

MERCER



## Study of 2010 Southeast Wisconsin Community Healthcare Premium Costs

Greater Milwaukee Business  
Foundation on Health, Inc. **GMBFH**

Greater Milwaukee Business Foundation on Health, Inc.

*December 14, 2011*

# 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 four previous studies comparing Southeast Wisconsin average commercial healthcare premium costs to Midwest average commercial healthcare premium costs.

Calendar Year	Southeast Wisconsin Cost in Relation to Midwest Average
2000	55% higher
2003	39% higher
2007	9% higher
2009	8% 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 2010 using the most recent available data.
- The primary objective of this study is to compare average 2010 healthcare premium costs for Southeast Wisconsin to Midwest and National benchmark averages at an aggregate level.
  - At GMBFH’s request, we did not analyze the factors contributing to premium level changes between 2009 and 2010 or measure the factors contributing to any differences between Southeast Wisconsin and Midwest average premiums.
  - GMBFH intends to analyze the factors contributing to premium level changes and differences as part of the 2011 study.

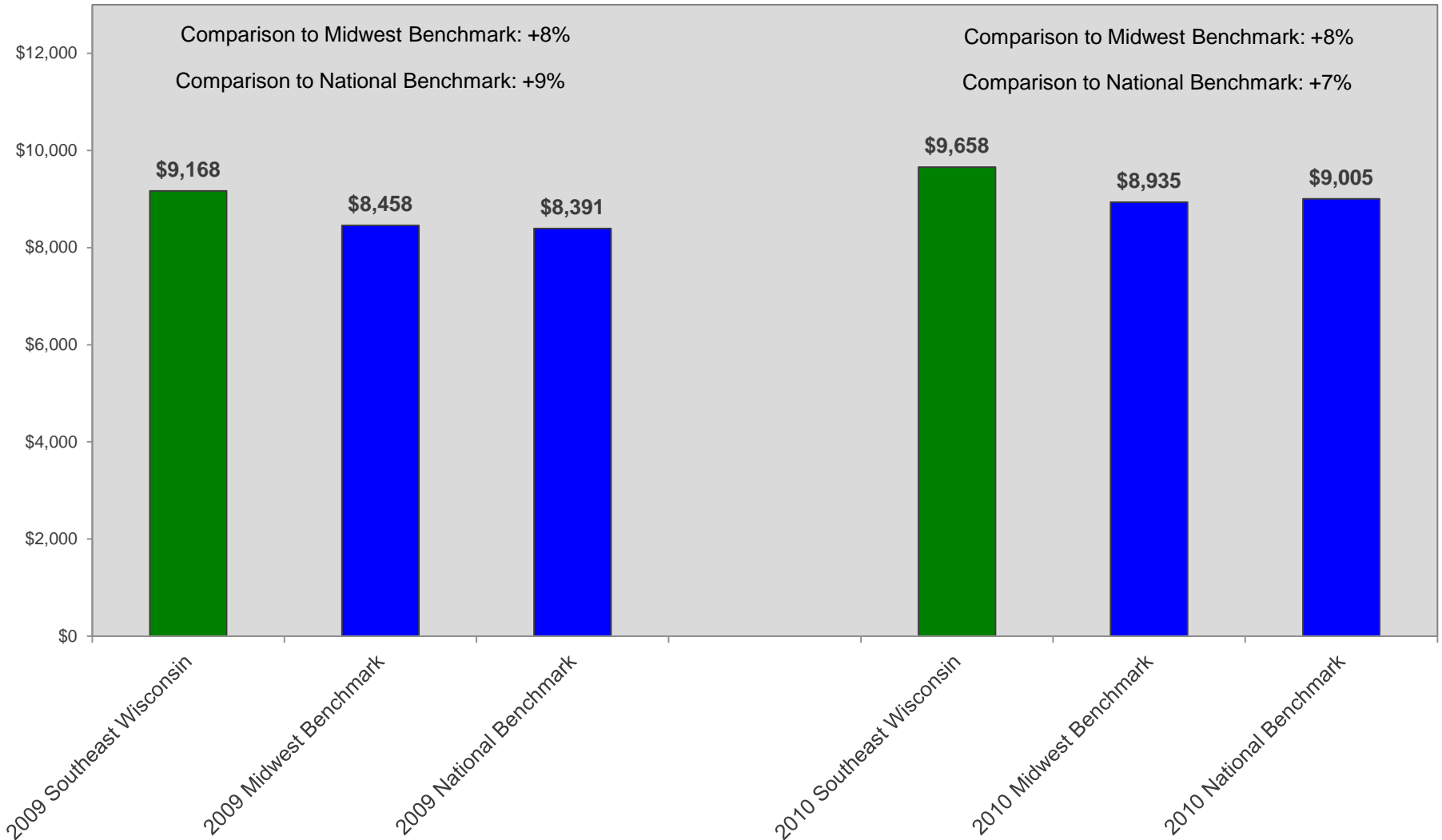
# Summary of Results

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- The difference between Southeast Wisconsin average healthcare premium costs and the Midwest average was unchanged from 2009 to 2010.
  - Southeast Wisconsin costs were approximately 8% above the Midwest average in both 2009 and 2010.
- Southeast Wisconsin premium costs continue to improve compared to the National average.
  - Southeast Wisconsin costs were 7% higher than the National average in 2010, down from 9% higher in 2009.
  - The one year increase in costs from 2009 to 2010 was approximately 5.5% for Southeast Wisconsin and approximately 7% for the National average. These increases are consistent with the average annual cost increases observed from 2007 through 2009.

# Summary of Results *(continued)*

## Total Per Employee Per Year (PEPY) Healthcare Premium Costs



# 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 2010 employer healthcare premium cost
  - The study population includes commercial members under age 65
  - Premium cost includes employer cost plus employee contributions
- 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 2010 medical and prescription drug claims and member data contributed by several area health plans
  - Data represents more than \$2 billion in healthcare costs from approximately 450,000 members (i.e., employees and dependents).
  - 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 and National averages in this study are based upon the 2010 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 are 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 to develop illustrative final premium costs for the Southeast Wisconsin, Midwest, and National averages. Actual administration costs may be different depending on the actual mix of insurance arrangements (e.g., ASO versus fully-insured).

# **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 2010.

# Contact Information



# Contact Information *(continued)*

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# Appendix A



**Greater Milwaukee Business Foundation on Health  
Study of 2010 Southeast Wisconsin Commercial  
Healthcare Premium Costs**

**Appendix A  
Southeast Wisconsin Healthcare Cost Development**

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Prepared by:  
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This appendix describes the methods we used to extract, process, and summarize Southeast Wisconsin healthcare claims data for commercially insured people (i.e., non-Medicare, non-Medicaid) from calendar year 2010. 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 2010 using the most recent available data.

The Foundation's goal for this analysis is to compare 2010 healthcare premium costs in Southeast Wisconsin to Midwest and National benchmarks.

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 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 for residents 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 2009 and 2010 with payments through December 31, 2010. The data was blinded such that no health plan specific information was included. As such, we were not able to differentiate claims 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 2010 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 2009-2010 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 which we used to estimate the 2010 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.

### CONVERTING BILLED CHARGES TO ALLOWED PROVIDER PAYMENTS

The claims information provided to Milliman included billed charge information (but not allowed amounts) through December 31, 2010. We applied estimates of 2010 unbilled services as of December 31, 2010 to the 2010 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.

$$\text{ALLOWED PROVIDER PAYMENTS} = \text{BILLED CHARGES} \times (1 - \text{NEGOTIATED DISCOUNTS})$$

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 2010 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
2010	0.65	0.63

### 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 so that we could develop the 2010 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 developed from data from larger plans upward 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 2010 Southeast Wisconsin professional service reimbursement levels is approximately 194% of the 2010 Southeast Wisconsin Medicare RBRVS fee schedule.

We used the estimated 2010 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 2010 was estimated to be approximately 45% 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 approximately 45%. 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
- > 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](mailto:keith.kieffer@milliman.com) or [chris.giese@milliman.com](mailto:chris.giese@milliman.com)) with questions and comments about the information in this report.

# Appendix B

## **Appendix B**

### **Comparisons to Midwest Average**

### **Methodology and Assumptions**

This appendix describes the data, methodology, assumptions and tools used by Mercer to develop Midwest averages for comparison to Southeast Wisconsin health care costs.

#### **Study Purpose**

GMBFH, Inc. commissioned Mercer and Milliman to update the previous comparisons of Southeast Wisconsin medical costs to the Midwest average through 2010 using the most recent available data.

The primary objectives of the study are to:

- Compare 2010 healthcare costs in the Southeast Wisconsin to Midwest & National benchmarks
- Evaluate how 2010 Southeast Wisconsin healthcare costs have changed relative to the Midwest average since the 2009 study and the 2007 study

#### **Definitions**

**Premium Cost** – Total gross annual cost (claims cost and administrative cost) for medical plan only, for active employees and dependents, divided by the number of active covered employees. Includes employee contributions (payroll deductions), if any, but not employee out-of-pocket expenses such as deductibles and copays. Prescription drug, mental health, vision and hearing benefits for all active employees and their covered dependents are included if part of the plan. Dental benefits, even if a part of the plan, are not included in these costs.

**Allowed Cost** - Represents the amount of submitted charges eligible for payment, for all services provided under medical coverage as well as any prescriptions filled. It is the amount eligible after applying pricing guidelines (discounts), but before deducting third party, copayment, coinsurance, or deductible amounts.

**Provider Cost** - The amount of charges submitted by the provider for facility and professional services provided under medical coverage as well as any prescriptions filled. It represents the gross charge amount before applying pricing guidelines (discounts) or deducting third party, copayment, coinsurance, or deductible amounts.

## **Data Sources**

**Mercer Survey** – The Mercer National Survey of Employer-Sponsored Health Plans is conducted using a national probability sample of public and private employers with at least 10 employees. Roughly 2,833 employers completed the survey for 2010. States included in the Midwest are Illinois, Indiana, Ohio, Michigan, Minnesota, Iowa, North Dakota, South Dakota, Missouri, Kansas, Nebraska, and Wisconsin.

**MarketScan Database** – The database, produced by Thomson Reuters Healthcare, reflects the health care experience of employees and dependents covered by the health benefit programs of large employers. These data are collected from approximately 100 different insurance companies, Blue Cross Blue Shield plans, and third party administrators. These data represent the medical experience of insured employees and their dependents for active employees, early retirees, COBRA beneficiaries and Medicare-eligible retirees with employer-provided Medicare Supplemental plans. No Medicaid or Workers Compensation data are included.

## **Report Category and Source**

- Annual Premium Cost
  - Midwest averages in this study are based upon the Mercer 2010 Mercer Survey of Employer Sponsored Health Plans average medical 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 cost is a blend of PPO, POS, HMO and CDHP plans, weighted by survey-reported enrollment percentages
- Administrative fees derived from Mercer Midwest ASO Survey – applied to SE WI and benchmark costs

## **Contact Information**

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