costs to the Midwest average through 2009 using the most recent available data.
- The primary objectives of this study are to:
  - Compare average 2009 healthcare premium costs for Southeast Wisconsin to Midwest and National benchmark averages
  - Analyze components of 2009 Southeast Wisconsin healthcare premium cost variation from the Midwest average
  - Evaluate how 2009 Southeast Wisconsin healthcare premium costs have changed relative to the Midwest average since 2007

Summary of Results

Summary of Results

- The difference between Southeast Wisconsin average healthcare premium costs and the Midwest average was relatively unchanged from 2007 to 2009.
  - Southeast Wisconsin costs were approximately 8% above the Midwest average in 2009 and 9% higher in the 2007 study.
  - Premium costs increased slightly more than 6% per year from 2007 through 2009 for both groups
    - Average rate of increase for Midwest was lower than average Midwest increase from 2003 through 2007
- 2009 Southeast Wisconsin costs have improved slightly relative to the National average:
  - Southeast Wisconsin costs were 9% higher in 2009 and 11% higher in 2007

Summary of Results *(continued)*

- Similar to the overall results, the components of variance between the Southeast Wisconsin and Midwest averages changed little from the 2007 study

Component	2007	2009
Demographics	4% higher	2% higher
Plan Design	2% higher	2% higher
Utilization/Service Mix	6% below	6% below
Provider Payments	9% higher	10% higher
Total Variance	9% higher	8% higher

- These differences are within study variances.

Study Approach and Methods

Study Approach and Methods

- Milliman and Mercer collaborated on this study
  - Methods are consistent with previous studies
  - All significant analysis and key assumptions were reviewed by each firm
- The study includes an analysis of 2008 and 2009 employer healthcare premium cost
  - The study population includes commercial members under age 65
  - Premium cost includes employer cost plus employee contributions
  - Data from 2008 were primarily used to validate 2009 findings
- Southeast Wisconsin average costs are compared to the Midwest average
  - Southeast Wisconsin included residents of Kenosha, Milwaukee, Ozaukee, Racine, Walworth, Washington, and Waukesha counties

Study Approach and Methods *(continued)*

- Southeast Wisconsin PEPY cost estimates were based on 2009 medical and prescription drug claims and member data contributed by several area health plans.
  - Data represents more than $1.5 billion in healthcare costs from approximately 450,000 members (i.e., employees and dependents) for each year.
  - Claims data included provider billed charges but did not include allowed provider payments.
  - Provider payments were estimated using market average discount information provided by Southeast Wisconsin health plans or information from the Wisconsin Hospital Fiscal Survey obtained from the Wisconsin Hospital Association.
  - Plan design factors were developed using median benefit levels submitted for the Milwaukee area and comparing them to Midwest median benefit levels. Both data points are from the Mercer Survey.

Study Approach and Methods *(continued)*

- Midwest averages in this study are based upon the 2009 Mercer Survey of Employer Sponsored Health Plans average healthcare plan cost per active employee

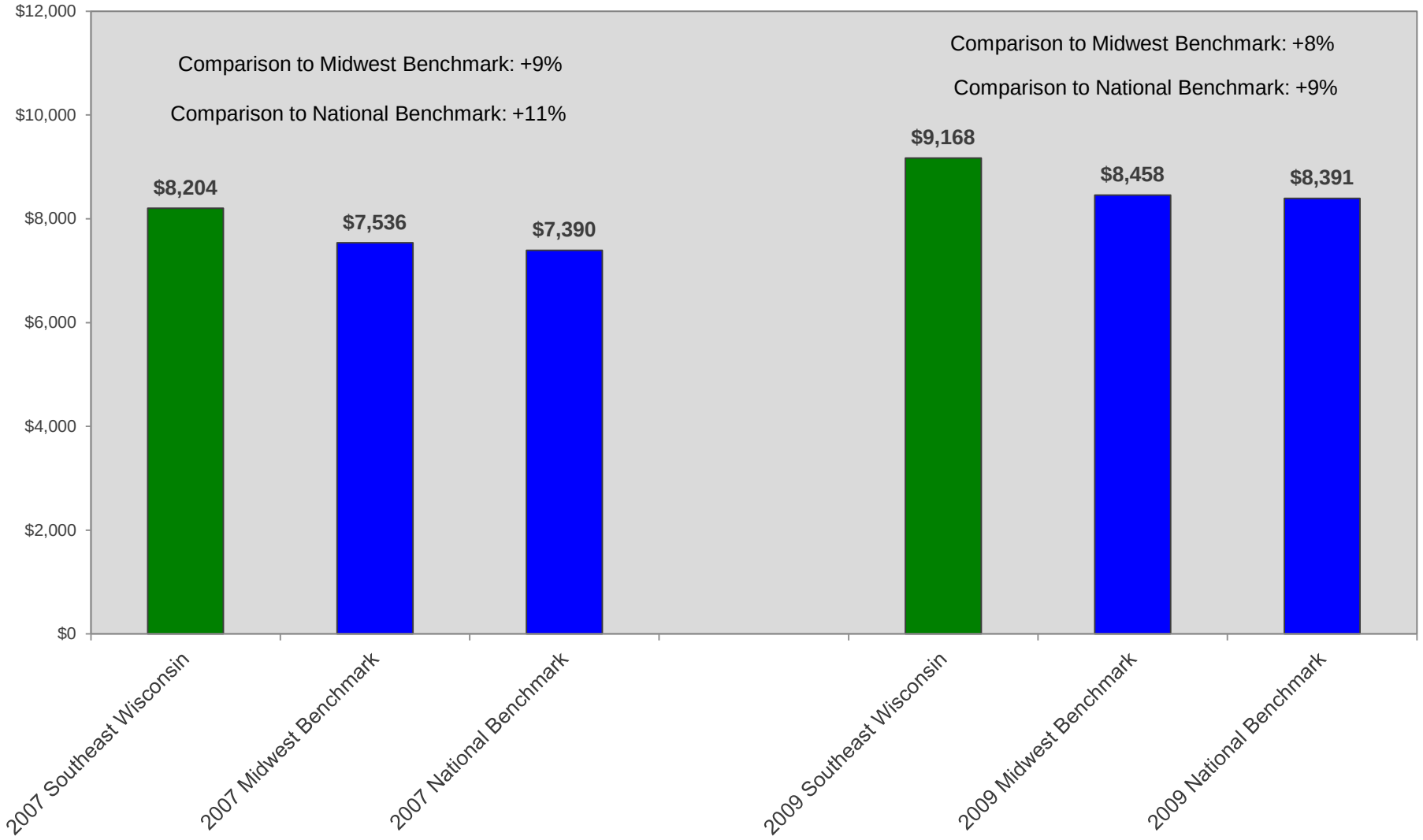
  - Per Employee Per Year (PEPY) costs include medical, prescription drug, administrative costs, mental health, vision and hearing. Dental is not included.

  - PEPY costs is a blend of PPO, POS, HMO, and CDHP plans, weighted by survey-reported participation percentages.

  - Administrative costs are based on Mercer ASO fee survey results.

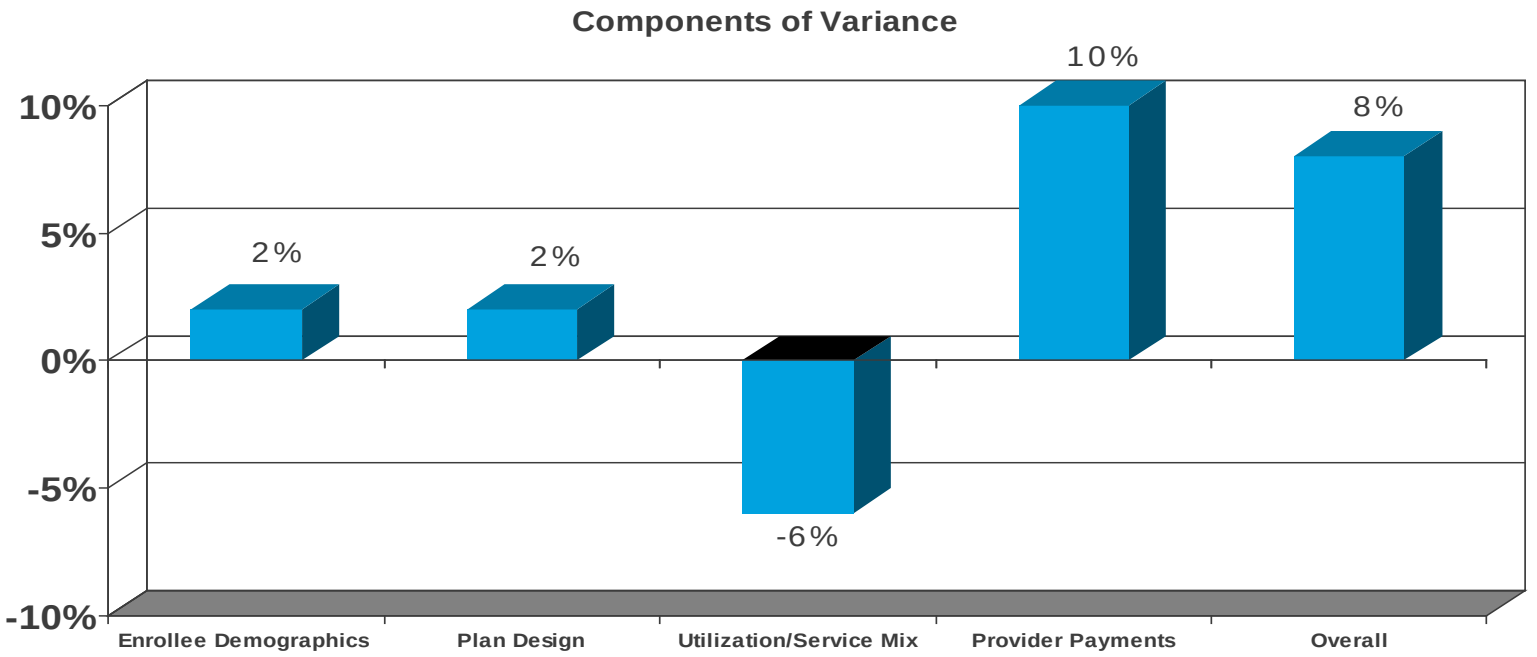
Healthcare Premium Cost Analysis

Total Per Employee Per Year (PEPY) Healthcare Premium Costs



Comparison of PEPY Healthcare Premium Costs to Midwest Benchmark

Comparison of Healthcare Premium Costs to Midwest Benchmark - 2009	
Southeast Wisconsin	$9,168
Midwest Benchmark	$8,458
Variance	***8%***



Demographics

- Southeast Wisconsin age / gender differences contributed 2% additional cost in 2009 compared to Midwest averages.
- Southeast Wisconsin's higher average employee age is the primary cause of the additional cost.

	Southeast Wisconsin	Midwest Average
Description	**2009**	**2009**
Average Age (employee)	43.1	42.0
Demographic Cost Factor		
▪ Male	1.00	0.93
▪ Female	1.13	1.14
TOTAL	**1.06**	**1.04**
Average Contract Size	**2.26**	**2.27**

2009 Plan Design Provisions

- Southeast Wisconsin plan design provisions (primarily lower deductibles and copayments) resulted in 2% higher costs than the Midwest average in 2009

Plan Design Comparison	Southeast Wisconsin	Midwest Average
In-Network Deductible (PPO)		
Individual	$300	$500
Family	$750	$1,000
Physician Vist and Hospital Cost-Sharing		
Physician copayments – PCP	$20	$20
Physician copayments – Specialist	$35	$35
Hospital coinsurance*	15%	20%
Out-of-Pocket Maximums for Individuals (PPO)		
Out-of-Pocket Maximum	$2,000	$2,000
HMO		
Physician copayments – PCP	$20	$20
Hospital deductible	$275	$250
Retail Rx copayments	$8 / $23 / $38	$10 / $27 / $45

* Composite median amount

Utilization / Service Mix

- Southeast Wisconsin utilization and service mix patterns in 2009 were significantly different than the Midwest average. The table below illustrates some of the more significant utilization differences.

	Southeast Wisconsin	Midwest Average
Utilization	**2009**	**2009**
▪ Inpatient admissions per 1,000 members	57	68
▪ Inpatient days per 1,000 members	225	255
▪ Physician office visits per 1,000 members	2,620	3,145
▪ ER visits per 1,000 members	163	216
▪ Rx per 1,000 members	9,179	9,544

Provider Reimbursement

- Southeast Wisconsin hospital payment levels were 5% to 7% higher than Midwest averages in 2009
- Southeast Wisconsin physician payment levels were estimated to be 20% to 25% higher than Midwest averages in 2009

	Southeast Wisconsin	Midwest Average
Reimbursement	**2009**	**2009**
Hospital		
▪ Average cost per inpatient day	$3,910	$3,660
▪ Average cost per inpatient admission	$15,346	$13,633
Physician		
▪ As a percentage of the 2009 Wisconsin RBRVS Fee Schedule	190%	156%

Summary – 2009 vs. 2007

- Changes in Southeast Wisconsin average healthcare premium costs were consistent with changes in the Midwest average in 2008 and 2009

Comparison of Southeast Wisconsin PEPY Healthcare Premium Costs to		
Components of Variance	**2007**	**2009**
Enrollee Demographics	4%	2%
Plan Design	2%	2%
Utilization / Service Mix	-6%	-6%
Provider Payment Levels	9%	10%
Total Variance from Midwest Average	**9%**	**8%**

Conclusions

- Results appear to validate significant Southeast Wisconsin improvement detailed in 2007 report.
- Southeast Wisconsin average premium costs remained approximately 8% higher than Midwest average premium costs in 2009 primarily as a result of:
  - Higher provider costs (net 4% higher costs),
    - Higher per-unit payment rates partially offset by lower utilization rates
  - Richer benefit plans (2% higher costs), and
  - Older employee demographics (2% higher costs).
- Average premium cost increases for Southeast Wisconsin and the Midwest were similar from 2007 through 2009.
  - Suggests aggregate change in Southeast Wisconsin components is similar to Midwest average.

Conclusions

- Significant reductions in the difference between Southeast Wisconsin and Midwest average premium levels may be difficult to achieve without reductions in health plan benefit and provider payment levels
  - Difficult to change demographics
  - Southeast Wisconsin already has significantly lower average utilization rates and other markets are working to lower utilization as well

Interpretation Considerations (Caveats)

Interpretation Considerations (Caveats)

- In preparing this information, we relied on information provided by the Wisconsin Health Information Organization and the Wisconsin Hospital Association. We accepted this information without audit, but reviewed the information for general reasonableness. Our results and conclusions may not be appropriate if this information is not accurate.

- This report was developed to provide comparisons of market average commercial PEPY health plan costs and may not represent the actual PEPY cost experience of individual employers.

- Our report does not reflect changes to medical costs in Southeast Wisconsin or other Midwest cities subsequent to 2009.

Contact Information

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Appendix A

Greater Milwaukee Business Foundation on Health Study of 2009 Southeast Wisconsin Commercial Healthcare Premium Costs

Appendix A
Southeast Wisconsin Healthcare Cost Development

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This appendix describes the methods we used to extract, process, and summarize Southeast Wisconsin healthcare claims data for actively employed people (i.e., non-Medicare, non-Medicaid) from calendar year 2009. Measuring healthcare costs is complicated and often controversial. Therefore, the descriptions in this appendix are crucial to the effective use of the comparisons provided throughout this report. The information included in the report should only be considered in its entirety, including the information in the attached appendices.

I. OVERVIEW

The Greater Milwaukee Business Foundation on Health (the Foundation) commissioned Milliman and Mercer to update previous comparisons of Southeast Wisconsin healthcare costs to the Midwest average through 2009 using the most recent available data.

The Foundation's goals for this analysis are to:

- Compare 2009 healthcare premium costs in the Southeast Wisconsin to Midwest and National benchmarks.
- Determine current causes of 2009 Southeast Wisconsin healthcare premium cost variation from the Midwest average.
- Evaluate how 2009 Southeast Wisconsin healthcare premium costs have changed relative to the Midwest average since 2007.

Milliman's role in this analysis was to:

- Gather Southeast Wisconsin healthcare claims from local health plans at the billed charge level along with de-identified enrollment information.
- Convert the Southeast Wisconsin billed charges to allowed provider payment levels.
- Provide summarized Southeast Wisconsin healthcare costs and utilization metrics to Mercer who adjusted the Southeast Wisconsin data for member cost sharing and administrative fees to develop premium cost estimates.
- Review Mercer's Southeast Wisconsin premium estimates and benchmark comparisons for reasonableness.

II. DEFINITION OF SOUTHEAST WISCONSIN

We isolated Southeast Wisconsin healthcare claims from local health plan data based on whether a given claim was incurred by a person who is a resident of one of the following counties:

- Milwaukee
- Kenosha
- Ozaukee
- Racine
- Walworth
- Washington
- Waukesha

III. DATA SOURCES AND TIME PERIOD

Milliman used enrollment and claims information from the Wisconsin Health Information Organization (WHIO), financial data included in the Wisconsin Hospital Fiscal Survey as reported by each hospital obtained from the Wisconsin Hospital Association (WHA) Information Center, and commercial reimbursement levels for professional services from several of the major health plans doing business in Southeast Wisconsin as the basis for our analysis.

The data provided by WHIO included:

- Billed medical and pharmacy claims from local health plans for services incurred in calendar years 2008 and 2009 with payments through December 31, 2009. The data was blinded such that no health plan specific information was included. As such, we were not able to differentiate a claim from one health plan carrier versus another.

- Monthly enrollment data (de-identified to protect individuals' privacy) from administrative systems.

The data from the Wisconsin Hospital Fiscal Survey is based on 2009 financial report data from each health system's fiscal year as reported to WHA. Southeast Wisconsin health systems have different fiscal years ending from June 30 through December 31 of each year. Milliman does not believe the differences in health system fiscal years are likely to have a material impact on the billed charge discounts used in our comparisons. Hospital reimbursement levels (i.e. discounts) may change over time. The results of this comparison may be different if the analysis was performed on more recent data.

Several of the major health plans doing business in Southeast Wisconsin provided their 2009 average professional service commercial reimbursement levels (expressed as a percentage of Medicare RBRVS fee schedules) for all commercial insured and self-funded employer members). In addition, each plan provided their average enrollment levels for 2009 which we used to estimate the 2009 weighted average professional services reimbursement level for the Southeast Wisconsin market. Professional reimbursement levels (i.e., discounts) may change over time. The results of this comparison may be different if the analysis was performed on more recent data.

IV. HEALTH INSURANCE COSTS FORM THE BASIS OF COMPARISON

The focus of this analysis is on the health insurance premium levels for actively employed people under the age of 65 living in Southeast Wisconsin. The analysis does not include cost or premium analysis of other market segments such as Medicare, Medicaid, or the uninsured population that may influence these costs. In addition, the analysis is focused on costs related to health insurance (i.e.,. medical and prescription drug coverage) and excludes other costs related to services such as dental services.

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

V. QUALITY COMPARISONS ARE NOT INCLUDED IN ANALYSIS

Milliman's analysis did not include any quality or outcomes information because such data was outside the scope of this analysis. Quality information is a critical component of provider evaluation and should be considered when evaluating healthcare costs.

VI. METHODOLOGY AND ASSUMPTIONS

A general description of our approach for analyzing and preparing the Southeast Wisconsin data from WHIO summarized in the report is as follows:

a) We identified all commercial members under the age of 65 with enrollment records indicating residence in the Southeast Wisconsin counties.

b) We extracted all claims associated with the members identified in (a).

c) For claims identified in (b), we developed allowed provider payment levels using methods described in the following section.

d) Finally, we summarized key metrics using commonly accepted calculations (i.e. per member per month, inpatient days per 1,000, etc.) for inclusion in the final report.

CONVERTING BILLED CHARGES TO ALLOWED PROVIDER PAYMENTS

The claims information provided to Milliman included billed charge information (but not allowed amounts) through December 31, 2009. We applied estimates of 2009 unbilled services as of December 31, 2009 to the 2009 WHIO data by broad service category (i.e., inpatient hospital, outpatient facility, professional services, mental health / chemical dependency services, radiology / pathology services, and prescription drugs) to estimate amounts paid in 2010 for services incurred in 2009.

Since the claims information included billed charge information (but not allowed amounts), we developed estimates of allowed provider payment levels for each claim. A description of our methods for estimating allowed provider payment levels is included below.

For purposes of this discussion, we are defining billed charges and allowed provider payments as follows:

- **Billed Charges:** Charges billed for a medical service or drug prior to any negotiated discounts. Billed charges omit any duplicate claims or claims that are not covered by a health plan due to exclusions.

- **Allowed Provider Payments:** The amount commercial health plans pay for a medical service or drug after negotiated discounts are applied, but before member cost sharing (i.e. deductibles, coinsurance, copays) and third party liability credits (i.e., coordination of benefits or subrogation) are applied. In its simplest form, the following formula describes allowed provider payments.

  ALLOWED PROVIDER PAYMENTS = BILLED CHARGES x (1 - NEGOTIATED DISCOUNTS)

We used the following sources and methods to convert billed charges to allowed provider payments for each healthcare service category.

Hospital Inpatient and Outpatient

We adjusted the billed charges included in the health plan data using 2008 and 2009 average inpatient and outpatient commercial discounts (as a percentage of billed charges) reported by each hospital in the Wisconsin Hospital Association Information Center's (WHA) Wisconsin Hospital Fiscal Survey. Average Southeast Wisconsin Allowed to Billed Charge Ratios are included in Table 1 below.

Table 1 Average Southeast Wisconsin Hospital Allowed to Billed Commercial Charge Ratios		
Year	**Hospital Inpatient**	**Hospital Outpatient**
2008	0.67	0.66
2009	0.68	0.66

Professional Services

Our approach for estimating allowed provider payments for professional services was limited to applying market average payment levels uniformly to all professional service claims. The reasons for using this market average approach stem from:

1. The inability to distinguish the carrier or provider network for a given claim.

2. The inability of health plans to divulge provider specific fee schedules due to confidentiality agreements

To address this issue, several of the major health plans doing business in Southeast Wisconsin agreed to provide their average commercial reimbursement levels for professional services from their insured and self-funded employer business (expressed as a percentage of Medicare RBRVS fee schedules). In addition, the plans provided their average enrollment levels for 2009 so that we could develop the 2009 weighted average professional services reimbursement level for Southeast Wisconsin as described below.

We blended each health plan's average reimbursement level for each year using Southeast Wisconsin membership counts provided by each plan to arrive at a weighted average Southeast Wisconsin RBRVS multiplier that was used as the basis for estimating reimbursement for each professional service claim. We then adjusted this average reimbursement level for larger plans upward slightly to account for the reimbursement levels of smaller health plans which did not provide their average reimbursement levels for use in the study.. Our estimate of the 2009 Southeast Wisconsin professional service reimbursement levels is approximately 190% of the 2009 Southeast Wisconsin Medicare RBRVS fee schedule.

We used the estimated 2009 Southeast Wisconsin market average professional reimbursement level to re-price all professional claims using Medicare RBRVS methodologies to allowed provider payment levels. In instances where no CPT code was assigned to a claim, we applied the market average discount from billed charges to these services to estimate allowed amounts. The Southeast Wisconsin average discount in 2009 was estimated to be 43% of billed charges.

Ancillary Services

Ancillary services include private duty nursing, home health, ambulance, Durable Medical Equipment (DME), prosthetics, vision hardware, and hearing aids. We assumed average ancillary discounts of 43%. The average ancillary discounts were set equal to the average implied discount from professional billed charges (after applying the RBRVS multiplier mentioned earlier) based on analysis performed in our previous studies.

Prescription Drugs

Prescription drug information provided by the health plans did not include fully populated billed charge information. Instead, we approximated ingredient costs by using average wholesale price (AWP) by National Drug Code (NDC) and applying average discounts from various surveys that Milliman performs and / or purchases. We also included an estimate for dispensing fees and rebates based on prescription drug survey information and our experience with such matters to arrive at the allowed payment level estimates.

ANALYSIS FOR REASONABLENESS

We reviewed our estimates for reasonableness to benchmark information using the following metrics:

- Per employee per year allowed costs
- Per member per month (PMPM) allowed costs by service category
  - Hospital Inpatient
  - Outpatient Facility
  - Professional Services
  - Radiology / Pathology Services
  - Mental Health / Chemical Dependency Services
  - Prescription Drugs
- PMPM costs by gender and quin-quennial age segments
- Claim probability distribution based on each member's annual claim amounts
- Utilization metrics such as days / 1,000, admits / 1,000, average length of stay, office visits / 1,000, and prescription fills / 1,000
- Payment level metrics such as payment / day, payment / visit, and percentage of RBRVS
- Average employee and member age and average contract size
- Distribution of members by age and gender
- Drug costs and utilization by generic vs. brand and retail vs. mail order

We also reviewed Mercer's independently developed benchmarks for reasonableness relative to other data sources available to us.

VII. USES OF INFORMATION

The Greater Milwaukee Business Foundation on Health, Milliman, and Mercer encourage the business, healthcare 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, any organization-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 healthcare 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, healthcare provider, and government communities, not individual consumers of healthcare services.

VIII. CAVEATS AND LIMITATIONS ON USE

Milliman relied, without audit, on health plan information and public data sources. To the extent this information is not accurate, the results of Milliman's analyses may not be accurate.

This report is designed to measure changes in Southeast Wisconsin health costs relative to other regional and national averages. This information may not be appropriate, and should not be used, for other purposes.

Guidelines issued by the American Academy of Actuaries require actuaries to include their professional qualifications in actuarial communications. Chris Giese is a member of the American Academy of Actuaries and meets the qualification standards for performing the analyses in this report

IX. FOR FURTHER INFORMATION

Please contact Keith Kieffer, CPA, RPh, or Chris Giese, FSA, MAAA in the Milwaukee office of Milliman (Phone: (262) 784-2250, email: keith.kieffer@milliman.com or chris.giese@milliman.com) with questions and comments about the information in this report.

Appendix B