The Healthy Michigan Plan
Baseline Reports on Uncompensated Care & Insurance Rates
PA 107 §105(d)(8-9)

December 31, 2014

Submitted to The Michigan Department of Community Health
and the Michigan Department of Insurance and Financial Services

Prepared by the University of Michigan Institute for Healthcare Policy & Innovation

105(d)(8) The program described in this section is created in part to extend health coverage to the state's low-income citizens and to provide health insurance cost relief to individuals and to the business community by reducing the cost shift attendant to uncompensated care. Uncompensated care does not include courtesy allowances or discounts given to patients. The Medicaid hospital cost report shall be part of the uncompensated care definition and calculation. In addition to the Medicaid hospital cost report, the department of community health shall collect and examine other relevant financial data for all hospitals and evaluate the impact that providing medical coverage to the expanded population of enrollees described in subsection (1)(a) has had on the actual cost of uncompensated care. This shall be reported for all hospitals in the state. By December 31, 2014, the department of community health shall make an initial baseline uncompensated care report containing at least the data described in this subsection to the legislature and each December 31 after that shall make a report regarding the preceding fiscal year's evidence of the reduction in the amount of the actual cost of uncompensated care compared to the initial baseline report. The baseline report shall use fiscal year 2012-2013 data. Based on the evidence of the reduction in the amount of the actual cost of uncompensated care borne by the hospitals in this state, beginning April 1, 2015, the department of community health shall proportionally reduce the disproportionate share payments to all hospitals and hospital systems for the purpose of producing general fund savings. The department of community health shall recognize any savings from this reduction by September 30, 2016. All the reports required under this subsection shall be made available to the legislature and shall be easily accessible on the department of community health's website.

105(d)(9) The department of insurance and financial services shall examine the financial reports of health insurers and evaluate the impact that providing medical coverage to the expanded population of enrollees described in subsection (1)(a) has had on the cost of uncompensated care as it relates to insurance rates and insurance rate change filings, as well as its resulting net effect on rates overall. The department of insurance and financial services shall consider the evaluation described in this subsection in the annual approval of rates. By December 31, 2014, the department of insurance and financial services shall make an initial baseline report to the legislature regarding rates and each December 31 after that shall make a report regarding the evidence of the change in rates compared to the initial baseline report. All the reports required under this subsection shall be made available to the legislature and shall be made available and easily accessible on the department of community health's website.

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Executive Summary

These reports establish a baseline estimate of uncompensated care borne by Michigan hospitals, as it relates to insurance rates and rate setting, prior to the implementation of the Healthy Michigan Plan, pursuant to §105(d)(8-9) of PA 107 of 2013. **The Healthy Michigan Plan is a multifaceted, comprehensive intervention in Michigan; its impacts must be studied over time.** In subsequent years, these baseline reports will contribute to the evaluation of the impact of the Healthy Michigan Plan on uncompensated care and rate filings.

PA 107 of 2013 Reporting Requirements

Public Act 107 of 2013 establishes the Healthy Michigan Plan, a program to provide comprehensive health coverage to Michigan residents with income at or below 133 percent of the Federal Poverty Level who do not qualify for Medicare or other Medicaid programs, effective April 1, 2014. The Act requires the Department of Community Health (DCH) and the Department of Insurance and Financial Services (DIFS) to work with a third party evaluator to prepare two companion reports:

- §105(d)(8): Analyze uncompensated care in Michigan using hospital cost reports, *beginning in 2014 with a report on the baseline level of uncompensated care provided in fiscal year 2013.*
- §105(d)(9): Examine the financial reports of health insurers and evaluate the impact of the Healthy Michigan Plan on the cost of uncompensated care as it relates to insurance rates and insurance rate change filings, as well as its resulting net effect on rates overall, *beginning in 2014 with a baseline report on 2013 premium rate changes.*

Findings: §105(d)(8) Uncompensated Care Baseline Estimates

Estimating hospital uncompensated care costs relies on state-maintained data and standard analytic methods. This baseline estimate of uncompensated care costs is derived from hospital cost reports submitted to DCH. This report finds that short-term acute care hospitals, rehabilitation units and hospitals, and psychiatric units and hospitals in Michigan provided **$1.2 billion in uncompensated care in fiscal year 2013**: $403.0 million in bad debt and $751.4 million in charity care.

Uncompensated care represented **5.1% of total hospital costs in Michigan** during this period.

Findings: §105(d)(9) Insurance Rate Setting Baseline Review

The analysis of insurance premium rate setting relies on data gathered from filings with DIFS and interviews with key informants on how costs of bad debt and charity care are incorporated into the premiums set or negotiated by insurers, employers, and providers:

- Analysis of 2013 rate filings with premium rate changes (54 health plans filed for premium rate changes in 2013; 50 filings noted increases and 4 filings noted decreases).
- Interviews with Michigan employers, health plans, and health care providers concerning 2013 premium rate setting processes, and factors affecting increases in premiums in 2014;

The most commons reasons for changes in premium rates in 2013 reported in both key informant interviews and 2013 rate change documents filed with DIFS include:

- ACA regulations, including single risk pool, taxes and fees, benefit redesign, transparency of premiums in the market

- Changes in prices and costs of medical services; changes in use and intensity of services
- Changes in demographic and morbidity mix of risk pools
- Changes in benefit design, plan features, out of pocket costs, provider networks
- Market competition; namely, new insurers who enter the market for the first time during the year, or who offer coverage for a limited time.

Challenges in Quantifying the Impact of the Healthy Michigan Plan on Rates

Gathering all the necessary data to determine the cost of uncompensated care as it relates to insurance premiums is challenging and complex. Federal and state economic, health care, regulatory, and political environments impact commercial health insurance in Michigan. Creating and implementing health insurance premium rates involves many stakeholders, complex rate setting methodologies and processes, and is subject to changing medical and insurance markets.

Not all plans offered in the state are subject to regulation, review, and approval by the state: approximately 60% of Michigan employees of organizations offering health insurance are in self-insured plans; these employers are not subject to state plan rate review and approval, premium taxes, or mandated benefits. Rate filings may not include the detailed information required to determine the contribution of uncompensated care to rates, even for commercially insured health plans that are subject to DIFS regulatory authority. In addition, contracts that might detail the relationship between health care costs and insurance prices are often proprietary. However, although DIFS and DCH collect data supporting their functions and mandates, they do not have access or authority to collect detailed data from those proprietary contracts.

The academic literature does not provide any direct support for a transfer of the costs of uncompensated care or of shortfalls in Medicare and Medicaid cost recovery to private payers, despite anecdotal comment and speculation of the existence of cost shift. Some studies cited in this report provide empirical support of an association between lower public payer reimbursements and higher insurance premiums. However, this association does not imply a direct causation between lower public payer rates and higher insurance premiums, or cost shift, and the literature demonstrates that a number of factors contribute to private premium increases. **Therefore, it is difficult to attribute changes in insurance premiums to the Healthy Michigan Plan since the related factors cannot be fully isolated or accurately measured.**

Conclusion

The quantification of any potential shift or transfer of uncompensated care costs to insurance rates is not feasible at this time. Future reports will strive to address the effects of the Healthy Michigan Plan on premium rates, however these analyses will continue to be difficult as not all of the necessary data are available, and do not fall under the regulatory authority of DIFS or DCH. Even with expanded authority, it is highly unlikely that either DIFS or DCH would be able to obtain the data necessary to quantify the contribution of uncompensated care on insurance rates, because of the proprietary nature of contractual agreements between insurers and hospitals, the high proportion of the Michigan population employed by self-funded employers (and thus not subject to DIFS review), and the preponderance of other unmeasured market factors that contribute to premium rates. Subsequent reports will utilize the data available through DIFS and DCH, and will recognize opportunities for expanded interviews with key decision makers and stakeholders.

§105(d)(8): Baseline Uncompensated Care

Summary of Findings

This report finds that short-term acute care hospitals, rehabilitation units and hospitals, and psychiatric units and hospitals in Michigan provided **$1.2 billion in uncompensated care in fiscal year 2013**: $403.0 million in bad debt and $751.4 million in charity care.

Uncompensated care represented **5.1% of total hospital costs in Michigan** during this period.

1. Purpose and scope of this section

In order to measure the effect of the Healthy Michigan Plan, §105(d)(8) of Public Act 107 requires the Department of Community Health (DCH) to publish annual reports on uncompensated care in Michigan. The first of these reports must describe uncompensated care before the establishment of the Healthy Michigan Plan. This section of the report, *The Healthy Michigan Plan: Baseline Uncompensated Care*, fulfills the requirement of §105(d)(8).

2. Data and definition of uncompensated care

This baseline report will use data reported to DCH by all 141 short-term acute care hospitals, rehabilitation units and hospitals, and psychiatric units and hospitals in Michigan on the Michigan Medicaid cost report forms for fiscal year (FY) 2013.[1] Uncompensated care is the sum of two different types of costs: charity care and bad debt.

- **Charity care** is the cost of medical care for which there was no expectation of payment because the patient has been deemed unable to pay for care.
- **Bad debt** is the cost of medical care for which there was an expectation of payment because the patient was deemed to be able to pay for care.

For more detail on the definition of uncompensated care, please see Appendix B.

3. Uncompensated care for all Michigan hospitals

Michigan hospitals provided $1.2 billion of uncompensated care in fiscal year 2013. Approximately one-third of this total was bad debt ($403.0 million) while the remaining two-thirds was charity care ($751.4 million). The total amount of $1.2 billion represents 5.1% of hospitals' total costs. Uncompensated care data for each hospital are provided in Appendix C.

4. Uncompensated care in Michigan by type of hospital

In order to understand which types of hospitals in Michigan provide the most uncompensated care, we categorize hospitals based on the following characteristics:[2]

[1] The analysis excludes all long-term acute care hospitals (22) and one short-term acute hospital because of incomplete reporting.
[2] Hospital characteristics come from the American Hospital Directory.

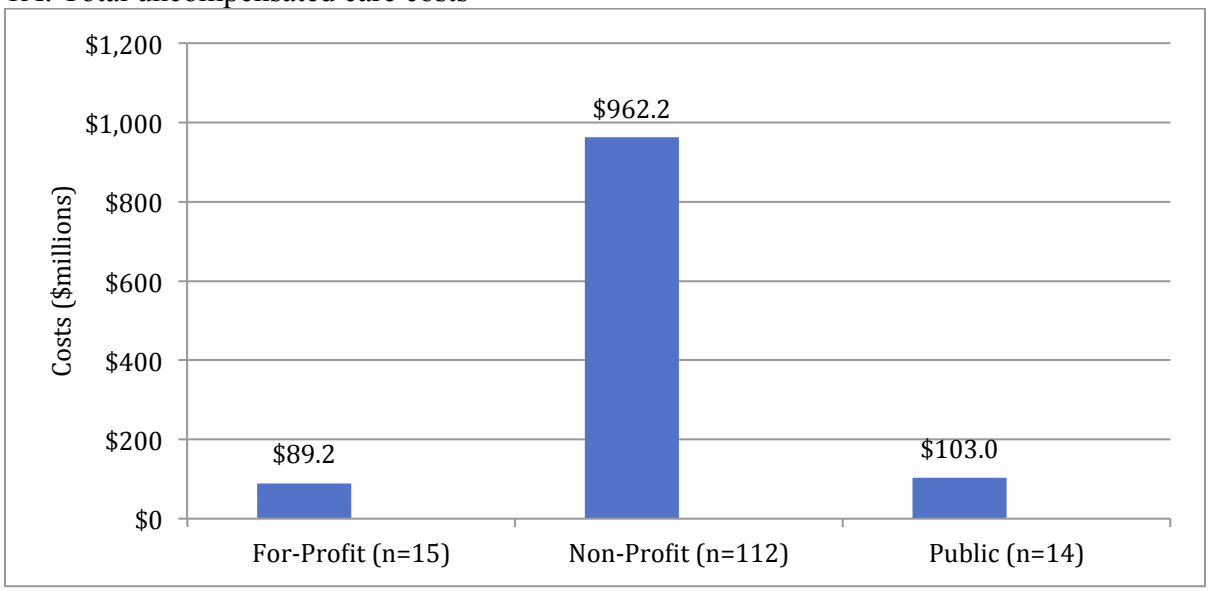
- **Ownership**: For-profit, not-for-profit, or public
- **Urbanicity and teaching status**: Rural, urban non-teaching, or urban teaching
- **Size:** Number of beds is 0-49, 50-99, 100-499, 500-999, or 1,000+

Exhibits 1 through 3 present statistics on uncompensated care by hospital ownership, urbanicity/teaching status, and size. Each exhibit contains two charts. The first presents data on total uncompensated care in millions of dollars; the second presents data on uncompensated care as a percentage of total hospital costs. In each exhibit, the number of hospitals in each category is presented in parentheses next to the category label.

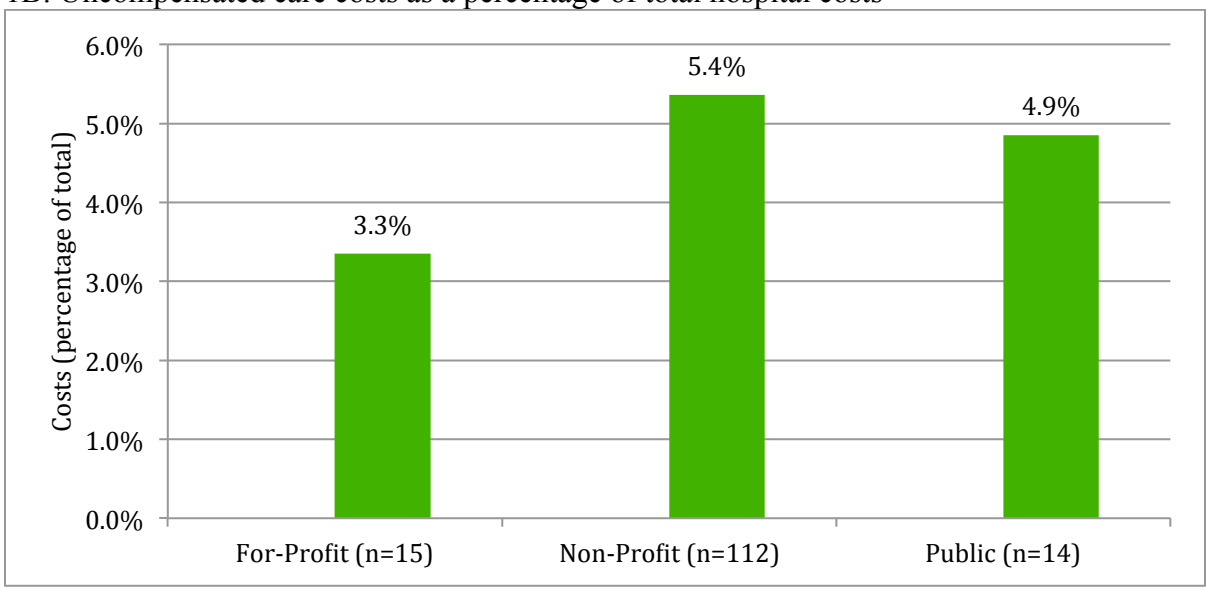
Ownership (Exhibit 1): Most hospitals in the state – 112 of 141 – are not-for-profit, and these hospitals provide the great majority of uncompensated care: nearly $1 billion of the total amount of $1.2 billion. However, public hospitals have a similar burden of uncompensated care when this is measured as a percentage of total hospital costs. Uncompensated care as a percentage of total cost is lower among for-profit hospitals than among either not-for-profit or public hospitals.

Exhibit 1: Uncompensated care costs by hospital ownership

1A: Total uncompensated care costs



1B: Uncompensated care costs as a percentage of total hospital costs

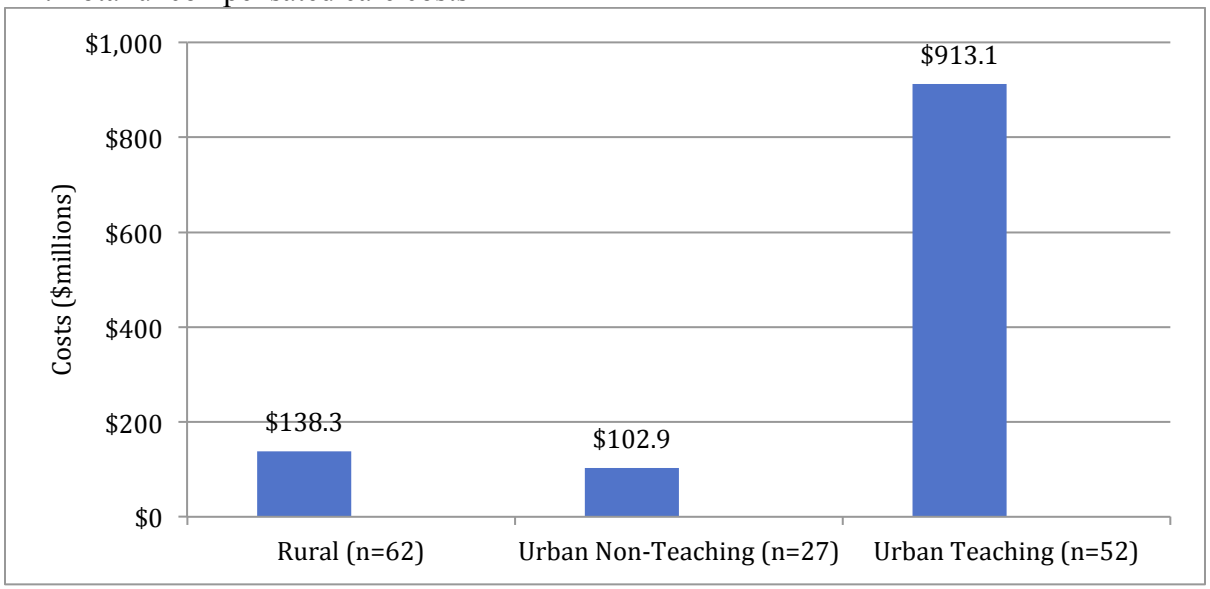


Source: Michigan Medicaid Cost Report, FY 2013; American Hospital Directory

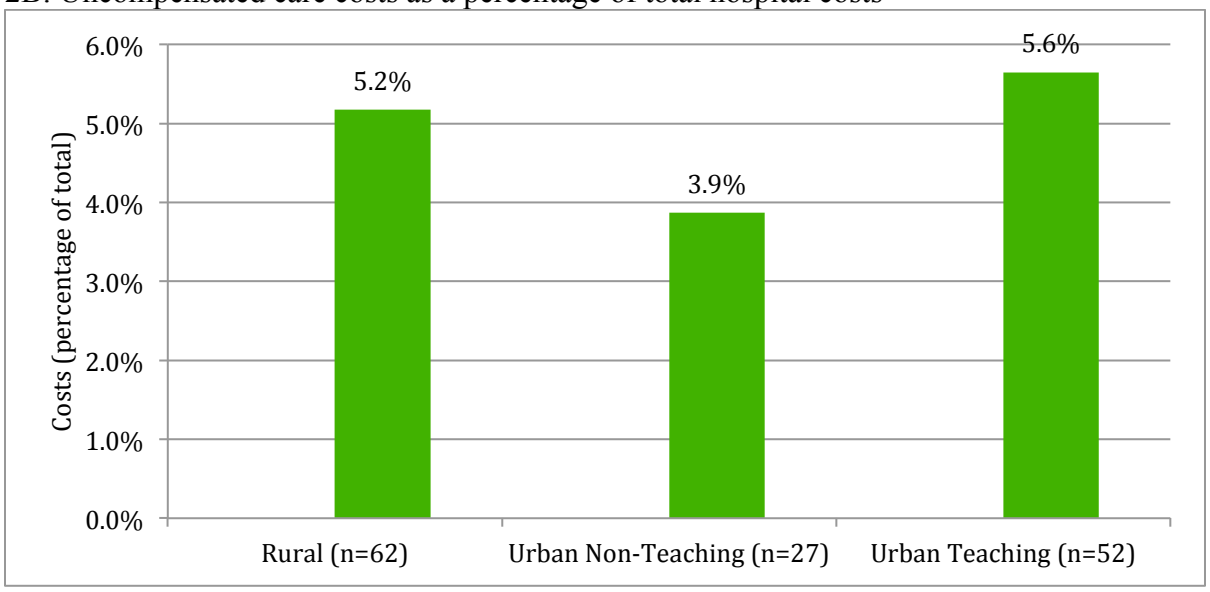
Urbanicity and teaching status (Exhibit 2): While urban teaching hospitals provide most uncompensated care in Michigan ($913.1 million), rural hospitals have a similarly high burden of uncompensated care as a percentage of total costs.

Exhibit 2: Uncompensated Care by Hospital Type: Urban and Teaching Status

2A: Total uncompensated care costs



2B: Uncompensated care costs as a percentage of total hospital costs

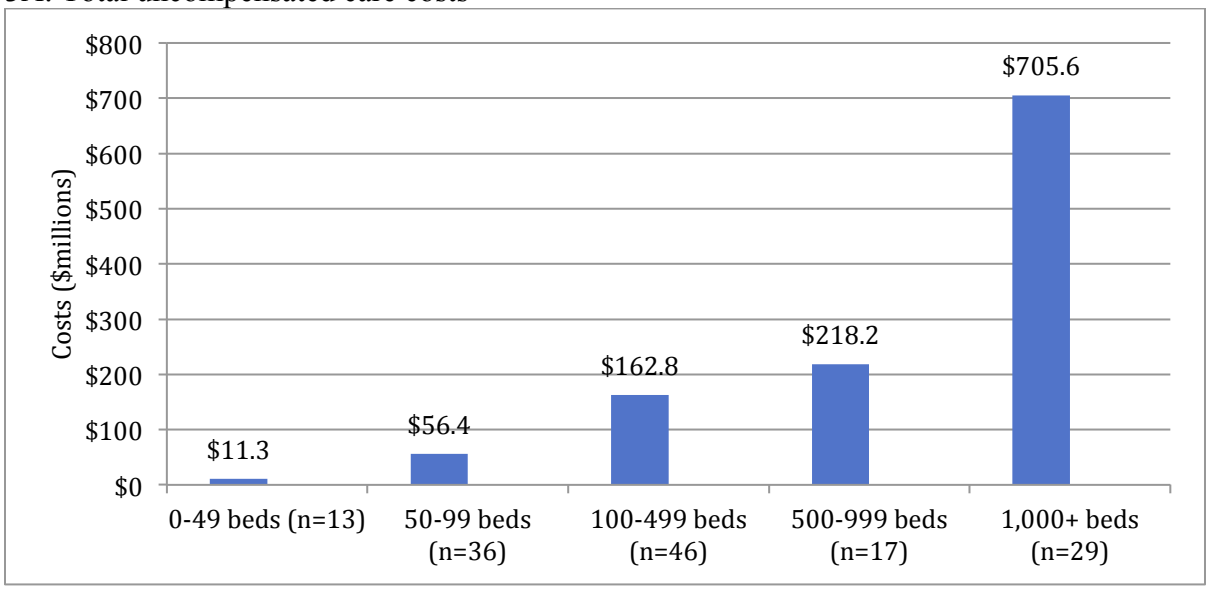


Source: Michigan Medicaid Cost Report, FY 2013; American Hospital Directory

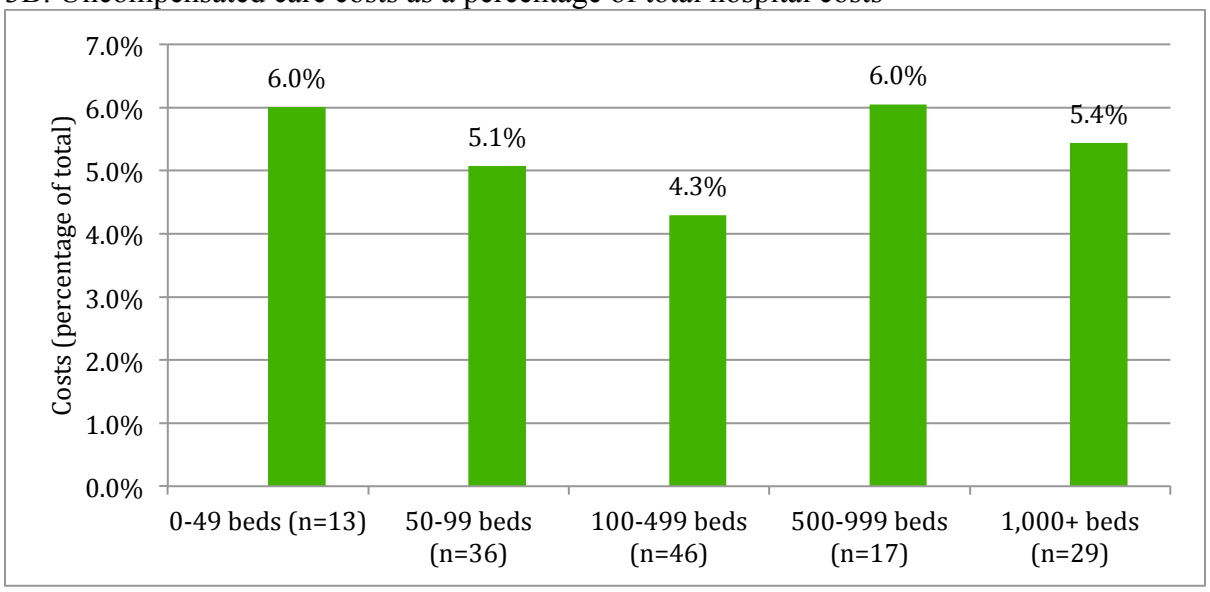
Hospital size (Exhibit 3): Most uncompensated care is provided by large hospitals; the 29 largest hospitals, with more than 1,000 beds each, together provide approximately $700 million in uncompensated care. But large hospitals do not necessarily face the largest burden of uncompensated care as a percentage of total costs, since there is not a clear relationship between hospital size and this measure of uncompensated care.

Exhibit 3: Uncompensated care by hospital size

3A: Total uncompensated care costs



3B: Uncompensated care costs as a percentage of total hospital costs



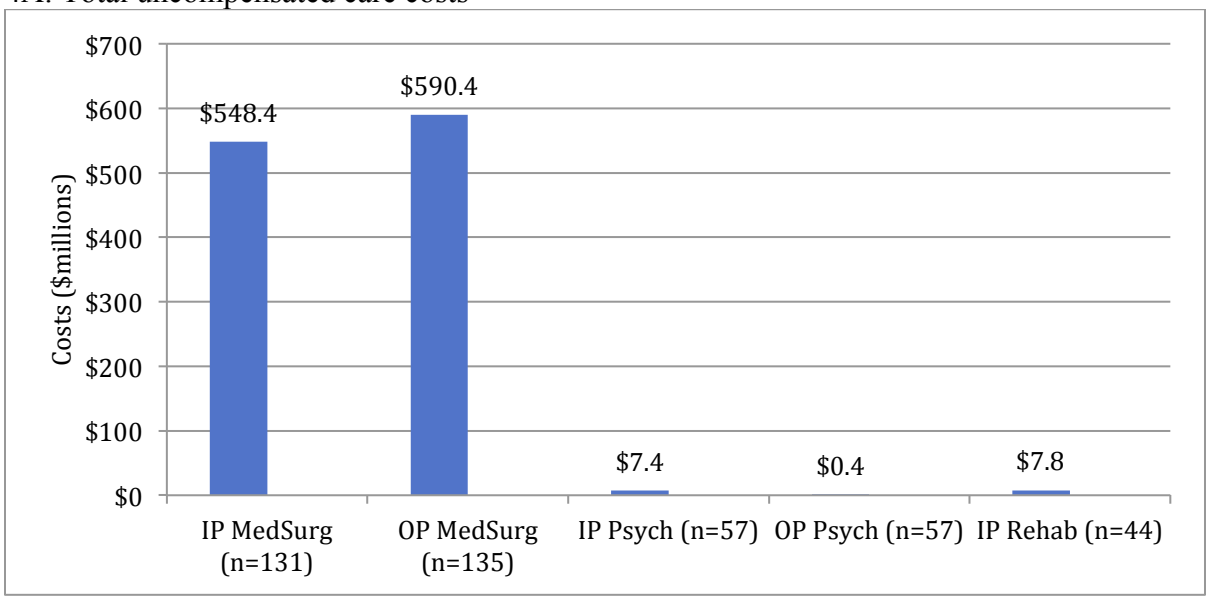
Source: Michigan Medicaid Cost Report, FY 2013; American Hospital Directory

5. Uncompensated care in Michigan by hospital provider type

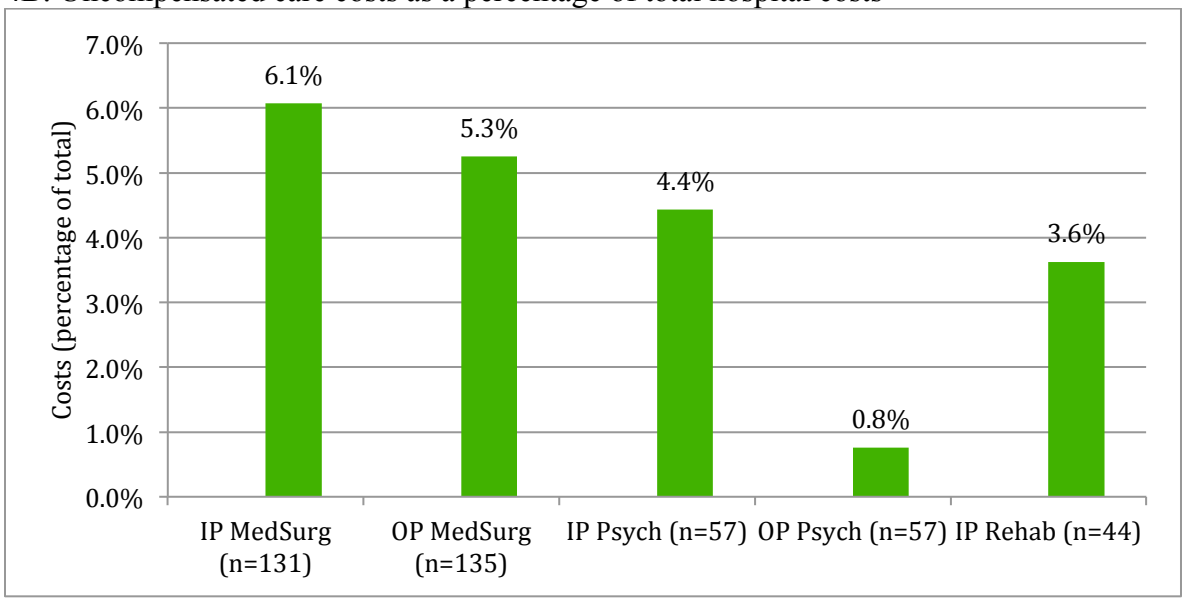
Hospitals report uncompensated care costs based on the cost center where the care was provided: inpatient medical/surgical, outpatient medical/surgical, inpatient psychiatric, outpatient psychiatric, and inpatient rehabilitation. Exhibit 4 presents uncompensated care costs by hospital cost center. Most uncompensated care is provided by inpatient and outpatient medical/surgical departments; these departments also face the highest burden of uncompensated care as a percentage of total costs.

Exhibit 4: Uncompensated Care by Hospital Provider Type

4A: Total uncompensated care costs



4B: Uncompensated care costs as a percentage of total hospital costs



Source: Michigan Medicaid Cost Report, FY 2013
Note: Individual hospitals may have multiple provider types.

6. Uncompensated care and the insurance environment

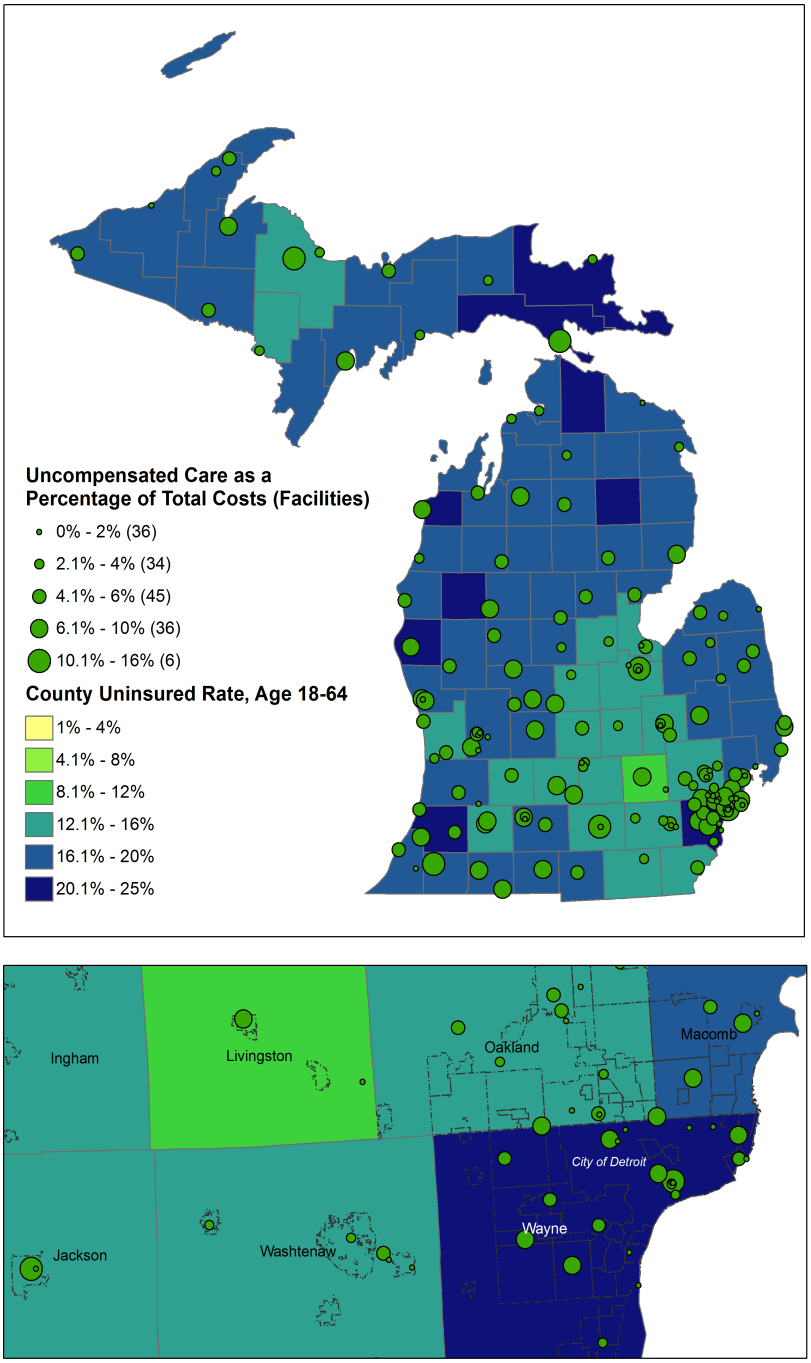
Exhibit 5 presents a graphical summary of uncompensated care in Michigan, with contextual information on the insurance status of the population in the surrounding county. Each dot on the map in Exhibit 5 represents a single hospital. The size of the dot is proportional to the amount of uncompensated care that hospital provides, so a larger dot means a larger uncompensated care costs as a percentage of total hospital costs. Each county on the map is shaded to indicate the percentage of the county's adult population between the ages of 18 and 64 that lacked health insurance in 2012, the most recent year for which county-level statistics are available.[3] Darker shading means a higher percentage of the population is uninsured.

7. Concluding Comments

This is the first in a series of annual reports analyzing changes in uncompensated care following the implementation of the Healthy Michigan Plan. This report presents data on the baseline level of uncompensated care provided by short-term acute care hospitals, rehabilitation units and hospitals, and psychiatric units and hospitals in Michigan in 2013, just before the Healthy Michigan Plan was implemented. Subsequent reports will document and analyze trends over time.

[3] Appendix B provides details of how the fraction uninsured is calculated.

Exhibit 5: Hospital Uncompensated Care as a Percentage of Total Hospital Costs by County-Level Uninsured Rates



Source: Michigan Medicaid Cost Reports, FY 2013; Small Area Health Insurance Estimates, 2012

§105(d)(9): Baseline Insurance Rates

Summary

Teasing out the impact of uncompensated care on insurance rates is a challenging and complex exercise; multiple factors described in this section of the report make it difficult to quantify the effect of uncompensated care on premium rate setting. Measuring the impact of any potential shift of uncompensated care costs to insurance rate setting is not feasible. This section of the report provides an analysis of the data available from rates filed with DIFS and interviews with key informants to help inform a baseline understanding of insurance rates and rate changes prior to the implementation of the Healthy Michigan Plan.

Section 1. Purpose, Scope, and Background

1.1: Purpose and Scope

In order to measure the effect of the Healthy Michigan Plan, §105(d)(9) of Public Act 107 requires the Department of Insurance and Financial Services (DIFS) to publish annual reports on insurance rates in Michigan. The first of these reports must describe 1) the cost of uncompensated care as it relates to insurance rates and rate changes; and 2) the status of insurance rates and rate changes before the establishment of the Healthy Michigan Plan. The report, *The Healthy Michigan Plan: Baseline Uncompensated Care Report*, fulfills the requirement of §105(d)(8) to report on uncompensated care before the establishment of Healthy Michigan. This report, *The Healthy Michigan Plan: Baseline Insurance Rates,* fulfills the requirement of §105(d)(9) to report on the baseline contribution of uncompensated care on premium rates prior to the Healthy Michigan Plan, using:

- Key Informant Interviews and reports with employer benefit managers, hospital and health system contracting and reimbursement department managers, and health plans; and
- Analysis of the Rate Filings submitted to the Michigan Department of Insurance and Financial Services for products offered in the small and large group markets and individual markets.

To provide context for the analysis, and to summarize the complex processes of premium rate setting and factors that affect changes in those rates, the **appendices** to this report provide a synopsis of the methodology for premium setting, a table of factors that contribute to rate increases, and additional figures referenced in the report.

1.2: Background

The Healthy Michigan Plan is a multifaceted, comprehensive intervention in Michigan. Measuring the effects of the Healthy Michigan Plan on uncompensated care and on insurance premiums uses data gathered from rate filings and interviews, and assumptions on how costs of bad debt and charity care are incorporated into the premiums set or negotiated by insurers, employers, and providers.

1.3: Definitions

As defined previously in §105(d)(8) of this report, **uncompensated care** is the sum of two different types of costs: charity care and bad debt.

- **Charity care** is the cost of medical care for which there was no expectation of payment because the patient has been deemed unable to pay for care.
- **Bad debt** is the cost of medical care for which there was an expectation of payment because the patient was deemed to be able to pay for care.

Health insurance relies on the spreading of risk among diverse individuals or groups in order to operate. All insurance companies use data and statistics to predict levels of risk for various individuals or groups. This risk calculation information is used to develop rates. A health insurance rate covers claims for medical services, insurer administrative costs and (sometimes) profit.

A rate is the base price for health insurance. A **premium**, or the amount paid monthly, quarterly or yearly for the insurance, is then calculated based on a number of regulated and market-based factors, varying by type and size of insurance product.

Factors that Determine Premiums vary by type of plan market:

- **Individual** Plans (for those who purchase their coverage directly from a carrier, not job-based coverage):
  - Age (the premium rate cannot vary more than 3 to 1 for adults for all plans)
  - Benefits and cost-sharing selected
  - Number of family members on the plan
  - Location of residence in Michigan
  - Tobacco use (the premium rate cannot vary by more than 1.5 to 1)

- **Small Group** Plans (for those who have coverage through an employer with fewer than 50 employees):
  - Benefits the employer selects
  - How much the employer contributes to the cost
  - Family size
  - Age (the premium rate cannot vary more than 3 to 1 for adults for all plans)
  - Tobacco use (the premium rate cannot vary by more than 1.5 to 1)
  - Location of employer in Michigan

- **Large Group** Plans (for those who have coverage through an employer with more than 50 employees):
  - Benefits the employer selects
  - Employee census information including age, gender, family status, health status and geographic location
  - How much the employer contributes to the cost
  - Industry
  - Group size
  - Wellness programs

Health Coverage Rates and Rate Reviews[5]:
The Department of Insurance and Financial Services requires that all health plans comply with Michigan law and reviews the rates filed by health carriers selling individual plans, group conversion policies, Medicare supplemental policies, small employer group plans, and plans sold by health maintenance organizations. DIFS does not set health insurance rates.

DIFS does not review the rates for: commercial large group plans (coverage through an employer with more than 50 employees); self-insured employers (health benefits whereby the employer provides the benefits to employees with its own funds); and government entities.

Additionally, as a result of the Patient Protection and Affordable Care Act, health carriers must inform the public when they want to increase premium rates for individual and small group policies by an average of 10% or more.

Federal and state economic, health care, regulatory, and political environments impact commercial health insurance in Michigan. Creating and implementing health insurance premium rates involves large numbers of stakeholders, complex rate setting methodologies and processes, propriety information, and are subject to changing medical and insurance markets. In addition, not all plans offered in the state are subject to regulation, review, and approval by the State. These, and other factors, cannot be fully isolated or perfectly measured, making it difficult to attribute changes to the Healthy Michigan Plan.

There is no single source of data that provides all necessary elements for analysis. This baseline report relies on information gathered from interviews with providers, insurers, plans, employers, and actuaries; and information from the plan and insurer forms filed in 2013 with the Michigan DIFS for regulatory review.

Section 2. Key Informant Interviews

2.1: Overview

Systematic and detailed interviews with Michigan policy makers, employers, health plans, and providers provide one of the only means of gathering data on the complex processes involved in setting premium rates, and understanding changes in uncompensated care.

Technical and proprietary expertise: The processes of rate setting involve a number of parties, internal and external to the organization, and extensive technical expertise in estimating and predicting medical costs, use of services, regulatory effects, population mix, and morbidity. In addition, much of the technical detail is specific and proprietary to the organizations. There are variations in assumptions for the time period, mix in utilization of services, benefit designs, and cost sharing by employers and employees.

[5] http://www.michigan.gov/difs/0,5269,7-303-12902_35510-113481--,00.html

The PPACA: The Affordable Care Act also include several regulations that impact, among other things, the definitions of covered risk pools, the structure of benefits, individual and family cost sharing, premium fees, and taxes.

Self Insurance: Most large employers in Michigan are self-insured (also known as self-funded) for their health insurance. The employer assumes the financial risk for providing health care benefits to its employees. In practical terms, self-insured employers pay for claims as they are incurred instead of paying a fixed premium to an insurance carrier, which is known as a fully insured plan. **Self-insured employers are not subject to several state health insurance regulations/benefit mandates**, but self-insured health plans are regulated under federal law (ERISA).

There is no centralized data source for self-insured employers with regard to the premium rate changes or underlying reasons for those changes. The Kaiser Family Foundation and the Employer Benefits Research Institute (EBRI) produce periodic overviews using national data, with some reports summarized by state or region.

As noted in the table below, approximately 60% of private sector enrollees in Michigan organizations offering health insurance are in self-insured plans. **The DIFS filings or other reporting mechanisms do not capture this segment of the market.**

Percentage of Private–Sector Enrollees in Self-Insured Plans at Establishments Offering Health Insurance, by Firm Size and State, 2011[6]

State	Total	Fewer Than 50 Employees	50 or More Employees	100–999 Employees	1,000 or More Employees
Michigan	60.9 %	13.9 %	71.2 %	50.8 %	85.9 %

2.2: Sample Selection

To understand better the variation in processes for determining premium rates, a sample of key informants was drawn from Michigan-based insurers, plan administrators, healthcare providers, and employers. Researchers used a non-probability sampling technique, often referred to as chain referral sampling, to identify potential subjects. The process identifies initial subjects for data collection, and requests additional contacts recommended by the interviewee.

The initial interviews were conducted with Michigan-based:

- Large employers (6)
- Small employers (10)
- Employer groups (4)
- Health plans (5)
- Healthcare system providers (4)

[6] http://www.ebri.org/pdf/notespdf/ebri_notes_11_nov-12.slf-insrd1.pdf

The interviews focused on the following (See Exhibit X for detail):

- Processes for determining premium rates
- Changes in benefit plans/offerings
- Changes in premium rates/contributors to changes
- 2014-15 estimates of coverage options, premiums by market, plan
- Role of Medicaid coverage in site insurance offerings, price, continuance

2.3: Findings from Interviews

Based on 2014 preliminary interviews of Michigan employers, health plans, and health care providers concerning 2013 premium rate setting processes, and factors affecting increases in premiums in 2014, this report finds that **the most common reasons reported for health plan premium changes are**:

- ACA regulations, including single risk pool, taxes and fees, benefit redesign, transparency of premiums in the market
- Medical cost increases
- Changes in demographic and morbidity mix of risk pools
- Changes in required benefits
- Market competition; namely, new insurers who enter the market for the first time during the year, or who offer coverage for a limited time.

Gathering this information to understand the methodology behind premium changes is challenging, for many reasons:

- There are many individuals and groups involved in setting rates;
- The information on the relationships between costs, charges, and premiums is often proprietary, and may be enumerated in private, contractual agreements between providers and insurers;
- Approximately 60% of employees of organizations offering health insurance are in self-insured plans; these employers are not subject to state rate review, premium taxes, or mandated benefits.

Section 3: Analysis of DIFS Rate Filings

What follows is an analysis of the DIFS rate filings for 2013. *Data presented below include only those health insurance carriers that noted any change (increases and decreases) in premium rates.*

3.1: Health Coverage Rate Increase Requests

Health plans include several factors in the creation of the premium rate. The state requires that filings include the actuarial methods and data used. In most cases, this section of the filings is noted as “Confidential/ Proprietary/ Trade Secret.” Most plans contract with actuarial firms; these firms often use proprietary methods for estimating risk, based on data specific to a number

of plan and population features, including the plan type, size, benefits, region, and estimated numbers and types of claims**.**

When included, the filing sections titled, "Proposed Rate Increases" enumerate the contributions of the following to the rate:

- **Medical Loss Ratio (MLR)**: The claims experience on Michigan policies in a specific block of business must be adequate to achieve an 80% Federal Medical Loss Ratio.

- **Allowed and Incurred Claims Incurred During the Experience Period**: Allowed Claims data are available to the company directly from company claims records, with some estimation due to timing issues.

- **Claim liabilities for medical business** are normally calculated using proprietary methods.

- **Benefit Categories:** Claims are assigned to each of the varying benefit category by places services were administered, and types of medical services rendered.

- **Projection Factors**
    - **Single risk pools**, for policy years beginning after 1/1/14.
    - **Changes in Morbidity of the Population Insured**: The assumptions used are from the experience period to the projection period.
    - **Trend Factors (cost/utilization):** The assumption for cost and utilization is often developed from nationwide claim trend studies, using experience from similar products that were marketed earlier.
    - **Changes in Benefits, Demographics, and other factors: Non-Benefit Expenses and Risk Margin Profit & Risk Margin:** Projected premiums include a percent of premium for risk, contingency, and profit margin. Assumptions are often derived from analysis of pre-tax underwriting gain, less income taxes payable on the underwriting gain, and on the insurer fee, which is not deductible for income tax purposes.

- **Taxes and fees** include premium tax, insurer fees, risk adjustment fees, exchange fees, and federal income tax.
    - **Premium Tax**: The premium tax rate is 1.25% in the state of Michigan.
    - **Insurer Fees**: This is a permanent fee that applies to fully insured coverage. This fee will fund tax credits for insurance coverage purchased on the exchanges. The total fee increases from $8B in 2014 to $14.3B in 2018 (indexed to premium for subsequent years). Each insurance carrier's assessment will be based on earned health insurance premiums in the prior year, with certain exclusions.
    - **Risk Adjustment Fees**: The HHS Notice of Benefit and Payment Parameters includes a section on risk adjustment user fees and specifies a $0.08 per member per month user fee for the benefit year 2014. For many products in the state of Michigan, this equates to approximately 0.02% of premium for 2014.
    - **Federal Income Tax**: Income tax is calculated as 35% * (Pre-Tax Income + Insurer Fees), since insurer fees are not tax deductible.

- **Reinsurance Fees**: This is a temporary fee that applies to all commercial groups (both fully insured and self funded) and individual business from 2014 to 2016 for the purpose of funding the reinsurance pool for high cost claimants in the individual market during this three-year transitional period. The total baseline amounts to be collected to fund this pool are $12B in 2014, $8B in 2015, and $5B in 2016, and individual states can add to this baseline. Each insurance carrier will be assessed on a per capita basis.

- **Changes in Medical Service Costs:** There are many different health care cost trends that contribute to increases in the overall U.S. health care spending each year. These trend factors affect health insurance premiums, which can mean a premium rate increase to cover costs. Some of the key health care cost trends that have affected this year's rate actions include:
  - **Coverage Mandates** – Estimated impacts of changes in benefit design and administration due to the Patient Protection and Affordable Care Act mandates. Direct impacts include the effects of specific changes made to comply with new Federal and State laws.
  - **Increasing Cost of Medical Services** – Annual increases in reimbursement rates to health care providers, such as hospitals, doctors and pharmaceutical companies. The price of care can be affected by the use of expensive procedures, such as surgery, as opposed to monitoring or certain medications.
  - **Increased Utilization** – Annual increases in the number of office visits and other services. In addition, total health care spending may vary by the intensity of care and/or use of different types of health services.
  - **Higher Costs from Deductible Leveraging** – Health care costs may rise every year, while deductibles and copayments may remain the same.
  - **Impact of New Technology** - Improvements to medical technology and clinical practice may require use of more expensive services, leading to increased health care spending and utilization.
  - **Underwriting Wear off** – the variation by policy duration in individual medical insurance claims, where claims are higher at later policy durations as more time has elapsed since initial underwriting.

- **Administrative Costs**: Expected benefit and administrative costs.

3.2: Data Collection

The public access System for Electronic Rate/Form Filing (SERFF) portal was used to retrieve all filings for 2013. (SERFF Filing Search Portal: http://w3.lara.state.mi.us/SerffPortal/)

Rate filing data: Rate filings consist of detailed and comprehensive reporting forms for each product; these include filing notes, correspondence, disposition forms, and over 100 types of supporting documents. Premium setting methods reported in the filings require mathematical logic and detailed demonstration, and include actual data, models, and rate tables. The DIFS review process is iterative, with submissions per plan and product, review by DIFS and contract

actuaries, correspondence with plans, objection letters, responses to letters, resubmissions of filings, and multiple re-reviews, until final disposition.

Most filings are large files, from .5 MB to >100MB per filing, and many are over 5,000 pages each, much in free form text., rather than tables. The size of the files and preponderance of text makes manual extraction of data time intensive. Each filing needs to be downloaded individually from the online portal for viewing.

The following elements were abstracted from each 2013 filing for which a change (negative or positive) in rates was requested. (The complete list of abstracted elements appears in Exhibit X.)

- Health Insurance market (Large Group, Small Group, Individual)
- Product Type (HMO, PPO, POS, Hospital/Surgical/Medical (MM))
- Rate Change Requested (%)
- Reasons noted for Rate Change Request
- Medical Cost Trend used in the premium rate formulas

3.3: Analysis

The following questions guide the analysis of the rate filings:

1. *What firms filed requests for premium rate changes?*

    A. What types of market segments (Large Group, Small Group, and Individual) noted premium rate changes?
    B. What types of plan products (HMO, PPO, POS, MM (Hosp/Surg/Major Medical))[7] noted rate changes?

2. *What is the size of the rate changes requested by those who file?*

    A. What is the range and distribution of noted rate changes by market segment and plan product?

3. *Why do insurers request premium rate changes?*

    A. What are the recorded reasons for changes in premium rates (reasons, frequency)?
    B. Do different markets and plan types record different reasons for changes in premium rates?

4. *What is the size of the noted rate change and the reported medical trend rate by market segment and product type?*

[7] HMO: Health Maintenance Organization; MM Major Medical Expense Plan; POS: Point of Service Plan; PPO: Preferred Provider Organization

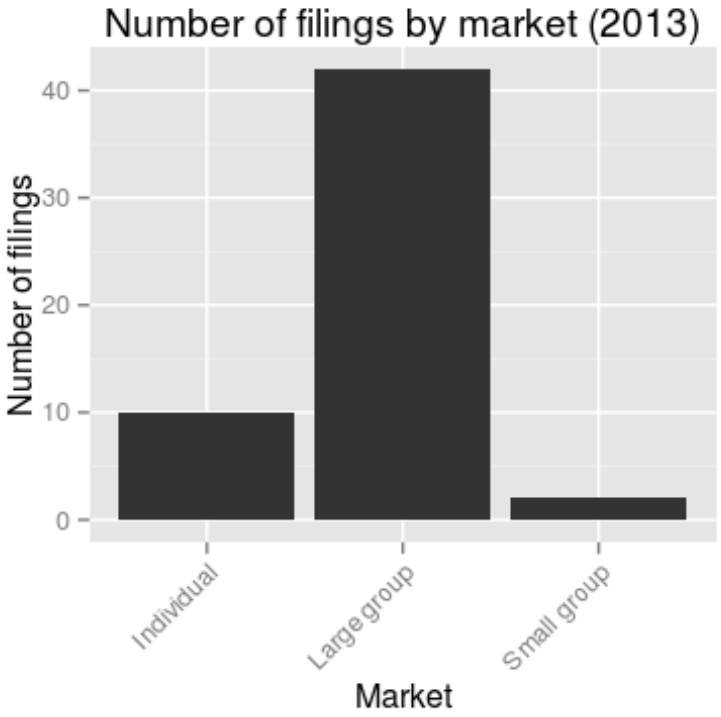
Findings

1. Who files requests for premium rate changes?

There were 54 rate filings with changes in premium rates in 2013.

1A) Number of filings for rate increases by Market Segment[8] and Year

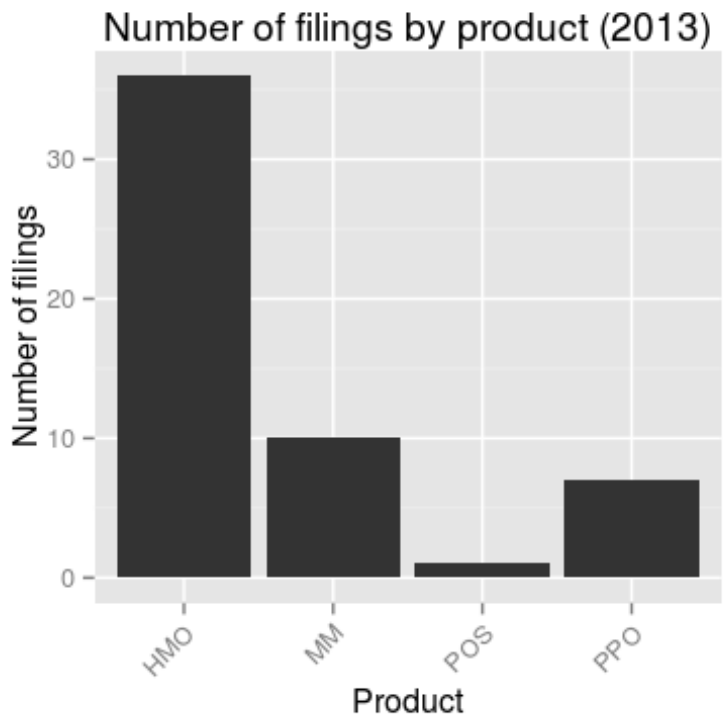
	Group-Large	Group-Small	Individual
2013	42	2	10



[8] Markets:
Individual Plans: coverage directly from a carrier, not based on employment;
Small Group Plans: coverage through an employer with fewer than 50 employees;
Large Group Plans: coverage through an employer with more than 50 employees.

1B) Number of filings for each type of plan[9] (2013)

YEAR	HMO	MM	POS	PPO
2013	36	10	1	7

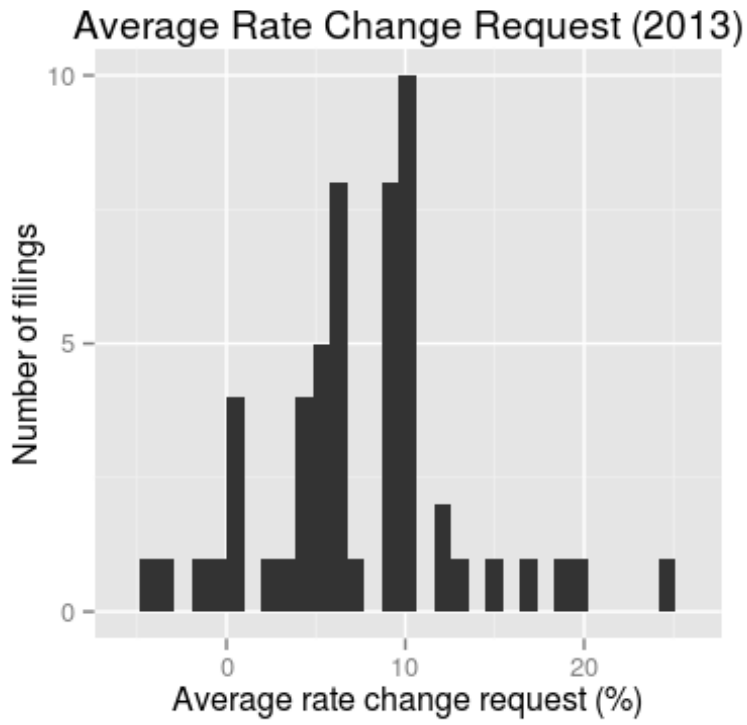


[9] HMO: Health Maintenance Organization; MM Major Medical Expense Plan; POS: Point of Service Plan; PPO: Preferred Provider Organization

2. What is the range and distribution of requested rate changes, by market segment, and by product type?

2A) Rate change (%) request per filing

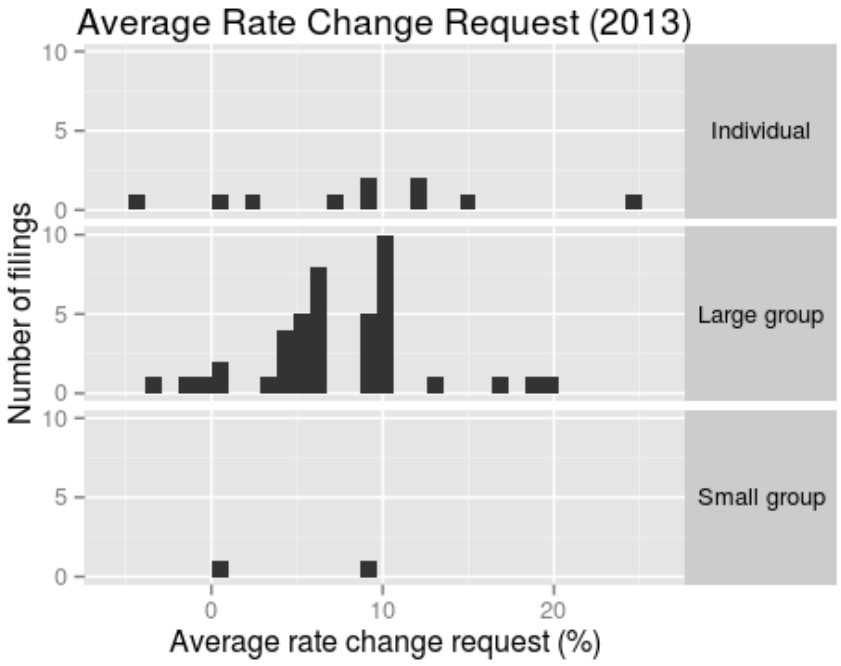
Year	# Filings	Average (%)	Minimum (%)	Maximum (%)
2013	54	7.55	-3.97	25.0

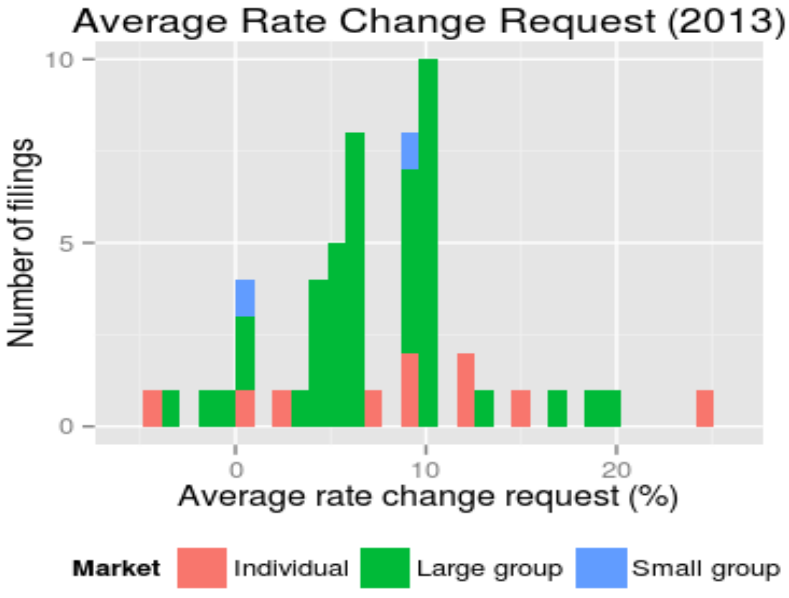


Four (4 out of 54) filings included a decrease in premium rates; 1 in the individual market; 3 in the large group market. All four filings were for HMO products.

2B) Average rate change (%) requested by filing by market segment

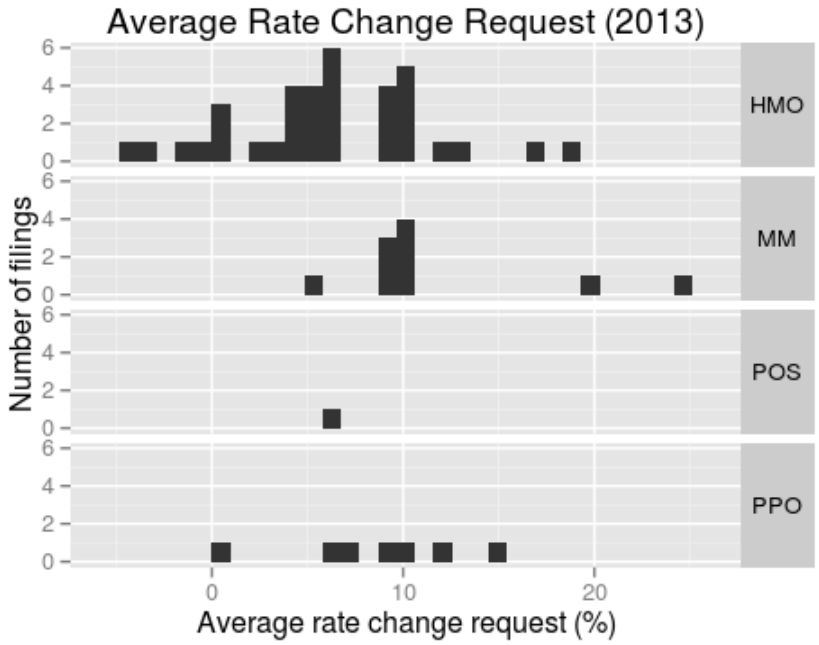
Year	Market	# Filings	Average (%)	Minimum (%)	Maximum (%)
2013	Individual	10	8.87	-3.97	25.00
2013	Large group	42	7.37	-3.19	19.80
2013	Small group	2	4.68	0.50	8.86

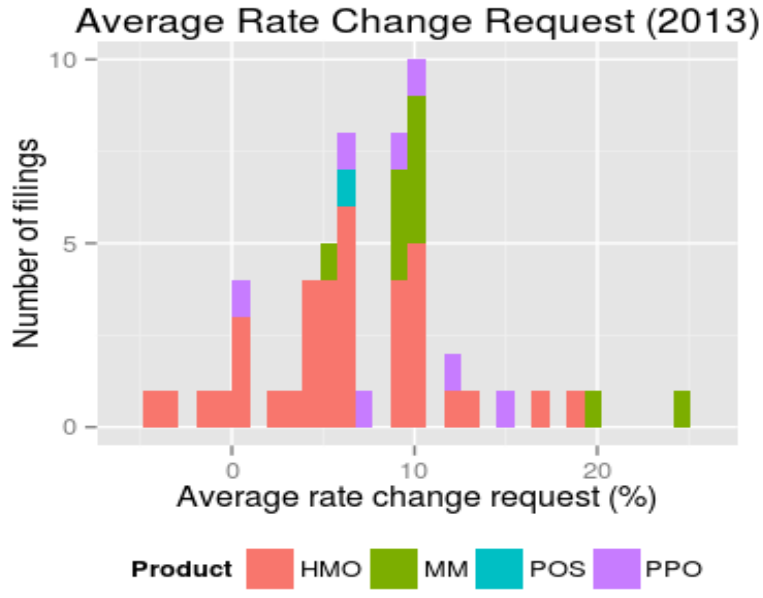




2C) Rate change (%) request per filings by product, by Year

Year	Product	# Filings	Average (%)	Minimum (%)	Maximum (%)
2013	HMO	36	6.20	-3.97	18.50
2013	MM	10	11.69	5.48	25.00
2013	POS	1	6.73	6.73	6.73
2013	PPO	7	8.67	0.50	14.60

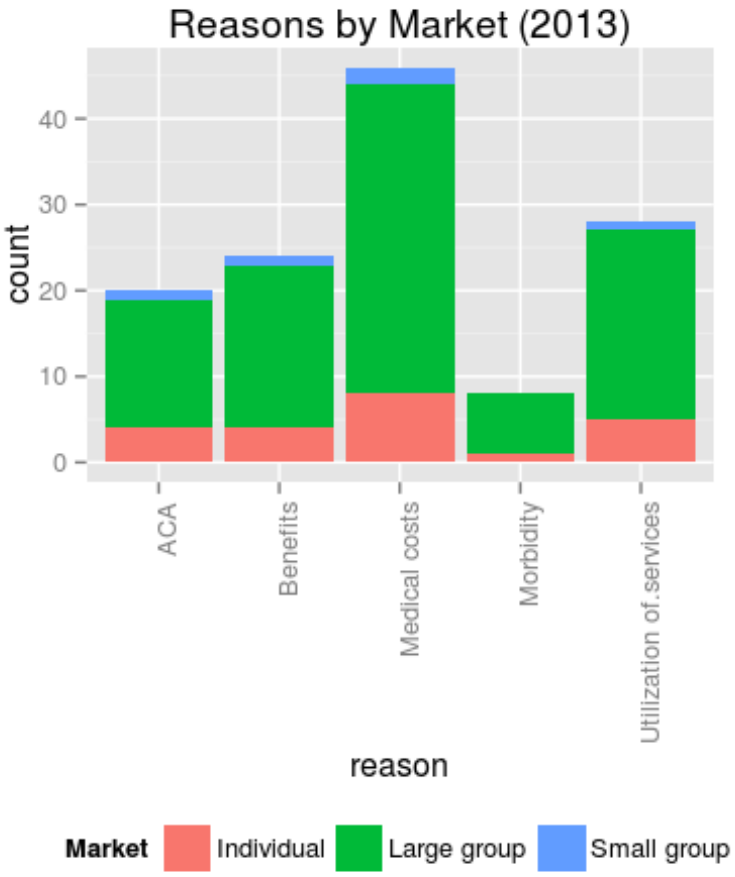


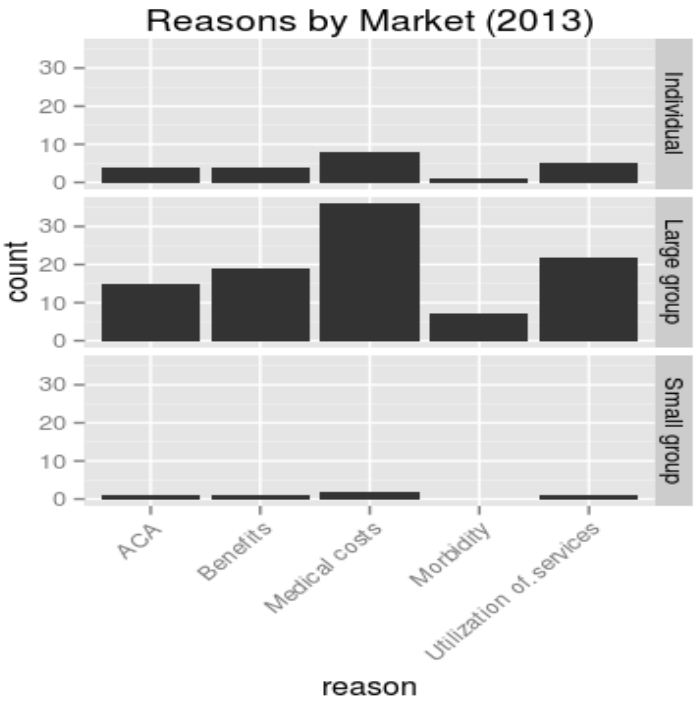


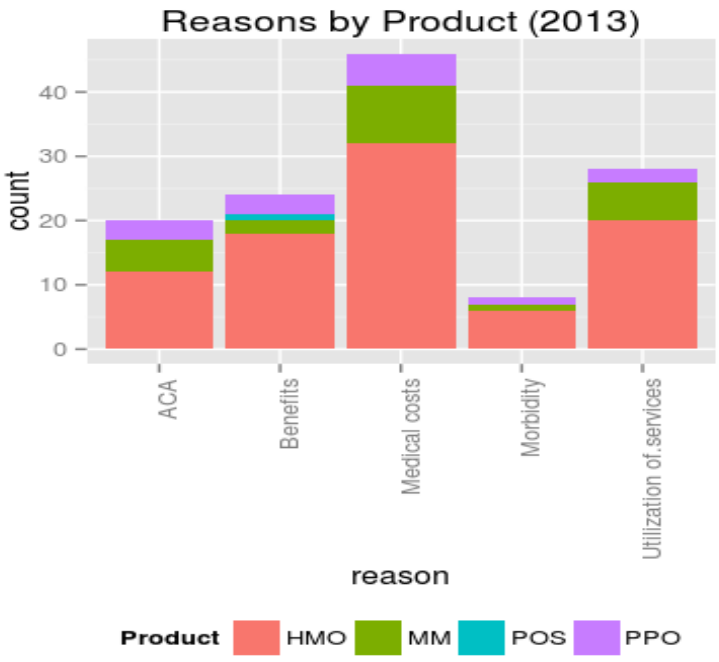
3. Why do insurers request premium rate changes? (reasons are noted in filings, not weighted by importance)

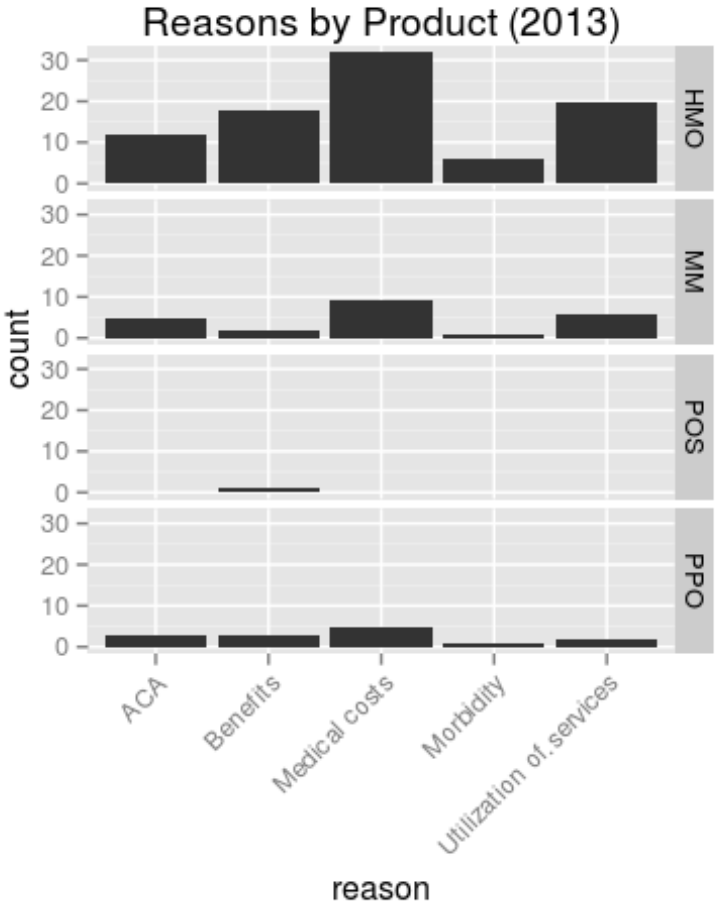
3A) Most common reasons for requesting rate change (N=54)

Medical Costs: Changes in prices and costs of medical services (N=46)
Utilization of Services: Increases in use of medical and health services, increase in intensity of services (N=28)
Benefits: Changes in benefit design, plan features, out of pocket costs, provider networks (N=24)
ACA: Changes in required benefits, medical loss rations, single risk pools, taxes, fees (N=20)
Morbidity: Changes in the extent and types of disease or illness within the intended pool of covered individuals (N=8)




Reasons by Market (2013)
Individual
Large group
Small group
count
30
20
10
0
ACA
Benefits
Medical costs
Morbidity
Utilization of.services
reason


Reasons by Product (2013)
count
40
30
20
10
0
ACA
Benefits
Medical costs
Morbidity
Utilization of.services
reason
Product
HMO
MM
POS
PPO


Reasons by Product (2013)
count
30
20
10
0
HMO
MM
POS
PPO
ACA
Benefits
Medical costs
Morbidity
Utilization of services
reason

4. What is the size of the requested rate change and the reported medical trend rate by market segment and product types?

Filings report the medical trend rate used in preparing projections for premium rates.

Medical Cost Trend

All Filings:

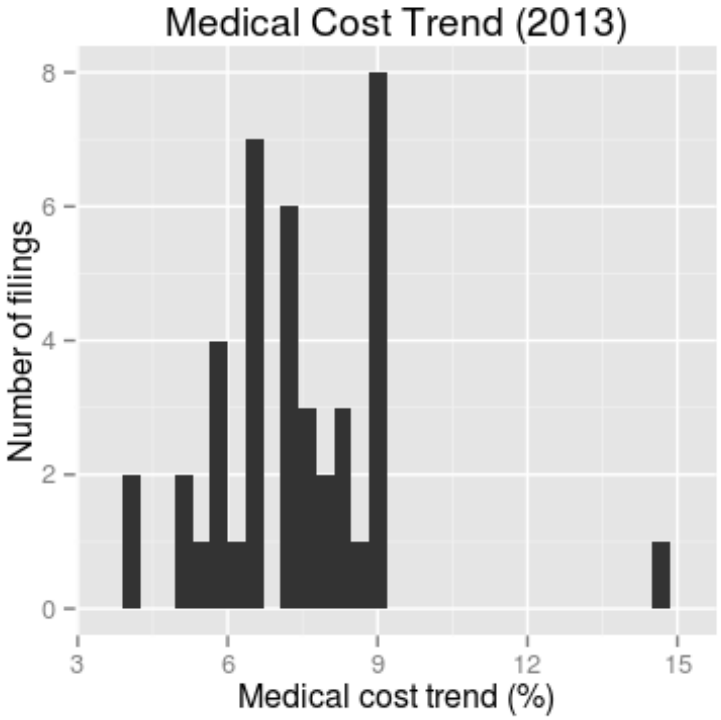
Year	# Filings	Average trend (%)	Minimum trend (%)	Maximum trend (%)
2013	54	7.33	4	14.6

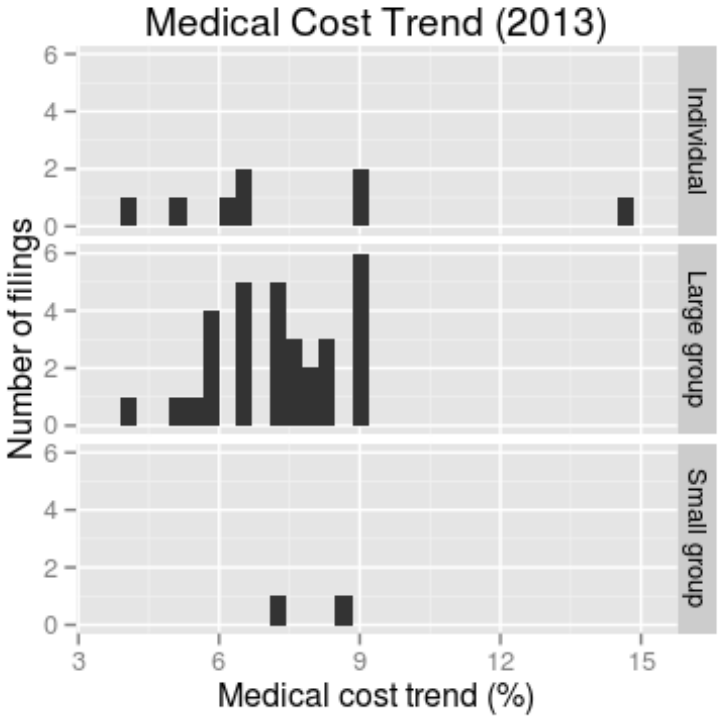
By Market:

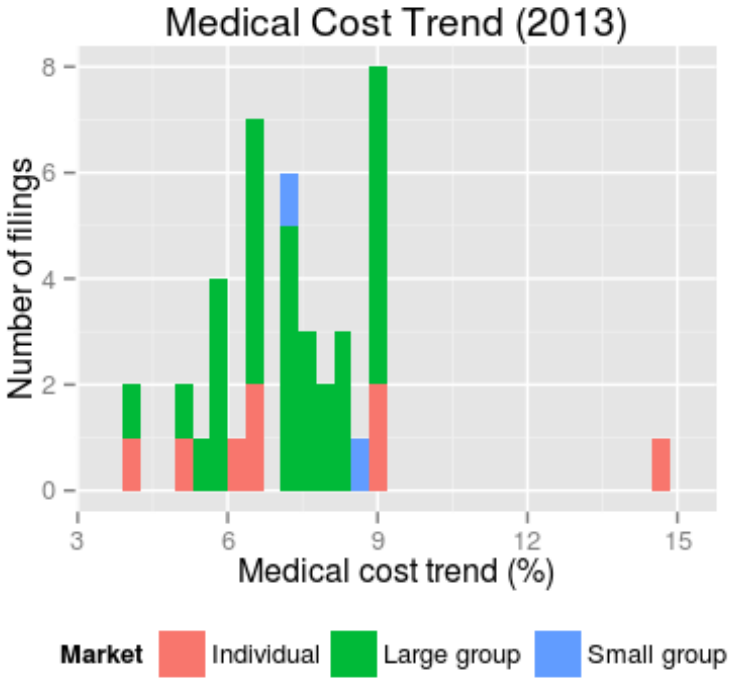
Year	Market	# Filings	Average (%)	Minimum (%)	Maximum (%)
2013	Individual	8	7.60	4.0	14.60
2013	Large group	31	7.22	4.2	8.84
2013	Small group	2	7.85	7.2	8.50

By Product:

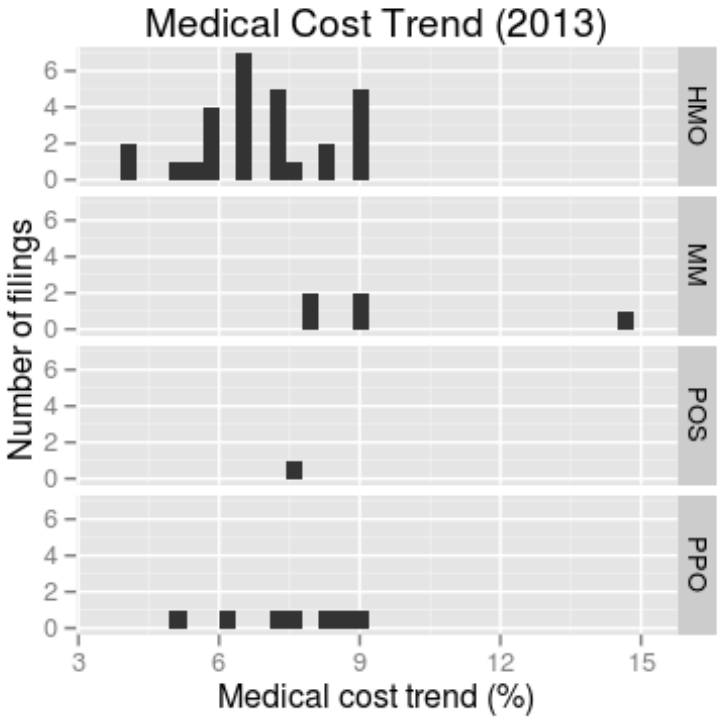
Year	Product	# Filings	Average (%)	Minimum (%)	Maximum (%)
2013	HMO	28	6.88	4.00	8.9
2013	MM	5	9.64	7.90	14.6
2013	POS	1	7.70	7.70	7.7
2013	PPO	7	7.41	5.18	9.1

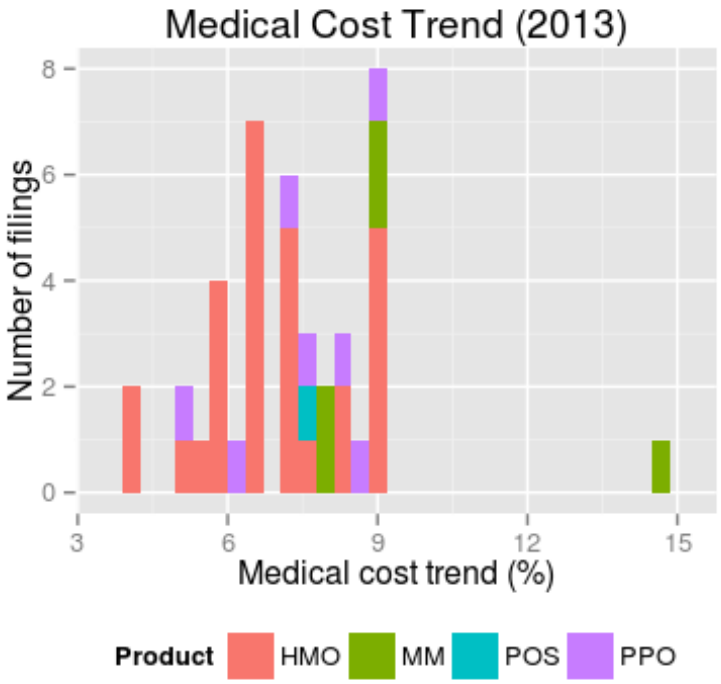

Medical Cost Trend (2013)
Number of filings
0
2
4
6
8
3
6
9
12
15
Medical cost trend (%)

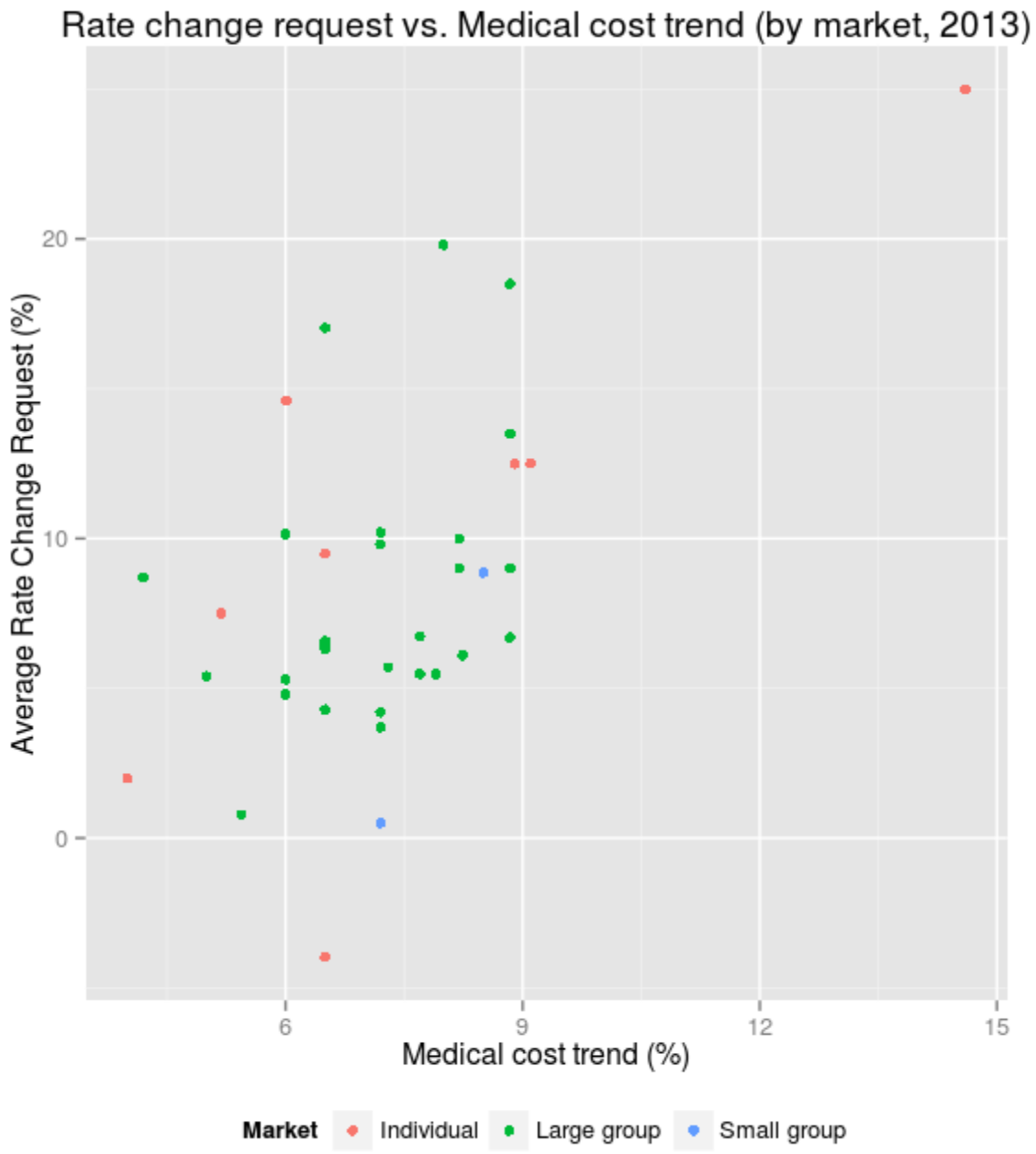

Medical Cost Trend (2013)
Number of filings
Individual
Large group
Small group
0
2
4
6
3
6
9
12
15
Medical cost trend (%)



Medical Cost Trend by Product:




Medical Cost Trend (2013)
Number of filings
0
2
4
6
8
3
6
9
12
15
Medical cost trend (%)
Product
HMO
MM
POS
PPO


Rate change request vs. Medical cost trend (by market, 2013)
Average Rate Change Request (%)
20
10
0
6
9
12
15
Medical cost trend (%)
Market
Individual
Large group
Small group

3.4: Findings - Analysis of 2013 Rate Filings Noting Change in Premium Rates

This report finds that, based on an analysis of **2013** DIFS rate filings ***with changes in premium rates*** (50 filings noted increase and 4 filings noted decrease):

- 54 health plan filings for premium rate changes in 2013
- 42 large group, 2 small group, and 10 individual plans filed for premium rate changes
- 36 HMO, 10 Major Medical, 7 PPO, 1 Point of Service plan products filed for premium rate changes in 2013

Most common reasons for requesting rate change (N=54):

- **Medical Costs**: Changes in prices and costs of medical services (N=46)
- **Utilization of Services**: Increases in use of medical and health services, increase in intensity of services (N=28)
- **Benefits**: Changes in benefit design, plan features, out of pocket costs, provider networks (N=24)
- **ACA**: Changes in required benefits, medical loss rations, single risk pools, taxes, fees (N=20)
- **Morbidity**: Changes in the extent and types of disease or illness within the intended pool of covered individuals (N=8)

Increases in medical prices and costs were the most common reason recorded among large group, small group, and individual plans; and for HMO, PPO, and Major Medical plans; Point of Service plans reported changes in benefits as the most common reason for increases.

Filings reported average medical cost trend estimates of 7.7%. All markets and products were within a small range of this average, with no remarkable deviations. There were wider variations in medical cost trends in the individual market and for major medical products.

Section 4. Conclusions

Federal and state economic, health care, regulatory, and political environments impact commercial health insurance in Michigan. Creating and implementing health insurance premium rates involves large numbers of stakeholders, complex rate setting methodologies and processes, propriety information, and is subject to changing medical and insurance markets. In addition, not all plans offered in the state are subject to regulation, review, and approval by the State. **These, and other factors, cannot be fully isolated or perfectly measured, making it difficult to attribute changes to the Michigan Healthy Plan at this time.**

Future analysis of the effects of the Healthy Michigan Plan on premium rates will continue to be difficult as the necessary information is not currently available and does not fall under the regulatory authority of DIFS. Even with expanded authority, it is highly unlikely that DIFS would be able to obtain the data necessary to quantify the contribution of uncompensated care on insurance rates, because of the proprietary nature of contractual agreements between insurers and hospitals, the high proportion of the Michigan population employed by self-funded employers (without DIFS-regulated health plan coverage), and the preponderance of other unmeasured market factors that contribute to premium rates.

Appendix A: Literature Review on Cost Shifting

Summary

Major health policy changes, such as the Medicaid expansion and the Affordable Care Act, have wide-reaching implications for resource allocation and payment responsibilities. In addition, rapidly rising health care costs pose burdens on individuals, employers, providers, and state and federal governments. The combined effects of new policies that impact costs of health care can lead to redistributions of funds to assure that institutions are financially viable and patients receive the care they need at affordable prices.

The recently enacted Healthy Michigan Plan legislation may impact resource allocation, specifically the outcome of costs that are uncompensated and the changes in insurance premium rates. Some speculate that the expansion of Medicaid coverage will reduce the costs providers absorb due to unreimbursed services; others speculate that commercial insurers shift their higher costs by raising premium rates to the fully insured.

The literature does not, however, provide any direct evidence of a cost shift, despite anecdotal comment and speculation of its existence. **The literature cited below provides the best evidence to date that there is no direct support for cost shifting.** The empirical studies in support of cost shift cited below provide evidence of an association between lower public payer reimbursements and higher insurance premiums. However, **this association does not imply a direct causation** between lower public payer rates and higher insurance premiums, or cost shift. Rather, there may be an association depending on geographic market structures, whether or not hospitals maximize profit revenues, and hospital patient pool composition (number of privately insured patients), and many other factors.

To adequately measure cost shift (or the absence of such), extensive databases are needed, including access to patient-provider contracts, and private claims data with Medicare/Medicaid payment reports for different hospital systems. The proprietary nature of these databases provides another barrier to adequately measure the existence of cost shift. Even with access to all of the data mentioned above, the many factors that contribute to private premium increases, outside of a cost shift, make it very difficult to isolate a direct association between uncompensated care and private insurance premiums. As research continues to advance measurement and analysis of this issue, we will update this section.

Congressional Reports

1. Congressional Budget Office. Key Issues in Analyzing Major Health Insurance Proposals. Congress of the United States Congressional Budget Office. 2008. Pp. 112. http://www.cbo.gov/sites/default/files/12-18-keyissues.pdf. 11.21.2014.

Evidence indicating that private payment rates are higher than public rates – and that these rates seem to be higher than the cost of treating privately insured patients – is sometimes taken as verification of cost shifting. However, there are other explanations for these trends. Hospitals receiving different payment rates from public and private insurers may be instances of *price*

discrimination – firms with large market power charge different rates to different payers based on willingness to pay, to increase profits. However, differences in payment rates between different types of insurers do not indicate that costs have been shifted from one type to another.

If cost shifting were to occur, it would depend on several factors, including the amount of uncompensated care that is provided, the adequacy of public payment rates, and the degree of competition facing hospitals and doctors. Cost shifting effect appears to be relatively limited. Uncompensated care represents about 5% of total hospital revenue in 2008. The federal government covers over 50% of uncompensated care costs. For payments under Medicaid and Medicare, recent studies indicate that hospitals shift only a small portion of their savings or costs to private insurers. Lower payment rates from public programs may actually cause hospitals to reduce their costs, possibly providing care that is less intensive or of lower quality than if the payments had been larger (Page 112).

2. MedPac. Hospital Inpatient and Outpatient Services. Report to the Congress: Medicare Payment Policy. MedPac. 2009. http://medpac.gov/documents/reports/Mar09_Ch02A.pdf?sfvrsn=0. 11.19.2014.

This report provides evidence that hospitals can control their costs when payments from private payers decrease. Increases in Medicare/Medicaid payments may increase hospital costs, rather than decrease rates charged by private insurers. Hospitals with the largest Medicare losses are in better financial shape than other hospitals; hospitals with higher profits charge more, which may show an inverse trend of pricing for private insurers, but does not necessitate these charges, and does not indicate causation.

Reviews of the Literature and Observable Trends

1. Frakt AB. How Much Do Hospitals Cost Shift? A Review of the Evidence. The Milbank Quarterly 2011; 89(1):90-130.

Reviewing all of the evidence through 2011 for cost shifting, Frakt et al warn that policymakers should view with some skepticism most hospital and insurance industry claims of inevitable, visible, or large-scale cost shifting. Some cost shifting may be caused from changes in public payment policy, but this is one of many possible effects. Changes in the balance of market power between hospitals and health care plans also significantly affect private prices.

2. Kaiser Family Foundation. Cost-Shift and Uncompensated Care. 2013. http://kff.org/report-section/uncompensated-care-for-the-uninsured-in-2013-a-detailed-examination-cost-shifting-and-remaining-uncompensated-care-costs-8596/. 11.10.2014.

Kaiser estimates the amount potentially associated with uncompensated care cost shifting is only 2.3% percent of private health insurance costs in 2013. Even if uncompensated care costs that are potentially financed by private insurance is off by as much as 100 percent (i.e.; due to government funds overpaying some hospitals and undercompensating others, for example), the potential cost would only be 4.6 % of private health insurance costs in 2013.

3. Lee J, Berenson R, Mayes R, Gauthier A. Medicare Payment Policy: Does Cost Shifting Matter. Health Affairs. October 2003.

Cost shifting matters for private payers and hospitals, based on their market power and the amount of revenue in the system. Medicare funding differs based on responsibility to patients, as well as the larger community. Payment rates are influenced by interest groups and budgetary requirements. The majority of the time, Medicare payments cover their responsibilities (Medicare patients and the community). However, if providers' prices rise, and neither public nor private payers' compensation follows suit, consumers pay more. This result is that people lose coverage, which is the ultimate cost shift.

Theoretical Understandings of Cost-Shift

1. Dobson, Allen, Joan DaVanzo, and Namrata Sen. "The cost-shift payment 'hydraulic': Foundation, history, and implications." Health Affairs 25.1 (2006): 22-33.

Dobson outlines theoretical potential for cost-shifting. This paper reviews empirical examples of cost-shift that show a correlation between lower Medicaid reimbursements and higher private insurance premiums, implying cost shift as a potential explanation for increase in private premiums, but potential for cost-shift varies greatly across market structures. Hospitals can absorb some degree of cost-shifting pressure through increased efficiency and decreases in service intensity.

2. Ginsburg, P. Can Hospitals and Physicians Shift the Effects of Cuts in Medicare Reimbursement to Private Payers? Health Affairs, Web Exclusive (October 8, 2003), pp. W3-472 to W3-479. http://content.healthaffairs.org/content/early/2003/10/08/hlthaff.w3.472.full.pdf. 11.25.2014.

Theoretical basis exists for cost shifting, but hospitals have room to adjust before cost shifting would occur: if prices are set below the profit-maximizing level, then there is room to raise them in response to a cut in prices. Potential for cost shifting would vary based on geographic share of the market, and the level of market power that hospitals and physicians have. Because of this variation, researchers need to remember that testing for the existence of or importance of cost shifting requires attention to whether the conditions being studied trend towards extensive or limited cost shifting.

3. Santerre R. The Welfare Loss from Hospital Cost-Shifting Behavior: A Partial Equilibrium Analysis. Health Economics. 2005:14(6). 621–26.

Microeconomic theory suggests that cost shifting can take place under specific conditions, and some empirical studies have shown that cost shifting may have actually occurred in certain instances. This study models potential welfare loss, caused by hospital cost shifting under ideal yet realistic conditions. The estimate yields only a small efficiency loss of 0.84% maximum of private hospital expenditures (US, 1992).

Empirical Studies

1. Friesner D, Rosenman R. Cost Shifting Revisited: The Case of Service Intensity. Health Care Management Science. 2002:5(1):15–24.

In a panel of hospitals in California, this research found support for cost shift in nonprofit hospitals, while no cost shift was observed in profit-maximizing hospitals. However, both types of hospitals respond to lower-service intensity, thus supporting the theoretical conclusion that lower-service intensity can be used as an alternative to cost shifting.

2. Showalter M. Physicians' Cost Shifting Behavior: Medicaid versus Other Patients. Contemporary Economic Policy. 1997;15 (2):74–84.

This article examines whether or not physicians practice cost-shifting. This study found that lower-Medicaid reimbursement rates resulted in physicians charging lower-service fees, contrary to cost shift theory.

3. White, C. (2013). Contrary to cost-shift theory, lower Medicare hospital payment rates for inpatient care lead to lower private payment rates. Health Affairs, 32(5), 935-43.

Policy makers believe when Medicare constrains its payment rates for hospital inpatient care, private insurers end up paying higher rates. This shows that slow growth in Medicare inpatient hospital payment rates also showed slow growth in private hospital payment rates. Greater reductions in Medicare payment rates led to a reduction in private payment rates, reflecting hospitals' efforts to rein in operating costs in the face of lower Medicare payment rates. Hospitals facing cuts in Medicare payment rates may also cut the payment rates they seek from private payers to attract more privately insured patients.

4. Wu VY. Hospital cost shifting revisited: new evidence from the balanced budget act of 1997. International Journal of Healthcare Finance and Economics. Mar: 10(1):61-83.

This paper analyzes hospital cost shifting using a natural experiment generated by the Balanced Budget Act of 1997. This study supports that urban hospitals were able to shift part of the burden of Medicare payment reduction onto private payers, but the overall degree of cost shifting was very small, and changes based on the hospital's share of private patients.

5. Zwanziger, Jack, and Anil Bamezai. "Evidence of cost shifting in California hospitals." Health Affairs 25.1 (2006): 197-203.

This study of California hospitals evaluates whether decreases in Medicare/Medicaid payments were associated with increase in private insurance payments. A 1% decrease in Medicare price was associated with a 0.17% increase in corresponding price paid by privately insured patients. This implies that cost shifting from public to private payers accounted for a small percent of total increase in private payer prices from 1997-2001 in California.

Appendix B: Data Elements and Methods for Calculating Uncompensated Care

1. Defining uncompensated care

Uncompensated care is defined as the cost of charity care plus the cost of bad debt.

Charity care is the cost of medical care for which there was no expectation of payment because the patient has been deemed unable to pay for care. Each hospital has its own criteria for identifying patients who are eligible for charity care. For example, hospitals in the Mercy Health system pay 100% of the charges for patients who are uninsured and have family income below 100% of the federal poverty level. The University of Michigan's charity care program pays 55% of total charges for uninsured patients that do not qualify for public insurance programs, have family income below 400% of the federal poverty level, and meet several other criteria. However, not all discounted medical care is charity care. Discounts provided for prompt payment or discounts negotiated between the patient and the provider to standard managed care rates do not represent charity care.

Bad debt is the cost of medical care for which there was an expectation of payment because the patient was deemed to be able to pay for care. For example, bad debt includes the unpaid medical bills of an uninsured patient who applied for charity care but did not meet the hospital's specific criteria. Insured patients who face deductibles and coinsurance payments for hospital care can also generate bad debt.

Hospitals report charity care and bad debt separately on the Michigan Medicaid Forms, though as just noted hospitals vary in the criteria they use to distinguish charity care from bad debt. Even within a particular hospital, rules governing eligibility for charity care are often not strictly applied and may take into account the judgment of individuals determining eligibility.

For purposes of this report, Medicaid and Medicare shortfalls — the difference between reimbursements by these programs and the cost of care— are not included in the estimate of uncompensated care. Similarly, expenditures for community health education, health screening or immunization, transportation services, or loss on health professions education or research are not considered uncompensated care. Although the hospital does not expect to receive reimbursement for these services, they do not represent medical care for an individual. These costs incurred by hospitals fall into the broader category of "community benefit," a concept used by the Internal Revenue Service in assessing hospitals' non-profit status.

2. Measuring uncompensated care using Michigan Medicaid cost report data

The cost of charity care is measured as full charges for uninsured charity care patients minus patient payments toward partial charity discounts, multiplied by the cost-to-charge ratio. The cost of bad debt is measured as unpaid patient charges for which an effort was made to collect payment minus any recovered payments, multiplied by the cost-to-charge ratio. Bad debts include charges for uninsured patients who did not qualify for a reduction in charges through a charity care program, and unpaid coinsurance, co-pays and deductibles for insured patients.

The cost-to-charge ratio is the ratio of the cost of providing medical care to what is charged for medical care, aggregated to the hospital-level. For example, a cost-to-charge ratio of 0.6 means that on average, 60 cents of every charged dollar covers the cost of care. Variation in cost-to-charge ratios among different payment source categories reflects differences in the mix of services received by patients in those categories. Charity care and bad debt charges for uninsured patients are translated to costs using the cost-to-charge ratio for uninsured patients. Bad debt charges for insured patients are translated to costs using the whole hospital cost-to-charge ratio.

The specific data elements from the Michigan Medicaid Forms (MMF) that are used for these calculations are as follows.

Measures of care for which payment was not received enter positively:

- Uninsured charity care charges (MMF line 6.00)
  Full charge of care provided to patients who have no insurance and qualify for full or partial charity care. Payment is not expected.

- Uninsured patient-pay charges (MMF line 6.10)
  Full charge of care provided to patients who have no insurance and do not qualify for full or partial charity care (self-pay). Payment is expected but hospital has not yet made a reasonable attempt to collect payment.

- Uninsured bad debts (MMF line 6.36)
  Full charge of care provided to patients who have no insurance and do not qualify for charity care. Payment is expected and hospital has made a reasonable attempt to collect payment.

- Third party bad debts (MMF line 6.38)
  Insured patients' unpaid coinsurance, co-pays or deductibles when there is an expectation of payment. This includes gross Medicare bad debts. Payment is expected and the hospital has made a reasonable attempt to collect the amount from the patient

These amounts are offset by payments that were received by patients who qualify for charity care as well as bad debt recoveries. These payments enter the calculation of uncompensated care negatively:

- Uninsured payments from charges (MMF line 6.60)
  Total payments made by uninsured charity care patients and uninsured self-pay patients towards charges.

- Recoveries for uninsured bad debt (MMF line 10.96)
  Recovered amounts for uninsured bad debts, which can include amounts that were collected from patients or amounts from community sources (such as an uncompensated care pool).

- Recoveries for third party bad debts and offsets (MMF line 10.98)
  Recovered amounts for insured patients' co-pays, co-insurance and deductibles, including Medicare beneficiaries.

The cost-to-charge ratios used in the calculation are:

- Uninsured inpatient cost-to-charge ratio
  Cost-to-charge ratio calculated by DCH for the purposes of determining disproportionate share hospital payments. It is used to convert charges for care provided to uninsured patients to costs.

- Whole hospital cost-to-charge ratio
  Cost-to-charge ratio calculated by DCH and used to convert charges for care provided to all patients to costs.

In addition to measuring the dollar amount of uncompensated care costs, we also measure these costs relative to total hospital costs (MMF line 11.30) as a percentage.

3. Calculating county-level uninsured rates

County-level insurance rates are calculated using the Census Bureau's 2012 Small Area Health Insurance Estimates, the most recent data available. The Census Bureau uses administrative and survey data from the American Community Survey to estimate county-level uninsured and population counts by age, sex, race, and income categories. We use these data to calculate the percentage of adults ages 18-64 who are uninsured.

4. Hospital characteristics

Hospital characteristics used in this report (ownership, number of beds, urban status) come from the American Hospital Directory, a publicly available dataset that collects information from Medicare cost reports. Teaching status comes from the Centers for Medicare and Medicaid Services open payments reports for May, 2012. All characteristics were reviewed by DCH staff for accuracy.

Appendix C: Uncompensated Care Data for Individual Hospitals

Hospital Name	Uncompensated Care Cost (Millions)	Uncompensated Care as a Percentage of Total Hospital Costs (%)
Short-Term General and Specialty Hospitals		
Allegiance Health	$40.6	11.3%
Alpena Regional Medical Center	$2.9	3.6%
Barbara Ann Karmanos Cancer Hospital	$2.1	1.0%
Beaumont Health System, Royal Oak	$34.6	3.1%
Beaumont Hospital, Grosse Pointe	$8.1	5.0%
Beaumont Hospital, Troy	$18.9	3.9%
Borgess Hospital	$28.6	8.0%
Botsford Hospital	$21.0	8.9%
Brighton Hospital	<$0.1	<0.1%
Bronson Battle Creek Hospital	$15.8	9.0%
Bronson Methodist Hospital	$37.9	8.4%
Carson City Osteopathic Hospital	$3.5	7.5%
Chelsea Community Hospital	$2.4	2.6%
Chippewa War Memorial Hospital	$2.6	3.9%
Community Health Center of Branch County	$4.6	7.8%
Covenant Medical Center, Inc.	$9.7	2.7%
Crittenton Hospital	$7.0	3.6%
Detroit Receiving Hospital	$34.8	15.3%
Dickinson County Memorial Hospital	$1.8	3.2%
Doctors' Hospital of Michigan	$4.4	11.8%
Edward W. Sparrow Hospital	$23.9	3.8%
Emma L. Bixby Medical Center	$1.3	1.9%
Garden City Hospital	$6.8	5.8%
Genesys Regional Medical Center	$18.7	5.1%
Gratiot Medical Center	$3.1	4.0%
Harper University Hospital	$12.3	3.2%
Healthsource Saginaw	$0.2	1.1%
Henry Ford Hospital	$89.7	7.8%
Henry Ford Macomb Hospital	$19.8	5.9%
Henry Ford West Bloomfield Hospital	$6.9	2.6%
Henry Ford Wyandotte Hospital	$20.6	8.8%
Hillsdale Community Health Center	$2.4	5.1%
Holland Community Hospital	$4.9	3.1%
Hurley Medical Center	$27.7	9.6%
Huron Medical Center	$0.9	3.2%

Hospital Name	Uncompensated Care Cost (Millions)	Uncompensated Care as a Percentage of Total Hospital Costs (%)
Huron Valley – Sinai Hospital	$6.5	4.5%
Lakeland Community Hospital - Watervliet	$2.0	9.5%
Lakeland Hospital - St. Joseph	$14.3	5.5%
Marquette General Hospital	$3.3	2.6%
McLaren - Central Michigan	$2.5	3.5%
McLaren - Greater Lansing	$7.6	2.9%
McLaren Bay Region	$9.0	4.1%
McLaren Flint	$14.4	3.9%
McLaren Lapeer Region	$6.2	6.5%
McLaren Oakland	$6.5	5.5%
McLaren-Northern Michigan	$5.4	3.1%
Memorial Healthcare	$2.3	3.0%
Memorial Medical Center of West Michigan	$2.2	4.1%
Mercy Health Partners - Hackley	$11.2	7.0%
Mercy Health Partners - Mercy	$8.7	6.1%
Mercy Hospital - Cadillac	$2.8	4.6%
Mercy Hospital - Grayling	$2.7	4.7%
Mercy Memorial Hospital	$8.5	5.9%
Metro Health Hospital	$14.8	6.9%
MidMichigan Medical Center - Clare	$1.8	5.8%
MidMichigan Medical Center - Midland	$8.3	3.6%
Mount Clemens Regional Medical Center	$18.6	8.2%
Munson Medical Center	$23.3	5.1%
North Ottawa Community Hospital	$2.2	5.0%
Oakland Regional Hospital	$0.1	0.3%
Oaklawn Hospital	$4.7	5.5%
Oakwood Annapolis Hospital	$10.6	8.6%
Oakwood Heritage Hospital	$7.1	6.1%
Oakwood Hospital and Medical Center	$25.0	4.7%
Oakwood Southshore Medical Center	$3.6	3.1%
Otsego County Memorial Hospital	$1.5	3.0%
Pennock Hospital	$2.5	5.3%
Port Huron Hospital	$8.7	5.7%
Portage Health Hospital	$1.1	2.0%
Providence Hospital	$25.3	4.7%
Sinai-Grace Hospital	$26.8	8.7%
South Haven Community Hospital	$1.7	5.8%
Southeast Michigan Surgical Hospital	$0.5	6.8%

Hospital Name	Uncompensated Care Cost (Millions)	Uncompensated Care as a Percentage of Total Hospital Costs (%)
Spectrum Health	$30.5	2.7%
Spectrum Health Big Rapids	$2.2	4.9%
Spectrum Health Gerber Memorial	$3.3	5.6%
Spectrum Health United Memorial - United	$2.8	4.9%
Spectrum Health Zeeland Community Hospital	$1.6	4.1%
St. John Hospital and Medical Center	$36.8	6.0%
St. John Macomb-Oakland Hospital	$24.4	7.3%
St. John River District Hospital	$1.4	4.0%
St. Joseph Mercy Hospital - Ann Arbor	$32.5	5.2%
St. Joseph Mercy Livingston Hospital	$8.3	9.4%
St. Joseph Mercy Oakland	$13.1	4.6%
St. Joseph Mercy Port Huron	$4.7	7.1%
St. Mary Mercy Hospital	$10.5	5.2%
St. Mary's Health Care (Grand Rapids)	$17.3	5.2%
St. Mary's of Michigan Medical Center	$20.3	10.3%
Straith Memorial Hospital	<$0.1	0.4%
Sturgis Memorial Hospital	$2.0	6.1%
Tawas St. Joseph Hospital	$2.7	7.0%
Three Rivers Health	$2.5	7.0%
University of Michigan Health System	$54.5	2.5%
West Branch Regional Medical Center	$1.8	4.8%
Subtotal	*$1,098.4*	*5.3%*
Children's Hospitals		
Children's Hospital of Michigan	$1.1	0.3%
Subtotal	*$1.1*	*0.3%*
Critical Access Hospitals		
Allegan General Hospital	$2.2	5.6%
Aspirus Grand View Hospital	$1.9	4.9%
Aspirus Keweenaw Hospital	$1.1	4.5%
Aspirus Ontonagon Hospital	$0.1	1.6%
Baraga County Memorial Hospital	$1.0	6.9%
Bell Memorial Hospital	$3.5	11.1%
Borgess-Lee Memorial Hospital	$4.0	13.9%
Bronson Lake View Hospital	$1.9	4.0%
Caro Community Hospital	$0.5	5.0%
Charlevoix Area Hospital	$0.8	3.0%

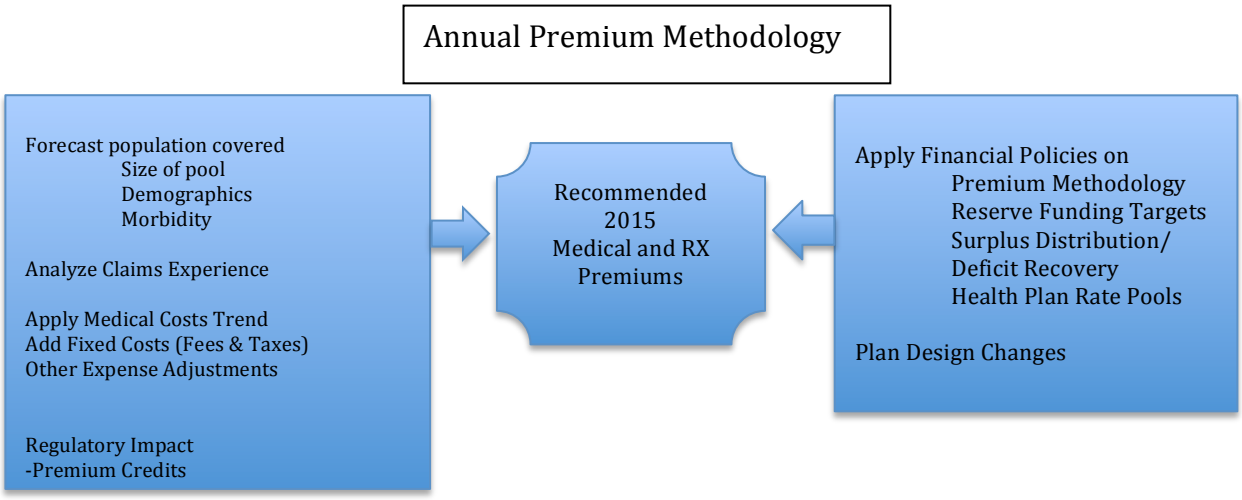
Hospital Name	Uncompensated Care Cost (Millions)	Uncompensated Care as a Percentage of Total Hospital Costs (%)
Clinton Memorial Hospital	$1.3	5.6%
Deckerville Community Hospital	$0.2	4.1%
Eaton Rapids Medical Center	$1.4	8.9%
Harbor Beach Community Hospital	$0.1	1.7%
Hayes Green Beach Memorial Hospital	$3.2	8.0%
Helen Newberry Joy Hospital	$0.7	3.1%
Hills & Dales General Hospital	$0.6	3.4%
Ionia County Memorial Hospital	$1.5	6.7%
Kalkaska Memorial Health Center	$1.9	9.0%
Mackinac Straits Hospital	$2.0	10.4%
Marlette Regional Hospital	$0.8	3.5%
McKenzie Memorial Hospital	$0.6	4.6%
Mercy Health Partners - Lakeshore Campus	$1.1	6.7%
Mid Michigan Medical Center - Gladwin	$0.8	4.0%
Munising Memorial Hospital	$0.4	5.8%
Northstar Health Systems	$1.7	5.5%
Paul Oliver Memorial Hospital	$1.0	7.5%
ProMedica Herrick Hospital	$0.7	2.4%
Saint Mary's Standish Community Hospital	$0.9	4.4%
Scheurer Hospital	$1.5	5.7%
Schoolcraft Memorial Hospital	$0.4	2.3%
Sheridan Community Hospital	$0.9	7.2%
Spectrum Health - Reed City Campus	$2.9	6.9%
Spectrum Health United Memorial - Kelsey	$0.9	7.0%
St. Francis Hospital & Medical Group	$3.9	7.0%
West Shore Medical Center	$1.4	3.3%
Subtotal	*$50.2*	*5.7%*
Psychiatric Hospitals		
BCA StoneCrest Center	$0.2	1.2%
Forest View Psychiatric Hospital	$0.2	1.3%
Harbor Oaks Hospital	<$0.1	0.4%
Havenwyck Hospital	$0.2	0.9%
Kingswood Psychiatric Hospital	$0.2	1.2%
Pine Rest Christian Hospital	$0.5	1.3%
Subtotal	*$1.4*	*1.1%*

Hospital Name	Uncompensated Care Cost (Millions)	Uncompensated Care as a Percentage of Total Hospital Costs (%)
Rehabilitation Hospitals		
Mary Free Bed Hospital & Rehabilitation Center	$0.9	1.9%
Rehabilitation Institute	$2.0	2.7%
Rogers City Rehabilitation Hospital	<$0.1	<0.1%
Southwest Regional Rehabilitation Hospital	$0.4	3.9%
Subtotal	*$3.3*	*2.1%*
Total	**$1,154.4**	**5.1%**

Note: The table excludes Forest Health Medical Center, Inc. because of incomplete reporting.

Appendix D: Overview of Process for Setting Health Insurance Premiums

Actuaries develop premiums based on projected medical claims and administrative costs for a pool of individuals or groups with insurance. Pooling risks allows the costs of the less healthy to be subsidized by the healthy. In general, the larger the risk pool, the more predictable and stable premiums can be. But, the composition of the risk pool is also important. Although the ACA prohibits insurers from charging different premiums to individuals based on their health status, premium levels reflect the health status of an insurer's risk pool as a whole. The majority of premium dollars goes to medical claims, which reflect unit costs (e.g., the price for a given health care service), utilization, the mix and intensity of services, and plan design. Premiums must cover administrative costs, including those related to product development, enrollment, claims processing, and regulatory compliance. They also must cover taxes, assessments, and fees, as well as profit (or, for not-for-profit insurers, a contribution to surplus). Laws and regulations can affect the composition of risk pools, projected medical spending, and the amount of taxes, assessments, and fees that need to be included in premiums.



Appendix E: Major Drivers of Premium Rate Changes Over Time

FACTORS IN PREMIUM INCREASES	
Risk Pool Composition	
Composition of the risk pool and How it compares to what was projected How it is expected to change	CMS Proposed Standard Age Curve published in the Federal Register on November 26, 2012. This age curve has a 3:1 ratio for age rating. There is also a published factor for children. Insurer expectations regarding the composition of the enrollee risk pool, including the distribution of enrollees by age, gender, and health status.
Single risk pool requirement	The ACA requires that insurers use a single risk pool when developing rates. That is, experience inside and outside the health insurance marketplaces (exchanges) must be combined when determining premiums. Premiums for 2015 will reflect demographics and health status factors of enrollees both inside and outside of the marketplace, as was true for 2014.
Transitional policy for non-ACA-compliant plans	For states that adopted the transitional policy that allowed non-ACA compliant plans to be renewed, the risk profile of 2014 ACA-compliant plans might be worse than insurers projected. This would occur if lower-cost individuals retain their prior coverage and higher-cost people move to new coverage. The transitional policy was instituted after 2014 premiums were finalized; meaning insurers were not able to incorporate this policy into their premiums.
Regional, within-Michigan variations.	Premiums are set at the state level (with regional variations allowed within a state) and will reflect state- and insurer-specific experience. These factors are reflected in the **trend** factors reported by carriers.
Reduction of reinsurance program funds	The ACA transitional reinsurance program provides for payments to plans when they have enrollees with especially high claims, thereby offsetting a portion of the costs of higher-cost enrollees in the individual market. This reduces the risk to insurers, allowing them to offer premiums lower than they otherwise would be. Funding for the reinsurance program comes from contributions from all health plans; these contributions are then used to make payments to ACA-compliant plans in the individual market. [i]
Prices & use of services	

Medical trend: Underlying growth in health care costs	The increase in medical trend reflects the increase in per-unit costs of services and increases in health care utilization and intensity
	Short term National projection: National Health spending growth projected to rise 6.1% 2014-2015 (adjusted for inflation (CPI-U)) Long term projection: 2015-2022 national health spending projected to grow 6.2% annually Health care reform impact on trend projected to be an average increase of 0.1% annually from 2012 to 2022 (CMS report on National Heath Expenditure Projections 2012-2022)
Employer Plan Taxes & Fees	
Temporary Reinsurance Fees (2014 thru 2016)	Fees from self-insured plans will be used to make reinsurance payments to individual market insurers that cover high-cost individuals in each state. National fee rate of $63 per (non-Medicare) member per year for 2014, $44 PMPY for 2015, and $31.50 PMPY for 2016.
Temporary tax for PCORI fees (2012 thru 2018)	Assessments will fund "patient centered outcomes research trust fund" Fees basis: $1 per covered health plan member per year for CY 2012, $2 per member per year for CY 2013, with PMPY amounts indexed to per capita increases in National Health Expenditures for years 2014-2018.
Employer Shared Responsibility for Health Care, "Pay or Play"	Requires large employers to "offer" medical coverage to employees averaging 30 or more hours of work per week Health care coverage will be offered to temporary employees Medical plans offered must satisfy mandated coverage levels; Employee premium must not exceed 9.5% of the employees pay rate
Employers must successfully "offer" coverage to 70% of their qualified population beginning 2015, and 95% by 2016.	–
Health claims assessment tax of 1% of claims and/or premium	State of Michigan Public Act 142 of 2011: Effective Jan 2012, applies to medical, Rx and dental services delivered in Michigan to Michigan residents

Plan Structure & Operations	
Changes in provider networks	Mix of practitioner specialties
Changes in provider reimbursement structures	Per service payment formulae; example: Inpatient stays paid on DRG, Percent of Charges, bundled rates
Benefit package changes	Changes to benefit packages (e.g., through changes in cost-sharing requirements or benefits covered) can affect claim costs and therefore premiums. This can occur even if a plan's actuarial value level remains unchanged.
Risk margin changes	Insurers build risk margins into the premiums to reflect the level of uncertainty regarding the costs of providing coverage. These margins provide a cushion in case costs are greater than projected. Greater levels of uncertainty typically result in higher risk margins and higher premiums.
Changes in administrative costs	Wages, information technology, profit
Increase in the health insurer fee	In 2014, the ACA health insurer fee is scheduled to collect $8 billion from health insurers. The fee will increase to $11.3 billion in 2015 and gradually further to $14.3 billion in 2018, after which it will be indexed to the rate of premium growth. The fee is allocated to insurers based on their prior year's premium revenue as a share of total market premium revenue. In general, insurers pass along the fee to enrollees through an increase to the premium. The effect on premiums will depend on the number of enrollees over which the fee is spread—a greater number of enrollees will translate to the fee being a smaller addition to the premium. The increase in health insurer fee collections from 2014 to 2015 will, in most cases, lead to a small increase in 2015 premiums relative to 2014.[ii]
Changes in geographic regions	Within a state, health insurance premiums are allowed to vary across geographic regions established by the state according to federal criteria. Changes in the number of geographic regions in the state or how those regions are defined could cause premium changes that would vary across areas. For instance, assuming no other changes, if a lower-cost region and a

	higher-cost region are combined into one region for premium rating purposes, individuals in the lower-cost area would see premium increases, and individuals in the higher-cost areas would see premium reductions.
Market Competition	
Market forces and product positioning	Insurers might withstand short-term losses in order to achieve long-term goals. Due to the ACA's uniform rating rules and transparency requirements imposed by regulators, premiums are much easier to compare than before the ACA, and some insurers lowered their premiums after they were able to see competitors' premiums.

Appendix F: Elements abstracted from System for Electronic Rate/Form Filing (SERFF) portal for all filings for 2013 and 2014 requesting a change in health insurance premium rates.

- Company Name
- Type of Insurance (Market Type and Plan)
- Rate Change Request (%)
- Reason for Change Request
- Avg. Requested Annual Rate ($)
- Projected Earned Premiums
- Projected Incurred Claims
- # Individuals Covered
- Affected Policy Holders
- Benefit Change Involved in Request (yes/no)
- Trend Factors (medical cost % increase)
- Medical Loss Ratio
- Administrative Fees (PMPM)

Appendix G: Interview Topics and Questions

Note: Structured, guided interviews occur in 2014; data for 2013 and 2014 collected at interview

- Processes for determining Premium Rates
    - Who (roles) involved in benefit design, rate setting, negotiations
    - Sources and timing of data collected
    - Contributors to rates and rate increases or decreases

- Changes in Benefit Plans/Offerings
    - Number of plans offered
    - Number of covered lives per plan
    - Premiums/ Plan: employer/employee contribution ratio

- Changes in Premium rates/Contributors to changes
    - Benefit design
    - Market
    - Risk pool
    - Medical trend

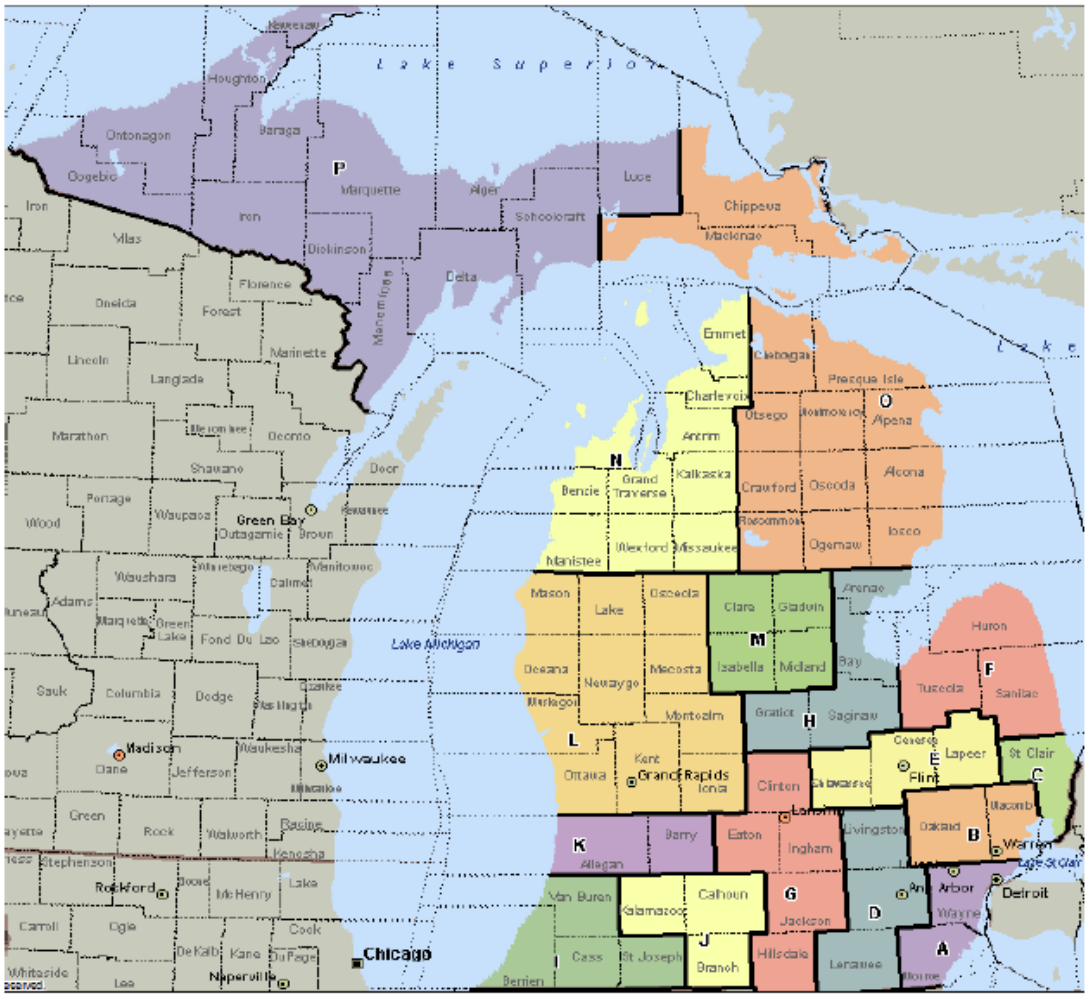
- Changes attributed to ACA
    - Single risk pool, fees, taxes, coverage levels

- Changes Attributed to Healthy Michigan Plan
    - Uncompensated care, taxes, fees, minimum benefits

Appendices

Attachment 1
(revised)

Selected Geographic Areas for Michigan's Non-Grandfathered Individual and Small Group Health Insurance Markets Effective January 1, 2014

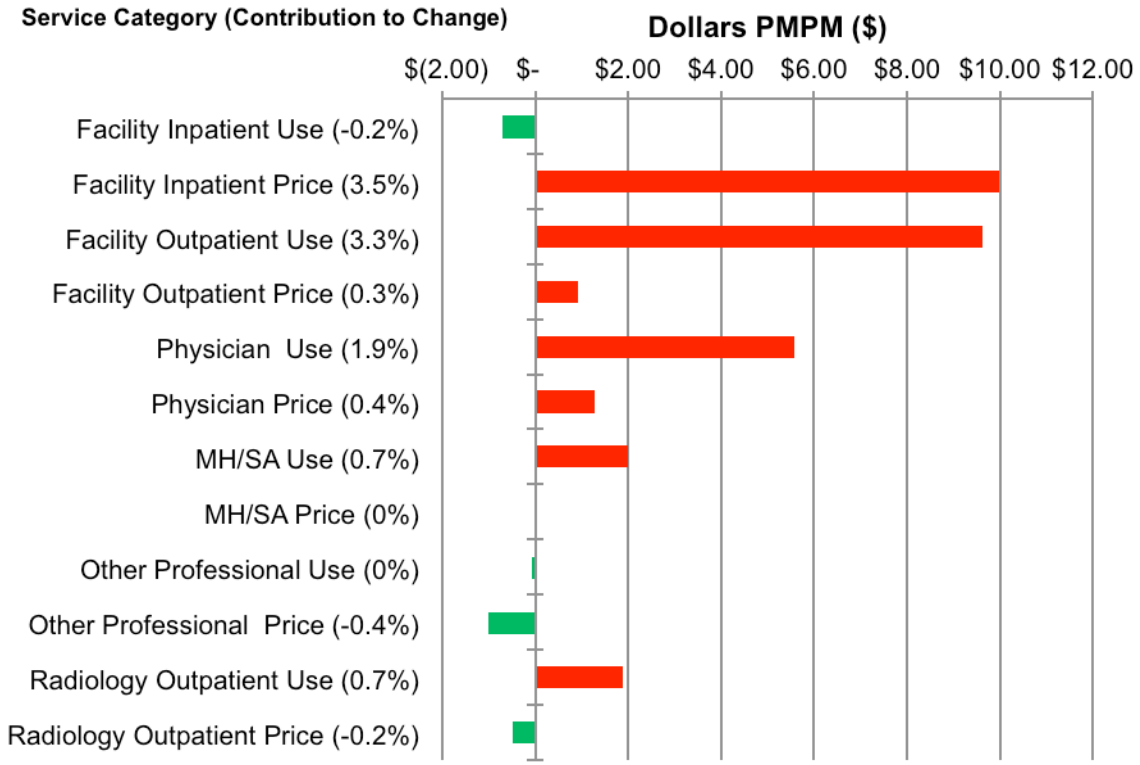


Counties Listed by Area (Rating Area ID)

A (1)	B (2)	C (3)	D (4)	E (5)	F (6)	G (7)	H (8)
Monroe	Macomb	St. Clair	Lenawee	Genesee	Huron	Clinton	Arenac
Wayne	Oakland		Livingston	Lapeer	Sanilac	Eaton	Bay
			Washtenaw	Shiawassee	Tuscola	Hillsdale	Gratiot
						Ingham	Saginaw
						Jackson	

I (9)	J (10)	K (11)	L (12)	M (13)	N (14)	O (15)	P (16)
Berrien	Branch	Allegan	Ionia	Clare	Antrim	Alcona	Alger
Cass	Calhoun	Barry	Kent	Gladwin	Benzie	Alpena	Baraga
St. Joseph	Kalamazoo		Lake	Isabella	Charlevoix	Cheboygan	Delta
Van Buren			Mason	Midland	Emmet	Chippewa	Dickinson
			Mecosta		Grand Traverse	Crawford	Gogebic
			Montcalm		Kalkaska	Iosco	Houghton
			Muskegon		Leelanau	Mackinac	Iron
			Newaygo		Manistee	Montmorency	Keweenaw
			Oceana		Missaukee	Ogemaw	Luce
			Osceola		Wexford	Oscoda	Marquette
			Ottawa			Otsego	Menominee
						Presque Isle	Ontonagon
						Roscommon	Schoolcraft

Exhibit 6: Sample Graph of Factors Contributing to Premium Rate Medical Trend Factors (Pharmacy Benefits excluded)



[i] For the 2014 plan year, $10 billion will be collected from health insurers and used to pay plans in the individual market when an individual's claims exceed $45,000 (the reinsurance attachment point). Insurers will be reimbursed for 80 percent of these individuals' health claims between $45,000 and $250,000. The amount collected for the reinsurance program will decrease to $6 billion for 2015, and to $4 billion for 2016 with no further scheduled collections. The reduced reinsurance funds available for 2015 and 2016, coupled with a potential increase in enrollment in the individual market, will reduce the per enrollee reinsurance subsidy. By providing less of an offset to premiums, the reduction in reinsurance funds will result in an increase in premiums. [i]

[ii] Exchange and Insurance Market Standards for 2015 and Beyond (Final Rule), Federal Register: 79 (101), May 27, 2014.
Available at: http://www.gpo.gov/fdsys/pkg/FR-2014-05-27/pdf/2014-11657.pdf.