

The Healthy Michigan Plan
PA 107 §105(d)(8-9)
2014 Report on Uncompensated Care and Insurance Rates

December 31, 2015

Submitted to the Michigan Department of Health and Human Services
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

This report, pursuant to §105(d)(8-9) of PA 107 of 2013, provides the 2015 annual update to the baseline estimate of uncompensated care borne by Michigan hospitals as it relates to insurance rates and rate setting. Following the initial baseline report submitted in December 2014, this second annual report relies on 2014 data which provides a limited opportunity to examine the time period post- HMP implementation.

Key findings: §105(d)(8) Uncompensated care

Utilizing hospital cost report data from the Michigan Department of Health and Human Services (MDHHS), this report on the estimate of uncompensated care costs in fiscal year 2014 finds that short-term acute care hospitals, rehabilitation units and hospitals, and psychiatric units and hospitals in Michigan provided \$1.08 billion in uncompensated care in fiscal year 2014, a 5.4% reduction from the \$1.15 billion in uncompensated care in fiscal year 2013. As a percentage of total hospital expenses, uncompensated care declined from 5.1% in FY2013 to 4.6% in FY2014.

Focusing on those hospitals with fiscal years ending in September which had the greatest exposure (6 months) to the Healthy Michigan Plan (HMP) in their 2014 data (April 1, 2014-September 30, 2014), uncompensated care declined from \$109.2 million in FY2013 to \$97.7 million in FY2014. As a percentage of total expenses, uncompensated care among these hospitals declined from 4.6% in FY2013 to 4.0% in FY2014.

Additional analyses utilizing quarterly data on hospital payer mix from the federal government show immediate changes in Michigan after the implementation of the Healthy Michigan Plan, with a three-percentage-point jump in the proportion of Medicaid hospital discharges and a three-percentage-point drop in the proportion of uninsured discharges. The Medicaid share of hospital discharges rose from 17% in the 1st quarter of 2014 – before HMP – to 20% in the 3rd quarter of 2014. At the same time the uninsured share of discharges fell from 4% to 1%. These changes in payer mix, following a decade in which payer mix shifted very gradually, suggest a significant effect of the Healthy Michigan Plan.

Key findings: §105(d)(9) Insurance premium rates

The analysis of insurance premium rate setting relies on interviews with key informants and data gathered from filings with the Department of Insurance and Financial Services (DIFS) on how the costs of bad debt and charity care are incorporated into the prices negotiated between hospitals and insurers and into premiums set or negotiated between insurers and employers.

Systematic and detailed interviews with Michigan policymakers, employers, health insurers, and providers were conducted to gather data on the potential effects of changes in uncompensated care and the complex internal processes involved in setting premium rates. Based on 29 interviews conducted in 2014 and 56 interviews conducted in 2015 of Michigan employers, health insurers, and health care providers regarding 2013 and 2014 premium rate setting

processes and factors affecting increases in premiums in 2013 and 2014, the most common reasons reported for health plan premium changes included:

- Medical cost increases for pharmacy services were noted from 2013-2014, specifically in HMO plans (ranges from 13% - 42% annual increase), whereas the contribution to premiums from inpatient hospital use remained relatively flat over the two years.
- Changes in demographic and morbidity mix of risk pools
- Affordable Care Act (ACA) regulations, including single risk pool, taxes and fees, benefit redesign, and transparency of premiums in the market. Employers noted planning efforts for the “Cadillac tax,” consideration of private exchanges, consideration of lowering the number of plans offered, and consideration of high deductible plans as examples of their responses to these regulations. These comments were free form or in response to questions on the effect of the ACA.
- Changes in required/mandated 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.

Although the interviews included questions about the effects of the Healthy Michigan Plan in particular, those interviewed did not identify the Healthy Michigan Plan or changes in uncompensated care as having an effect on insurance premium rates or rate setting. Separate probes in the interviews regarding the role of the Healthy Michigan Plan, the ACA, and uncompensated care costs more broadly revealed:

- No identifiable effects of the Healthy Michigan Plan.
- Two respondents indicated that hospital uncompensated care costs should be decreasing over time, but that it was unlikely that these decreases would “trickle down” to premium rates or be technically detectable in changes in premium rates.
- The increasing role of the regulations around the ACA was a concern. Specifically, both large and small employers were particularly concerned about the current and future implementation of ACA regulations on risk pools, penalty payments, and special taxes on plans offered by employers, whether self-funded or fully insured.
- Hospitals reported reexamination of their bad debt and charity care policies post-ACA, market plans, and Medicaid expansion, but they did not note a tie to premium rates.
- Large and small employers were examining approaches to reduce costs of benefits. They specifically mentioned careful plan management, specifically trying to incorporate value based purchasing into existing plans, and designing new plans that favored value-based insurance design principles.
- Large insurers doing business in Michigan believed that their large portfolio of products allowed them to place more emphasis on plan experience (use and costs of services in this or similar markets) than on Medicaid expansion or uncompensated care effects.
- Hospitals and hospital systems reported numerous separately negotiated contracts with payers, with customized discounts to payers.
- Some self-funded employers negotiate directly with health insurers, while others assign this function to third party administrators.
- Small employers find it difficult to understand some of the ACA rules that are pending.

Health Coverage Rates and Rate Reviews

Health insurance relies on the spreading of risk among diverse individuals or groups in order to operate. 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 premium, or the amount paid monthly, quarterly or yearly for the insurance, is then calculated based on claims for medical services, insurer administrative costs and (sometimes) profit.

The Department of Insurance and Financial Services (DIFS) does not set health insurance rates. However, DIFS ensures that all health plans comply with Michigan law and reviews the rates filed by health insurers selling individual plans, group conversion policies, Medicare supplemental policies, small employer group plans, and plans sold by health maintenance organizations. 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.

Health insurers submit their rate filings to DIFS for review. Filings include information regarding recent and projected medical care costs, including any benefit changes; past and future loss ratios (or how much of every premium dollar goes to pay health care claims); current and future administrative costs.

An analysis of the 2014 rate filings shows that increases in medical prices and costs were the most common reason for requesting a rate change (in both raw numbers and percent of filings) 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. Medical cost increases for pharmacy services were noted from 2013-2014, specifically in HMO plans (ranges from 13% - 42% annual increase), whereas the contribution to premiums from inpatient hospital use remained relatively flat over the two years.

Filings in 2013 reported average medical cost trend estimates of 7.3%. Filings in 2014 reported average medical cost trend estimates of 8.7%. 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.

Challenges in quantifying the impact of reductions in uncompensated care and the Healthy Michigan Plan on premium rates

Federal and state economic, health care, regulatory, and political environments impact commercial health insurance in Michigan. The development of health insurance premium rates involves many stakeholders, complex rate setting methodologies and processes, and is subject to changing medical and insurance markets.

Not only are there lags in data regarding uncompensated care provided at hospitals, but premium rates are filed with DIFS in one calendar year for premiums that go into effect the following year. For example, rates filed in 2013 effect premiums in 2014. Rates filed in 2014 effect

premiums in 2015. The Healthy Michigan Plan, implemented in April 2014, would show effects, if any, on experience, trend rates or other premium factors in 2015 filings. 2015 filings are not a part of this post-baseline report.

The academic literature in health economics and health policy does not provide direct theoretical or empirical support for a transfer of the costs of uncompensated care or of shortfalls in Medicare and Medicaid payments to private payers, despite perceptions of the existence of cost shift.¹ Cost shifting has been defined as “the phenomenon in which changes in administered prices of one payer lead to compensating changes in prices charged to other payers.”² Prior research demonstrates that uncompensated care as a share of overall health care costs has remained relatively flat while the private payment to cost ratio has increased, suggesting that factors other than changes in uncompensated care explain changes in private insurance premiums.³

A number of factors contribute to changes in private insurance premiums, with changes in public payer rates and in uncompensated care being just two of these factors. Even in situations where a hospital has a large share of market power, hospitals may employ other strategies rather than increase prices when faced with revenue shortfalls, including cost cutting and “volume shifting,” and lowering private prices to attract more private volume.⁴ Even if cost shifting does occur at its maximum, the amount that would potentially be shifted to employers is less than 3% of private insurance premiums nationally.⁵ The complex interplay of factors that explain changes in private insurance rates, as also noted in the literature, makes it very difficult to attribute changes in insurance premiums to the reductions in uncompensated care resulting from the Healthy Michigan Plan.

Conclusion

Based on hospital cost reports submitted to MDHHS, Michigan hospitals have begun to experience a notable drop in the costs of uncompensated care during the first six months after the Healthy Michigan Plan was implemented in April 2014. Yet rate filings and interviews with key stakeholders do not offer a connection between reductions in uncompensated care and premium rates.

¹ Coughlin TA, Holahan, J, Caswell, K, McGrath, M. Uncompensated care for the uninsured: A detailed examination. Kaiser Family Foundation report. May 30, 2013. Available from: <http://kff.org/report-section/uncompensated-care-for-the-uninsured-in-2013-a-detailed-examination-cost-shifting-and-remaining-uncompensated-care-costs-8596/>

² Ginsburg P. Can hospitals and physicians shift the effects of cuts in Medicare reimbursement to private payers? *Health Aff* [Internet]. 2003;(Web Exclusive):W3–472 to W3–479. Available from: <http://content.healthaffairs.org/content/early/2003/10/08/hlthaff.w3.472.full.pdf>

³ Forslund TO. Cost shifting and the impact of new hospitals on existing markets. Wyoming Department of Health. 2014.

⁴ Frakt A. How much do hospitals cost shift? A review of the evidence. *Milbank Q*. 2011;89(1):90–130.

⁵ Coughlin TA, Holahan, J, Caswell, K, McGrath, M. Uncompensated care for the uninsured: A detailed examination. Kaiser Family Foundation report. May 30, 2013. Available from: <http://kff.org/report-section/uncompensated-care-for-the-uninsured-in-2013-a-detailed-examination-cost-shifting-and-remaining-uncompensated-care-costs-8596/>

§105(d)(8): Uncompensated Care

Introduction

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), now the Department of Health and Human Services (DHHS), to publish annual reports on uncompensated care in Michigan. This section of the report, *The Healthy Michigan Plan: Uncompensated Care*, fulfills the requirement of §105(d)(8).

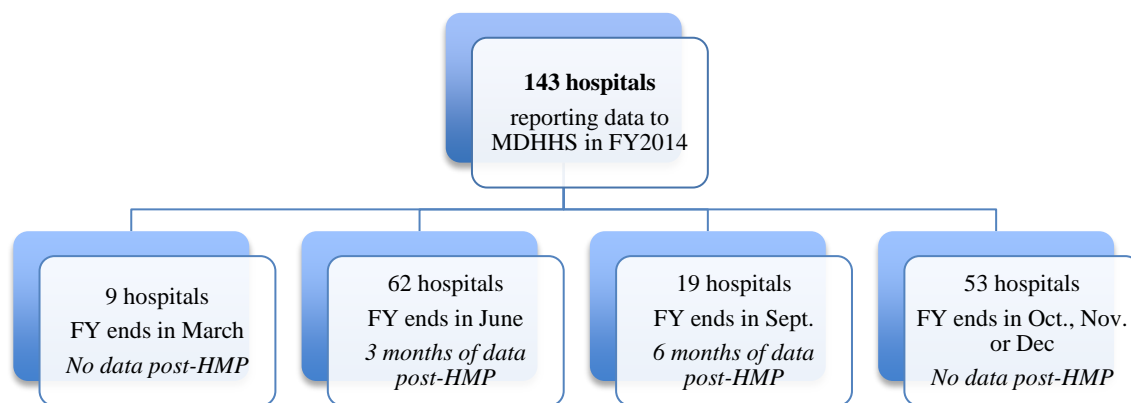
This year's report provides information on uncompensated care at Michigan hospitals reported to the state in 2014 compared with 2013. Because of the timing of hospitals' fiscal years, currently available data provide little information on hospitals' experience since the implementation of the Healthy Michigan Plan in April 2014. For many Michigan hospitals, data that reflect their experience in April 2014 and later will not be available until mid-2016. Because of these data limitations, the analysis was supplemented with trends in hospital payer mix calculated using hospital discharge data from the federal Agency for Healthcare Quality and Research.

Medicaid cost reports: Description of the available data

Cost report data are available for 143 Michigan hospitals for the state's fiscal year 2014. Because the deadline for filing a cost report is tied to the end of a hospital's fiscal year, all hospitals have fiscal years that end between October 1, 2013 and September 30, 2014 in this year's report. This timing is very important, because it means that the data reported to the state in FY2014 reflect *at most* six months of experience after the implementation of the Healthy Michigan Plan. In particular:

- Nine hospitals had fiscal years ending in March. These hospitals reported data for the period April 1, 2013 through March 30, 2014, a period during which the Healthy Michigan Plan had not yet been implemented.
- Sixty-two hospitals had fiscal years ending in June. These hospitals reported data for the period July 1, 2013 through June 30, 2014, so that only three months of this twelve-month period were after the implementation of the Healthy Michigan Plan.
- Nineteen hospitals had fiscal years ending in September. These hospitals reported data for the period October 1, 2013 through September 30, 2014, so that only six months of this twelve-month period were after the implementation of the Healthy Michigan Plan.
- Fifty-three hospitals had fiscal years ending in October, November, or December. These hospitals reported data for the period November 2012 through October 2013, December 2012 through November 2013, or January through December 2013. As a result, the data reported to the state by these hospitals for FY2014 do not include any months after the implementation of the Healthy Michigan Plan.

The following figure summarizes the number of hospitals in the data and the number of months in their 2014 report that reflects cost experience following the implementation of the Healthy Michigan Plan:



Because hospitals have different amounts of “exposure” to the Healthy Michigan Plan in the data that are reported to the state for FY2014 – including nearly half of them for which none of the data they report reflect expenses incurred after the implementation of the Healthy Michigan Plan – this analysis will show results on changes in uncompensated care that are stratified by the months of “exposure” for each hospital.

Medicaid cost reports: Description of uncompensated care

As in our baseline reports, 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. Both types of uncompensated care may arise from patients who are uninsured or from those who are under-insured and unable to afford deductibles or other cost-sharing required by their insurance plans when they receive hospital care. For more information on the definition of uncompensated care, please see Appendix B.

Medicaid cost reports: Uncompensated care in FY2014 compared with FY2013

Michigan hospitals provided **\$1.08 billion in uncompensated care in FY2014, compared with \$1.15 billion in FY2013**, a reduction of 5.4 percent. As a percentage of total hospital expenses, uncompensated care declined from 5.1% in FY2013 to 4.6% in FY2014. See Table 1 for these results. Appendix C provides uncompensated care data for each hospital in the state.

Separating hospitals into groups based on how much post-HMP experience is included in their 2014 cost report shows that uncompensated care either did not change or increased slightly for the hospitals that had no post-HMP experience in their FY2014 data and declined for hospitals reporting some post-HMP experience. More specifically:

Hospitals with no post-HMP Experience

- Focusing on the 53 hospitals for which the 2014 fiscal year ended in October, November, or December of 2014, and which therefore had no post-HMP experience in their FY2014 cost report, uncompensated care increased slightly between FY2013 and FY2014 in dollar terms – from \$469.7 million to \$474.8 million – and remained the same (5.4% in both years) as a percent of total hospital expenses.
- Focusing on the nine hospitals for which the 2014 fiscal year ended in March 2014, and which therefore had no post-HMP experience in their FY2014 cost report, uncompensated care increased slightly between FY2013 and FY2014 in dollar terms – from \$19.8 million to \$20.8 million – and remained relatively flat as a percent of total hospital expenses (4.6% in FY2013 and 4.7% in FY2014).

Hospitals with some post-HMP Experience

- Focusing on the 62 hospitals for which the 2014 fiscal year ended in June 2014, and who therefore had three months of post-HMP experience in their FY2014 cost report, uncompensated care declined from \$553.0 million in FY2013 to \$482.8 million in FY2014. As a percentage of total expenses, uncompensated care among these hospitals declined from 4.9% in FY2013 to 4.2% in FY2014.
- Focusing on the 19 hospitals for which FY2014 ended in September 2014, and which therefore had six months of post-HMP experience in their FY2014 cost report, uncompensated care declined from \$109.2 million in FY2013 to \$97.7 million in FY2014. As a percentage of total expenses, uncompensated care among these hospitals declined from 4.6% in FY2013 to 4.0% in FY2014.

To summarize the changes in uncompensated care between the 2013 and 2014 cost reports, for the hospitals that have no post-HMP experience in their 2014 cost report, there was a small increase in the dollar amount of uncompensated care provided and no change when uncompensated care is expressed as a percentage of total hospital expenses. For hospitals with three or six months of post-HMP experience in their 2014 cost report, we see small declines - about six-tenths or seven-tenths of a percentage point, when uncompensated care is expressed as a percentage of total hospital expenses. These patterns suggest that the Healthy Michigan Plan may be starting to reduce uncompensated care in Michigan, but a more definite result will require data on hospitals' experience later in 2014 and in 2015. These data will become available in mid-2016.

Trends in hospital payer mix

Trends in payer mix for inpatient stays in Michigan were analyzed using data from the Healthcare Cost and Utilization Project (HCUP) Fast Stats, a new online database query tool created by the Agency for Healthcare Research and Quality that reports counts of adult hospital

discharges by calendar quarter at the state level. (Available at: <https://www.hcup-us.ahrq.gov/faststats/statepayer/states.jsp>; accessed on 8/31/2015). The underlying data for the Fast Stats tool are drawn from state hospital discharge databases participating in the HCUP which contain information on all discharges in the state. The HCUP Fast Stats tool provides state-level data aggregated by age and primary expected source of payment (Medicaid, private insurance, Medicare, uninsured). Forty-one states including Michigan participate in HCUP Fast Stats; data for Michigan are available through the third quarter of 2014.

Trends for Michigan are presented graphically in Figure 1; the raw data underlying this figure are provided in Appendix D. The Medicaid share of hospital discharges rose from 17% in the 1st quarter of 2014 – before HMP – to 20% in the 3rd quarter of 2014. At the same time the uninsured share of discharges fell from 4% to 1%. The private share of discharges, which had declined steadily between 2003 and the end of 2013, leveled off at 30% after HMP went into effect, and the Medicare share of discharges remained just under 50%. These sharp changes in payer mix, following a decade in which payer mix shifted very gradually, suggest a significant effect of the Healthy Michigan Plan.

Conclusion

This is the second in a series of annual reports analyzing changes in uncompensated care following the implementation of the Healthy Michigan Plan. This year's report presents a comparison between hospital uncompensated care reported to the state in fiscal year 2013 – well before the implementation of the Healthy Michigan Plan in April 2014 – and in fiscal year 2014. As described in detail above, the fiscal year 2014 data represent a somewhat awkward mix of hospitals reporting their cost experience for a period before the Healthy Michigan Plan had been implemented and hospitals that are reporting their cost experience for a period that was partially, but not entirely, after the implementation of the Healthy Michigan. The patterns in the data – very small increases in uncompensated care between 2013 and 2014 for hospitals that report data largely prior to the Healthy Michigan Plan and small declines for hospitals with more exposure to Healthy Michigan – are consistent with an effect of Healthy Michigan on hospital uncompensated care, but a definitive answer will require data that will become available in mid-2016.

In the meantime, quarterly data on hospital payer mix from the federal government show immediate changes in Michigan after the implementation of the Healthy Michigan Plan, with a three-percentage-point jump in Medicaid hospital stays and a three-percentage-point drop in the fraction uninsured. This pattern strongly suggests that in future years, uncompensated care will decline as a result of the Healthy Michigan Plan.

Table 1
Hospital Uncompensated Care by Fiscal Year and Fiscal Month End

Fiscal year end:	Total Uncompensated Care (Millions of \$)		Uncompensated Care as a % of Total Hospital Expenses		No. of Hospitals		Months of Post-HMP Experience in 2014 report
	2013	2014	2013	2014	2013	2014	
Oct., Nov., or Dec. ^a	\$469.7	\$474.8	5.4%	5.4%	50	53	0
March ^b	\$19.8	\$20.8	4.6%	4.7%	9	9	0
June ^c	\$553.0	\$482.8	4.9%	4.2%	62	62	3
Sept ^d	\$109.2	\$97.7	4.6%	4.0%	19	19	6
Total	\$1,151.6	\$1,076.0	5.1%	4.6%	140	143	

Notes:

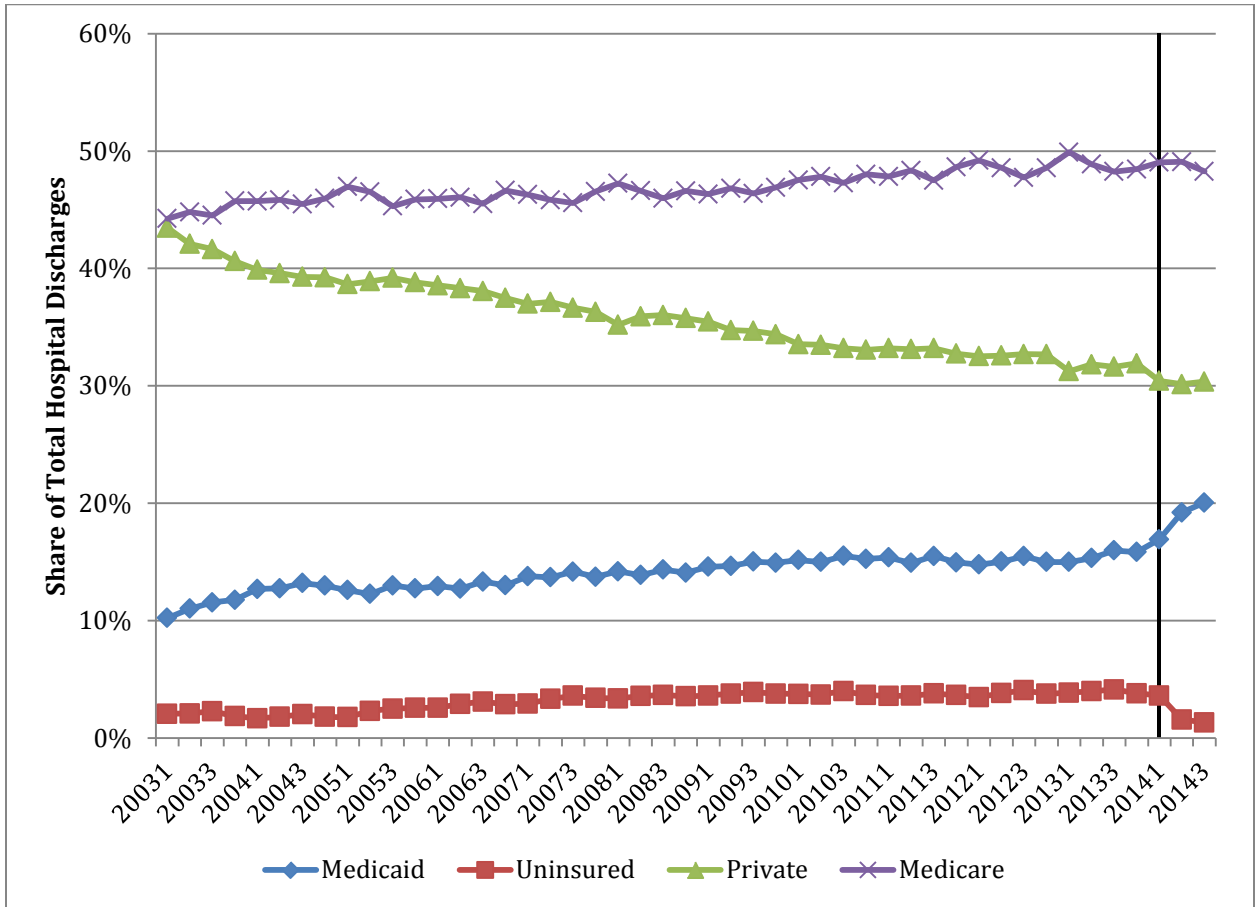
a. For these hospitals, the report submitted to the state in FY2014 describes costs from November 2012 through October 2013, December 2012 through November 2013, or January through December 2013, and in any of these cases includes zero months of post-HMP experience.

b. For these hospitals, the report submitted to the state in FY2014 describes costs from April 2013 through March 2014, and therefore includes zero months of post-HMP experience.

c. For these hospitals, the report submitted to the state in FY2014 describes costs from July 2013 through June 2014, and therefore includes three months of post-HMP experience.

d. For these hospitals, the report submitted to the state in FY2014 describes costs from October 2013 through September 2014, and therefore includes six months of post-HMP experience.

Figure 1: Payer mix in Michigan for non-Medicare adult discharges



Source: AHRQ FastStats, Hospital Cost & Utilization Project. The black line indicates the 1st quarter of 2014.

§105(d)(9): Insurance Premium Rates

Background

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 do not include the detailed information required to determine the contribution of uncompensated care to rates, even for fully 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. Although DIFS and MDHHS collect data supporting their functions and mandates, they do not have access or authority to collect detailed data from those proprietary contracts.

Furthermore, the academic literature in health economics and health policy does not provide direct theoretical or empirical support for a transfer of the costs of uncompensated care or of shortfalls in Medicare and Medicaid payments to private payers, despite perceptions of the existence of cost shift.¹ Cost shifting has been defined as “the phenomenon in which changes in administered prices of one payer lead to compensating changes in prices charged to other payers.”² Prior research has found uncompensated care as a share of overall health care costs has remained relatively flat while the private payment to cost ratio has increased, suggesting that factors other than changes in uncompensated care explain changes in private insurance premiums.³

A number of factors contribute to changes in private insurance premiums, with changes in public payer rates and in uncompensated care just two of these factors. Even in situations where a hospital has a large share of market power, hospitals may employ other strategies rather than increase prices when faced with revenue shortfalls, including cost cutting and volume shifting,

¹ Couglin TA, Holahan, J, Caswell, K, McGrath, M. Uncompensated care for the uninsured: A detailed examination. Kaiser Family Foundation report. May 30, 2013. Available from: <http://kff.org/report-section/uncompensated-care-for-the-uninsured-in-2013-a-detailed-examination-cost-shifting-and-remaining-uncompensated-care-costs-8596/>

² Ginsburg P. Can hospitals and physicians shift the effects of cuts in Medicare reimbursement to private payers? Health Aff [Internet]. 2003;(Web Exclusive):W3–472 to W3–479. Available from: <http://content.healthaffairs.org/content/early/2003/10/08/hlthaff.w3.472.full.pdf>

³ Forslund TO. Cost shifting and the impact of new hospitals on existing markets. Wyoming Department of Health. 2014.

and lowering private prices to attract more private volume.⁴ Even if cost shifting does occur, at its maximum the amount that would potentially be shifted to employers is less than 3% of private insurance premiums nationally.⁵ The complex interplay of factors that explain changes in private insurance rates, as also noted in the literature, makes it very difficult to attribute changes in insurance premiums to the reductions in uncompensated care resulting from the Healthy Michigan Plan.

This next section of the report provides an analysis of the data available from rates filed with DIFS and interviews with key informants to help inform understanding at baseline (2013) and in 2014 of insurance rates and rate changes prior to and in the year of implementation of the Healthy Michigan Plan. Rate filings and interviews with employers revealed that the Healthy Michigan Plan was not noted as a factor affecting changes in premiums in 2013 and 2014.

Introduction

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. This section of the report, *The Healthy Michigan Plan: Insurance Premium Rates*, fulfills the requirement of §105(d)(9) to report on the contribution of uncompensated care on premium rates in the year following implementation of the Healthy Michigan Plan using two sources of data:

- Key informant interviews and reports with employers, health insurers, and health care providers;
- Analysis of the rate filings from 2014 submitted to the Michigan Department of Insurance and Financial Services (DIFS) 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.

Definitions and factors that determine premiums

As defined previously in §105(d)(8) and in Appendix B 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 unpaid 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 unpaid medical care for which there was an expectation of payment because the patient was deemed to be able to pay for care.

⁴ Frakt A. How much do hospitals cost shift? A review of the evidence. *Milbank Q.* 2011;89(1):90–130.

⁵ Coughlin TA, Holahan, J, Caswell, K, McGrath, M. Uncompensated care for the uninsured: A detailed examination. Kaiser Family Foundation report. May 30, 2013. Available from: <http://kff.org/report-section/uncompensated-care-for-the-uninsured-in-2013-a-detailed-examination-cost-shifting-and-remaining-uncompensated-care-costs-8596/>

Health insurance relies on the spreading of risk among diverse individuals or groups in order to operate. 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, small group plans, and large group plans):

- **Individual Plans** (for those who purchase their coverage directly from an insurer, 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

DIFS requires that all health plans comply with Michigan law and reviews the rates filed by health insurers 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. See the DIFS Health Coverage Rates and Rate Reviews website for more information: http://www.michigan.gov/difs/0,5269,7-303-12902_35510-

[113481--00.html](#). As a result of the Affordable Care Act, health insurers must inform the public when they want to increase premium rates for individual and small group policies by an average of 10% or more.

DIFS does not review the rates for government entities, commercial large group plans (coverage through an employer with more than 50 employees), or self-insured employers (health benefits provided by an employer with its own funds, also known as “self-funding” as described here: <http://www.ebri.org/pdf/publications/books/databook/dbchpt28.pdf>).

As noted in Table 2 below, approximately 60% of private sector enrollees in Michigan organizations offering health insurance are in self-insured plans. As noted, the DIFS filings or other reporting mechanisms *do not* capture this segment of the market.

Table 2
Percentage of Private–Sector Enrollees in Self-Insured Plans at Establishments Offering Health Insurance, by Firm Size from 2011 from the Employee Benefit Research Institute

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 %

Limitations

Federal and state economic, health care, regulatory, and political environments impact commercial health insurance in Michigan. Setting and implementing health insurance premium rates involves large numbers of stakeholders, complex rate setting methodologies and processes, and propriety information, and health insurance premium rates 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 are among the myriad of factors that cannot be fully isolated or easily measured, thus making it difficult, if not impossible, to attribute changes in health insurance premiums to changes in uncompensated care related to Medicaid expansion through the Healthy Michigan Plan.

It is important to consider the timing of a plan’s filings, subsequent (if approved) premium rate changes, and the implementation of the Healthy Michigan Plan. In most cases, rates are filed with DIFS in the year before the premiums go into effect. For example, rates filed in 2013 affect premiums in 2014, and rates filed in 2014 affect premiums in 2015. The Healthy Michigan Plan, implemented in April 2014, would show effects, if any, on experience, trend rates or other premium factors in 2015 filings. Filings in 2015 are not a part of this post-baseline report but will be available for next year’s report.

There is no single source of data that provides all necessary elements for analysis. The baseline report relied on 2013 information gathered from interviews with providers, insurers, employers,

and actuaries in 2014 and rate filings with the Michigan DIFS in 2013. This first post-baseline report relies on 2014 information gathered from interviews conducted in 2015 and rate filings with the Michigan DIFS in 2014.

Key Informant Interviews

Overview

Systematic and detailed interviews with Michigan policymakers, employers, health insurers, and providers were conducted to gather data on the complex internal processes involved in setting premium rates, and understanding changes in uncompensated care. There is no centralized data source for self-insured employers with regard to the premium rate changes or underlying reasons for those changes. The best available sources of information are from the Kaiser Family Foundation and the Employer Benefits Research Institute (EBRI) which produce periodic overviews using national data, with some reports summarized by state or region. See http://www.ebri.org/pdf/notespdf/ebri_notes_11_nov-12.slf-insrd1.pdf for more information.

Sample frame and size

Although a small sample of employers cannot be representative of the state's business types, locations, size, industry, or insurance behaviors, by examining the Census and other data noted above, we sought to include comments from employers from across the state who could contribute unique and varying perspectives that might be associated with public and employer opinion on the impact of HMP on health coverage in Michigan.

The Michigan Care Improvement Registry (MCIR) groups Michigan counties into six regions (<https://www.mcir.org/>). Key informant interviews for the 2014 report used a convenience sample, loosely stratified by all six MCIR geographic regions with additional targeting in the southeast and southwest markets with the highest number of HMP enrollees, and a range of industry codes across the state. Data are available by county for total number of firms and enterprises and by size of firm in four categories (< 20, 20-99, 100-499, 500+employees). The United States Census Bureau provides interactive datasets that allow for an accounting of the number of firms, categorized by industry types, and county.

The initial interviews for the 2013 baseline report were conducted with 29 Michigan-based employers. The target number of contacts for this report was 60 firms, resulting in completed interviews with 56 employers located in all MCIR sections of the state. Given the Institutional Review Board (IRB) conditions of approval, no firms are identified by name in this report.

Interview topics

The interviews for both the baseline report and this report focused on the following topics:

- Processes for determining premium rates
- Current or planned changes in benefit plans/offerings
- Changes in premium rates/contributors to changes
- Current or planned benefit or coverage options, premiums by market

- Role of Medicaid coverage in site insurance offerings, price, continuance
- Role of ACA, HMP, and uncompensated care in premium setting behavior or planning

No specific questions about the role of Disproportionate Share Hospital (DSH) payments in premium setting behavior or planning were asked in 2015, but this topic will be addressed in 2016.

Interviews findings

Although the interviews included specific questions regarding the effects of the Healthy Michigan Plan, those interviewed did not identify the Healthy Michigan Plan or changes in uncompensated care as affecting insurance premium rates. Separate probes regarding the role of the Healthy Michigan Plan, the ACA and uncompensated care costs, or as part of the conversation revealed:

- No identifiable effects of the Healthy Michigan Plan.
- Two respondents indicated that hospital uncompensated care costs should be decreasing over time, but that it was unlikely that these decreases would “trickle down” to premium rates or be technically detectable in changes in premium rates.
- The increasing role of the regulations around the ACA was a concern. Specifically, both large and small employers were particularly concerned about the current and future implementation of ACA regulations on risk pools, penalty payments, and special taxes on plans offered by employers, whether self-funded or fully insured.
- Hospitals reported reexamination of their bad debt and charity care policies post-ACA, market plans, and Medicaid expansion, but they did not note a tie to premium rates.
- Large and small employers were examining approaches to reduce costs of benefits. They mentioned careful plan management, specifically trying to incorporate value based purchasing into existing plans, and designing new plans that favored value-based insurance design principles.
- Large insurers doing business in Michigan believed that their large portfolio of products allowed them to place more emphasis on plan experience (use and costs of services in this or similar markets) than on Medicaid expansion or uncompensated care effects.
- Hospitals and hospital systems reported numerous separately negotiated contracts with payers, with customized discounts to payers.
- Some self-funded employers negotiate directly with health insurers, while others assign this function to third party administrators.
- Small employers find it difficult to understand some of the ACA rules that are pending.

Based on 2014 and 2015 interviews of Michigan employers, health insurers, and health care providers concerning 2013 and 2014 premium rate setting processes and factors affecting increases in premiums in 2013 and 2014, the most common reasons reported for health plan premium changes as reported in the interviews are:

- Medical cost increases for pharmacy services were noted from 2013-2014, specifically in HMO plans (ranges from 13% - 42% annual increase), whereas the contribution to premiums from inpatient hospital use remained relatively flat over the two years.
- Changes in demographic and morbidity mix of risk pools
- Affordable Care Act (ACA) regulations, including single risk pool, taxes and fees, benefit redesign, and transparency of premiums in the market. Employers noted planning

efforts for the “Cadillac tax,” consideration of private exchanges, consideration of lowering the number of plans offered, and consideration of high deductible plans as examples of their responses to these regulations. These comments were free form or in response to questions on the effect of the ACA.

- Changes in required/mandated 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.

This information gained from the interviews, while informative, is of limited value in illustrating the methodology around premium changes for several reasons:

- There are many individuals and groups involved in setting rates.
- The information on the relationships between costs, charges, and premiums is often proprietary.
- 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.
- For the most part, rates are filed with DIFS in one calendar year for premiums that go into effect the following year. For example, rates filed in 2013 affect premiums in 2014. Rates filed in 2014 affect premiums in 2015. The Healthy Michigan Plan, implemented in April 2014, would show effects, if any, on experience, trend rates, or other premium factors in 2015 filings. 2015 filings are not a part of this post-baseline report.
- There is no single source of data that provides all necessary elements for analysis.

Data sources

Filings report several factors in setting their premium rates. The state requires that filings include the actuarial methods and data used. Often, this section of the filings is noted as “Confidential/ Proprietary/ Trade Secret.” Many insurers 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.

The public access System for Electronic Rate/Form Filing (SERFF) portal was used to retrieve all filings for 2013 and 2014. (SERFF Filing Search Portal:

<https://filingaccess.serff.com/sfa/home/MI>)

Rate filings consist of detailed and comprehensive reporting forms for each product; these include filing notes, correspondence, disposition forms, and numerous 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 insurers, 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 in “memos” or as separate data, or annotated data tables. The size of

the files and significant amount 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 and analyzed from each 2013 and 2014 filing for which a change (negative or positive) in rates was requested. The complete list of abstracted elements appears in Appendix F:

- 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

Summary of rate filing analysis

The analysis of rate filings provided below only includes those health insurance insurers that noted any change (increases and decreases) in premium rates. New products were also excluded due to the absent experience period. Please see Appendix E for tables and charts further illustrating this analysis.

This report finds, based on an analysis of 2013 and 2014 DIFS rate filings *with changes in premium rates*:

- 54 health insurer filings for premium rate changes, 4 of which noted a decrease in 2013; 44 filings in which 8 noted a decrease in premiums in 2014.
- Percent change requested (average): 2013: 7.55%; 2014: 5.77%
- 42 large group, 2 small group, and 10 individual filings were made for premium rate changes in 2013; 19 Large group, 18 Small group, 7 Individual markets in 2014
- 36 HMO, 10 Major Medical, 7 PPO, 1 Point of Service plan products filed for premium rate changes in 2013; 22 HMO, 8 MM, 12 PPO, 2 POS in 2014
- 2013 data had many more Large Group filings than Small Group filings, whereas 2014 was more balanced. 2013 had almost no Small Group filings.
- Rate change requests do not appear to differ dramatically. There were fewer very high rate change requests in 2014 than in 2013 (above 10%); the reasons given for changes are relatively consistent across the years, except for Medical Costs. Medical Costs as a reason for premium rate increases were found in 60% more filings in 2013 than in 2014 (46 filings vs. 29 filings).
- In 2014, filings noting Benefits as a reason were disproportionately from Large Groups. Otherwise, there were no significant trends by market.
- In both years, HMOs were disproportionately more likely to cite Benefits as a reason with a larger difference in 2014.
- Medical Cost Trend Rate was higher in 2014 than in the baseline year. (7.33%, 8.70%). The higher Medical Cost Trend rates tended to be in Large and Small Groups filings, rather than Individual markets. The distribution of Medical Cost Trend rates reported by Large Groups was much wider and more varied in 2014 than in 2013.
- Filings reporting high Medical Cost Trend rates tended to be from HMOs and MMs in both years.

- Highest Medical Cost Trend Rates were found in the Major Medical products in both years (9.64%, 13.37%)
- Medical cost increases for pharmacy services were noted from 2013-2014, specifically in HMO plans (ranges from 13% - 42% annual increase), whereas the contribution to premiums from inpatient hospital use remained relatively flat over the two years.

There were 54 requests for rate filing changes in 2013 and 44 requests for rate filing changes in 2014. The most common reasons for requesting rate change by number of filings (2013, 2014):

- **Medical Costs:** Changes in prices and costs of medical services (N=46, 30)
- **Utilization of Services:** Increases in use of medical and health services, increase in intensity of services (N=28, 28)
- **Benefits:** Changes in benefit design, plan features, out of pocket costs, provider networks (N=24, 21)
- **ACA:** Changes in required benefits, medical loss ratios, single risk pools, taxes, fees (N=20, 24)
- **Morbidity:** Changes in the extent and types of disease or illness within the intended pool of covered individuals (N=8, 10)
- **No respondents cited changes in uncompensated care to hospitals or reduction in uncompensated care costs as a contribution to premium rates in either year (N=0,0)**

Increases in medical prices and costs were the most common reason for requesting a rate change (in raw numbers and percent of filings) 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. As noted above, medical cost increases for pharmacy services were an important factor in requests for premium rate increases, particularly in HMO plans, but changes in inpatient hospital use were not a major factor cited in premium increases over the past two years.

Filings in 2013 reported average medical cost trend estimates of 7.3%; in 2014, 8.7%. 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.

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, if not impossible, to attribute changes to the Healthy Michigan Plan.

Conclusion

Based on hospital cost reports submitted to MDHHS, Michigan hospitals have begun to experience a notable drop in the costs of uncompensated care during the first six months after the Healthy Michigan Plan was implemented in April 2014. Yet rate filings and interviews with key stakeholders do not offer a connection between reductions in uncompensated care and premium rates.

Appendix A: Literature Review on Cost Shifting

Governmental reports

1. Key issues in analyzing major health insurance proposals. [Internet]. Congress of the United States Congressional Budget Office. 2008 [cited 2014 Nov 21]. p. 112. Available from: <http://www.cbo.gov/sites/default/files/12-18-keyissues.pdf>

This CBO report notes that cost shifting can only occur under certain conditions. One example is limited competition in which an isolated community is served by a single hospital or in a competitive provider market to offset the costs of uncompensated care or to make up for low public payment rates. Uncompensated care and low payment rates from public programs may result in hospitals reducing their costs by providing care that is less intensive or of lower quality.

2. Forslund TO. Cost shifting and the impact of new hospitals on existing markets. Wyoming Department of Health. 2014.

In its analysis of cost shifting in Wyoming, the Wyoming Department of Health reached two conclusions: First, cost shifting is one of three potential strategies that hospitals can pursue in the face of revenue shortfalls. Two other strategies, including cost cutting and “volume shifting” or lowering private prices to attract more private volume, may also be used. Second, hospitals’ ability to cost shift depends on their market power. This analysis of Wyoming data supports the conclusion that hospital market concentration is one of the more significant factors driving prices paid by the private sector. Market power is more strongly associated with changes in private prices than uncompensated or unreimbursed care. However, the report notes that just because a hospital has more market power does not necessarily mean that they engage in cost shifting.

Reviews of the literature and observable trends

1. Frakt AB. How much do hospitals cost shift? A review of the evidence. *Millbank Q*; 2011; 89(1): 90-130.

In reviewing the evidence on cost shifting through 2011, Frakt notes that policymakers should view with skepticism hospital and insurance industry commentary on the existence of inevitable, visible, or large-scale cost shifting. Some cost shifting may be caused by changes in public payment policy, but this is one of many possible effects on private insurance prices. Rather the author cautions that changes in the balance of market power between hospitals and health insurers which result in consolidation can have a significant impact on private insurance rates.

2. Coughlin TA, Holahan, J, Caswell, K, McGrath, M. Uncompensated care for the uninsured: A detailed examination. Kaiser Family Foundation. May 30, 2013. Available from: <http://kff.org/report-section/uncompensated-care-for-the-uninsured-in-2013-a-detailed-examination-cost-shifting-and-remaining-uncompensated-care-costs-8596/>

This Kaiser Family Foundation report notes that there is limited evidence to indicate that increases in uncompensated care have caused hospitals to increase their charges for those with

private insurance. The report notes that even as the uninsured rate grew over the past two decades, hospitals' uncompensated care as a share of overall cost has remained steady. Further, the private payment to cost ratio has steadily increased since 2001, which suggests that the rise in private surpluses is related to other forces, not a result of the cost of care provided to the uninsured. The authors estimate that in 2013, \$21.1 billion in providers' uncompensated care costs could be financed by private insurance in the form of higher payments and ultimately higher insurance premiums. Total private health insurance expenditures in 2013 are estimated to be \$925.2 billion, so the amount potentially associated with uncompensated care cost shift would be 2.3% of private health insurance costs in 2013. The authors note that even if the \$21.1 billion estimate is an underestimate by a wide margin, the potential cost shift from uncompensated care would account for only 4.6% of private health insurance in 2013.

3. Lee J, Berenson R, Mayes R, Gauthier A. Medicare payment policy: Does cost shifting matter? *Health Aff.* 2003;22(3):W3-480.

The authors examine cost shifting through the lens of Medicare payment policy and state that the extent to which cost shifting impacts private payers and hospitals is a result of their market power and the amount of revenue in the system. Medicare payment policy is based on responsibility to patients as well as supporting the public good. Payment rates are influenced by interest groups and budgetary considerations. The majority of the time Medicare payments cover their responsibilities to Medicare patients and the community. However, if providers' prices rise, and neither public nor private payers' compensation follows suit, consumers pay more. The result is that people lose coverage, which the authors note is the ultimate cost shift.

Theoretical understandings of cost shift

1. Dobson A, DaVanzo J, Sen N. The cost-shift payment "hydraulic": Foundation, history, and implications. *Health Aff.* 2006;25(1):22-33.

This paper reviews empirical examples of cost shift that show a correlation between lower Medicaid reimbursements and higher private insurance premiums leading to the explanation of cost shift as a potential explanation for increase in private premiums. In reality, the authors note that the potential for cost shift varies greatly over time and across health care markets. Hospitals can absorb some degree of cost shifting pressure through increases in efficiency and decreases in service intensity.

2. Frakt A. The end of cost shifting and the quest for hospital productivity. *Health Serv Res.* 2014;49(1):1-10.

This article explores the ways hospitals may respond to reductions in Medicare payments. Frakt describes cost shifting as one hypothesis for the ways in which hospitals may attempt to gain revenue in the face of declining Medicare payments. However, hospitals can also raise private prices commensurate with their market power in the absence of a public payment shortfall. Frakt notes that although there are circumstances under which hospitals could and did cost shift at high rates, recent research suggests that it is a far less pervasive phenomenon today.

3. Ginsburg P. Can hospitals and physicians shift the effects of cuts in Medicare reimbursement to private payers? *Health Aff* [Internet]. 2003;(Web Exclusive):W3-472 to W3-479. Available from: <http://content.healthaffairs.org/content/early/2003/10/08/hlthaff.w3.472.full.pdf>

This paper attempts to reconcile the different thinking between health care executives and economists regarding cost shifting. The potential for cost shifting varies according to structural factors that in turn vary by time and geography, and while Ginsburg says there is a theoretical basis exists for cost shifting, he shows other models where hospitals have room to adjust before cost shifting occurs.

4. Santerre R. The welfare loss from hospital cost-shifting behavior: A partial equilibrium analysis. *Health Econ*. 2005;14(6):621-6.

Microeconomic theory suggests that cost shifting can take place under specific conditions, and empirical studies indicate that cost shifting may have occurred in certain instances. This study models potential welfare loss caused by hospital cost shifting under ideal yet possible conditions.

Empirical studies

1. Friesner D, Rosenman R. Cost shifting revisited: The case of service intensity. *Health Care Manag Sci*. 2002;5(1):15-24.

This research found support for cost shift in some nonprofit hospitals in California 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 may be utilized as an alternative to cost shifting.

2. Garthwaite C, Gross T, Notowidigdo MJ. Hospitals as insurers of last resort [Internet]. NBER Working Paper. 2015. Available from: <http://www.nber.org/papers/w21290>

The authors used previously confidential hospital financial data obtained through a research partnership with the American Hospital Association from 1984 to 2011 to study uncompensated care provided by hospitals and found that the uncompensated care costs for hospitals increase in response to the size of the uninsured population. They found that each additional uninsured person costs local hospitals \$900 each year in uncompensated care. Nonprofit hospitals were found to be more exposed to changes in demand for uncompensated care. The closure of a nearby hospital increases the uncompensated care costs of remaining hospitals. Increases in the uninsured population were found to lower hospital profit margins, which suggests that hospitals cannot or do not pass along all increased costs onto patients with private insurance.

3. Showalter M. Physicians' cost shifting behavior: Medicaid versus other patients. *Contemp Econ Policy*. 1997;15(2):74-84.

This article examines whether physicians practice cost shifting. This study found, in contradiction to cost shift, that lower Medicaid reimbursement rates resulted in physicians

charging lower fees to privately insured patients though evidence also suggests that lower Medicaid reimbursements tend to cause physicians to treat fewer Medicaid patients.

4. White C. Contrary to cost-shift theory, lower Medicare hospital payment rates for inpatient care lead to lower private premium rates. *Health Aff.* 2013;32(5):935–43.

Policymakers believe when Medicare constrains its payment rates for hospital inpatient care, private insurers pay higher rates. This demonstrates that slow growth in Medicare inpatient hospital payment rates also results in 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 at a time of lower Medicare payments. Hospitals facing cuts in Medicare payment rates may also reduce the payment rates they seek from private payers to attract more privately insured patients.

5. Wu V. Hospital cost shifting revisited: new evidence from the Balanced Budget Act of 1997. *Int J Healthc Financ Econ.* 2010;10(1):61–83.

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

6. Zwanziger J, Bamezai A. Evidence of cost shifting in California hospitals. *Health Aff.* 2006;25(1):197–203.

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

Appendix B: Data Elements for Calculating Uncompensated Care and Discharges

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 MDHHS for the purposes of determining Disproportionate Share Hospital (DSH) 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 MDHHS and used to convert charges for care provided to insured 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.

Data elements and methods for calculating hospital discharges

The data for hospital case mix come from HCUP Fast Stats, an online database query tool that reports counts of adult hospital discharges by calendar quarter at the state level.⁷ The underlying data for the Fast Stats tool are drawn from state hospital discharge databases participating in the Healthcare Cost and Utilization Project (HCUP), which contain information on all discharges in the state, covering over 95 percent of inpatient hospitalizations. The HCUP Fast Stats tool provides state-level data aggregated by age and primary expected source of payment (Medicaid, private, Medicare, uninsured). Forty-one states participate in HCUP Fast Stats; at the time of this writing, data for Michigan are available through the third quarter of 2014.

Hospital discharges are defined in the following ways:

1. Medicaid Share of Discharges

The Medicaid share of discharges was calculated by dividing Medicaid discharges by the total number of discharges. Medicaid discharges were defined as inpatient stays for which Medicaid was listed as the expected source of payment and include patients aged 19 to 64 (or 19 to 45 for maternity care discharges).

2. Uninsured Share of Discharges

The uninsured share of discharges was calculated by dividing uninsured discharges by the total number of discharges. Uninsured discharges were defined as inpatient stays for which the expected primary payer was self-pay, charity, no charge, Indian Health Services, county indigent, migrant health programs, Ryan White Act, Hill-Burton Free Care, and other State or local programs for the indigent that are not insurance programs and included patients aged 19 to 64 (or 19 to 45 for maternity care discharges).

3. Private Share of Discharges

Private share of discharges was calculated by dividing private discharges by the total number of discharges. Private discharges were defined as inpatient stays for which private insurance was listed as the expected source of payment and include patients aged 19 to 64 (or 19 to 45 for maternity care discharges).

4. Medicare Share of Discharges

Medicare share of discharges was calculated by dividing Medicare discharges by the total number of discharges. Medicare discharges were defined as inpatient stays for which Medicare was listed as the expected source of payment.

Appendix C: FY2013 vs FY2014 Uncompensated Care Data by Hospital

Hospital Name	CMS ID	Uncompensated Care Cost (\$M)		Uncompensated Care Ratio to Net Expenses (%)		Hospital Type
		2013 Extract	2014 Extract	2013 Extract	2014 Extract	
Fiscal year ends in October, November, or December						
Huron Valley - Sinai Hospital	277	\$6.4	\$8.6	4.5%	5.7%	General Acute Care
Rehabilitation Institute	3027	\$2.0	\$1.5	2.7%	1.9%	Rehabilitation
Straith Memorial Hospital	71	\$0.0	\$0.0	0.4%	0.3%	General Acute Care
Portage Health Hospital	108		\$1.1	0.0%	1.9%	General Acute Care
Allegan General Hospital	1328	\$2.2	\$1.7	5.6%	4.6%	Critical Access
BCA StoneCrest Center	4038	\$0.2	\$0.1	1.2%	0.8%	Psychiatric
Beaumont Hospital, Grosse Pointe	89	\$8.0	\$9.0	5.0%	5.6%	General Acute Care
Beaumont Hospital, Royal Oak	130	\$34.5	\$45.9	3.1%	4.1%	General Acute Care
Beaumont Hospital, Troy	269	\$18.9	\$19.3	3.9%	3.9%	General Acute Care
Botsford Hospital	151	\$20.9	\$16.4	8.9%	6.9%	General Acute Care
Bronson Battle Creek Hospital	75	\$15.7	\$15.3	9.0%	8.5%	General Acute Care
Bronson Lake View Hospital	1332	\$1.9	\$2.8	4.0%	6.2%	Critical Access
Bronson Methodist Hospital	17	\$37.8	\$49.4	8.4%	10.2%	General Acute Care
Caro Community Hospital	1329	\$0.5	\$0.5	5.0%	4.8%	Critical Access
Children's Hospital of Michigan	3300	\$1.1	\$3.5	0.3%	1.1%	Children's
Chippewa War Memorial Hospital	239	\$2.6	\$2.4	3.9%	3.3%	General Acute Care
Clinton Memorial Hospital	1326	\$1.3	\$0.7	5.6%	2.9%	Critical Access
Community Health Center of Branch County	22	\$4.6	\$5.5	7.8%	9.2%	General Acute Care
Crittenton Hospital	254	\$7.0	\$5.3	3.6%	2.6%	General Acute Care

Table continues on next page

Hospital Name	CMS ID	Uncompensated Care Cost (\$M)		Uncompensated Care Ratio to Net Expenses (%)		Hospital Type
		2013	2014	2013	2014	
		Extract	Extract	Extract	Extract	
Fiscal year ends in October, November, or December (continued)						
Detroit Receiving Hospital	273	\$34.7	\$31.5	15.3%	14.4%	General Acute Care
Dickinson County Memorial Hospital	55	\$1.8	\$1.6	3.2%	2.6%	General Acute Care
Doctors' Hospital of Michigan	13	\$4.4	\$3.5	11.8%	12.9%	General Acute Care
Edward W. Sparrow Hospital	230	\$23.8	\$21.3	3.8%	3.1%	General Acute Care
Emma L. Bixby Medical Center	5	\$1.3	\$1.2	1.9%	1.7%	General Acute Care
Forest Health Medical Center, Inc.	144	\$0.0	\$0.4	0.1%	1.2%	General Acute Care
Forest View Psychiatric Hospital	4030	\$0.2	\$0.2	1.3%	1.4%	Psychiatric
Harbor Beach Community Hospital	1313	\$0.1	\$0.1	1.7%	0.8%	Critical Access
Harper University Hospital	104	\$12.3	\$9.7	3.2%	2.5%	General Acute Care
Healthsource Saginaw	275	\$0.2	\$0.2	1.1%	0.8%	General Acute Care
Helen Newberry Joy Hospital	1304	\$0.7	\$1.9	3.1%	7.4%	Critical Access
Henry Ford Hospital	53	\$89.5	\$96.3	7.8%	8.5%	General Acute Care
Henry Ford Macomb Hospital	47	\$19.7	\$14.6	5.9%	4.7%	General Acute Care
Henry Ford West Bloomfield Hospital	302	\$6.9	\$6.2	2.6%	2.5%	General Acute Care
Henry Ford Wyandotte Hospital	146	\$20.5	\$21.4	8.8%	9.1%	General Acute Care
Ionia County Memorial Hospital	1331	\$1.5	\$1.7	6.7%	6.6%	Critical Access
Kingswood Psychiatric Hospital	4011	\$0.2	\$0.2	1.2%	1.0%	Psychiatric
Memorial Healthcare	121	\$2.3	\$2.0	3.0%	2.6%	General Acute Care
Northstar Health Systems	1318	\$1.7	\$1.6	5.5%	5.5%	Critical Access
Oakland Regional Hospital	301	\$0.1	\$0.1	0.3%	0.4%	General Acute Care
Oakwood Annapolis Hospital	142	\$10.5	\$7.8	8.6%	6.7%	General Acute Care
Oakwood Heritage Hospital	270	\$7.1	\$6.0	6.1%	5.3%	General Acute Care

Table continues on next page

Hospital Name	CMS ID	Uncompensated Care Cost (\$M)		Uncompensated Care Ratio to Net Expenses (%)		Hospital Type
		2013	2014	2013	2014	
		Extract	Extract	Extract	Extract	
Fiscal year ends in October, November, or December (continued)						
Oakwood Hospital - Dearborn	20	\$24.9	\$17.8	4.7%	3.5%	General Acute Care
Oakwood Southshore Medical Center	176	\$3.6	\$3.4	3.1%	2.9%	General Acute Care
Otsego County Memorial Hospital	133	\$1.5	\$1.3	3.0%	2.6%	General Acute Care
ProMedica Herrick Hospital	1334	\$0.7	\$0.6	2.4%	1.9%	Critical Access
Rogers City Rehabilitation Hospital	3029	\$0.0	\$0.0	0.0%	0.0%	Rehabilitation
Samaritan Behavioral Center	4040	--	\$0.1	0.0%	1.0%	Psychiatric
Schoolcraft Memorial Hospital	1303	\$0.4	\$0.3	2.3%	1.7%	Critical Access
Sinai-Grace Hospital	24	\$26.7	\$28.5	8.7%	9.2%	General Acute Care
Southeast Michigan Surgical Hospital	264	\$0.5	\$0.0	6.8%	0.3%	General Acute Care
Sparrow Carson Hospital	208	\$3.4	\$1.4	7.5%	3.2%	General Acute Care
The Behavioral Center of Michigan	4042	--	\$0.1	0.0%	0.9%	Psychiatric
Three Rivers Health	15	\$2.5	\$2.5	7.0%	6.6%	General Acute Care
<i>Subtotal, hospitals with FY end in Oct., Nov., or Dec.</i>		<i>\$469.7</i>	<i>\$474.8</i>	<i>5.4%</i>	<i>5.4%</i>	
Fiscal year ends in March						
Charlevoix Area Hospital	1322	\$0.8	\$1.0	3.0%	3.3%	Critical Access
Hayes Green Beach Memorial Hospital	1327	\$3.2	\$4.2	8.0%	11.6%	Critical Access
Holland Community Hospital	72	\$4.9	\$5.5	3.1%	3.3%	General Acute Care
Mackinac Straits Hospital	1306	\$2.0	\$2.0	10.4%	9.2%	Critical Access
Mary Free Bed Hospital & Rehabilitation Center	3026	\$0.9	\$1.5	1.9%	3.0%	Rehabilitation
Munising Memorial Hospital	1308	\$0.4	\$0.5	5.8%	7.6%	Critical Access

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Hospital Name	CMS ID	Uncompensated Care Cost (\$M)		Uncompensated Care Ratio to Net Expenses (%)		Hospital Type
		2013 Extract	2014 Extract	2013 Extract	2014 Extract	
Fiscal year ends in March (continued)						
Oaklawn Hospital	217	\$4.7	\$3.0	5.5%	3.5%	General Acute Care
Sheridan Community Hospital	1312	\$0.9	\$1.0	7.2%	7.8%	Critical Access
West Branch Regional Medical Center	95	\$1.8	\$2.0	4.8%	5.3%	General Acute Care
<i>Subtotal, hospitals with FY end in March</i>		<i>\$19.8</i>	<i>\$20.8</i>	<i>4.6%</i>	<i>4.7%</i>	
Fiscal year ends in June						
Allegiance Health	92	\$40.6	\$29.4	11.3%	8.0%	General Acute Care
Alpena Regional Medical Center	36	\$2.9	\$1.8	3.6%	2.2%	General Acute Care
Aspirus Grand View Hospital	1333	\$1.9	\$2.3	4.9%	5.9%	Critical Access
Aspirus Keweenaw Hospital	1319	\$1.1	\$1.4	4.5%	4.9%	Critical Access
Aspirus Ontonagon Hospital	1309	\$0.1	\$0.1	1.6%	1.1%	Critical Access
Bell Memorial Hospital	1321	\$3.5	\$1.4	11.1%	4.6%	Critical Access
Borgess Hospital	117	\$28.6	\$20.6	8.0%	5.8%	General Acute Care
Borgess-Lee Memorial Hospital	1315	\$4.0	\$3.7	13.9%	13.8%	Critical Access
Brighton Hospital	279	\$0.0	\$0.0	0.0%	0.0%	General Acute Care
Covenant Medical Center, Inc.	70	\$9.7	\$8.1	2.7%	2.3%	General Acute Care
Deckerville Community Hospital	1311	\$0.2	\$0.4	4.1%	6.1%	Critical Access
Eaton Rapids Medical Center	1324	\$1.4	\$1.8	8.9%	10.9%	Critical Access
Garden City Hospital	244	\$6.8	\$5.2	5.8%	4.4%	General Acute Care
Genesys Regional Medical Center	197	\$18.7	\$14.5	5.1%	3.9%	General Acute Care
Harbor Oaks Hospital	4021	\$0.0	\$0.1	0.4%	1.3%	Psychiatric
Havenwyck Hospital	4023	\$0.2	\$0.3	0.9%	1.3%	Psychiatric

Table continues on next page

Hospital Name	CMS ID	Uncompensated Care Cost (\$M)		Uncompensated Care Ratio to Net Expenses (%)		Hospital Type
		2013	2014	2013	2014	
		Extract	Extract	Extract	Extract	
Fiscal year ends in June (continued)						
Hillsdale Community Health Center	37	\$2.4	\$2.1	5.1%	4.6%	General Acute Care
Hurley Medical Center	132	\$27.7	\$16.0	9.6%	5.4%	General Acute Care
Kalkaska Memorial Health Center	1301	\$1.9	\$1.8	9.0%	8.4%	Critical Access
Marlette Regional Hospital	1330	\$0.8	\$0.9	3.5%	4.0%	Critical Access
Marquette General Hospital	54	\$4.0	\$3.4	2.6%	2.0%	General Acute Care
Memorial Medical Center of West Michigan	110	\$2.2	\$1.8	4.1%	3.3%	General Acute Care
Mercy Health Partners - Hackley Campus	66	\$11.2	\$6.8	7.0%	4.2%	General Acute Care
Mercy Health Partners - Lakeshore Campus	1320	\$1.1	\$0.8	6.7%	4.0%	Critical Access
Mercy Health Partners - Mercy Campus	4	\$8.7	\$7.5	6.1%	3.4%	General Acute Care
Metro Health Hospital	236	\$14.8	\$11.8	6.9%	4.9%	General Acute Care
Mid Michigan Medical Center – Gladwin	1325	\$0.8	\$0.9	4.0%	4.5%	Critical Access
MidMichigan Medical Center – Clare	180	\$1.8	\$2.8	5.8%	8.7%	General Acute Care
MidMichigan Medical Center – Gratiot	30	\$3.1	\$2.7	4.0%	3.5%	General Acute Care
MidMichigan Medical Center – Midland	222	\$8.3	\$7.3	3.6%	3.0%	General Acute Care
Munson Healthcare Cadillac Hospital	81	\$2.8	\$2.6	4.6%	3.7%	General Acute Care
Munson Healthcare Grayling Hospital	58	\$2.7	\$1.9	4.7%	2.9%	General Acute Care
Munson Medical Center	97	\$23.3	\$17.3	5.1%	3.8%	General Acute Care
North Ottawa Community Hospital	174	\$2.2	\$1.7	5.0%	3.8%	General Acute Care
Paul Oliver Memorial Hospital	1300	\$1.0	\$1.0	7.5%	7.2%	Critical Access
Pine Rest Christian Hospital	4006	\$0.5	\$0.6	1.3%	1.4%	Psychiatric
ProMedica Monroe Regional Hospital	99	\$8.5	\$9.1	5.9%	6.9%	General Acute Care
Providence Hospital	19	\$25.3	\$20.7	4.7%	3.9%	General Acute Care

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Hospital Name	CMS ID	Uncompensated Care Cost (\$M)		Uncompensated Care Ratio to Net Expenses (%)		Hospital Type
		2013	2014	2013	2014	
		Extract	Extract	Extract	Extract	
Fiscal year ends in June (continued)						
Saint Mary's Standish Community Hospital	1305	\$0.9	\$0.8	4.4%	4.6%	Critical Access
Scheurer Hospital	1310	\$1.5	\$1.4	5.7%	5.0%	Critical Access
South Haven Community Hospital	85	\$1.7	\$1.0	5.8%	3.2%	General Acute Care
Southwest Regional Rehabilitation Hospital	3025	\$0.4	\$0.3	3.9%	3.4%	Rehabilitation
Spectrum Health	38	\$30.5	\$40.5	2.7%	3.4%	General Acute Care
Spectrum Health - Reed City Campus	1323	\$2.9	\$3.1	6.9%	6.8%	Critical Access
Spectrum Health Big Rapids	93	\$2.2	\$2.1	4.9%	4.3%	General Acute Care
Spectrum Health Gerber Memorial	106	\$3.3	\$3.4	5.6%	5.6%	General Acute Care
Spectrum Health United Memorial - Kelsey Campus	1317	\$0.9	\$1.2	7.0%	9.4%	Critical Access
Spectrum Health United Memorial - United Campus	35	\$2.8	\$3.2	4.9%	5.1%	General Acute Care
Spectrum Health Zeeland Community Hospital	3	\$1.6	\$2.4	4.1%	5.3%	General Acute Care
St Joseph Mercy Chelsea	259	\$2.4	\$2.7	2.6%	2.9%	General Acute Care
St. John Hospital and Medical Center	165	\$36.8	\$34.7	6.0%	5.6%	General Acute Care
St. John Macomb-Oakland Hospital-Macomb Center	195	\$24.4	\$20.0	7.3%	6.2%	General Acute Care
St. John River District Hospital	241	\$1.4	\$1.1	4.0%	3.0%	General Acute Care
St. Joseph Mercy Hospital - Ann Arbor	156	\$32.5	\$26.1	5.2%	4.6%	General Acute Care
St. Joseph Mercy Livingston Hospital	69	\$8.3	\$7.2	9.4%	8.4%	General Acute Care
St. Joseph Mercy Oakland	29	\$13.1	\$18.4	4.6%	6.7%	General Acute Care
St. Joseph Mercy Port Huron	31	\$4.7	\$3.7	7.1%	5.8%	General Acute Care

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Hospital Name	CMS ID	Uncompensated Care Cost (\$M)		Uncompensated Care Ratio to Net Expenses (%)		Hospital Type
		2013	2014	2013	2014	
		Extract	Extract	Extract	Extract	
Fiscal year ends in June (continued)						
St. Mary Mercy Hospital	2	\$10.5	\$14.4	5.2%	7.1%	General Acute Care
St. Mary's Health Care (Grand Rapids)	59	\$17.3	\$12.7	5.2%	3.6%	General Acute Care
St. Mary's of Michigan Medical Center	77	\$20.3	\$13.7	10.3%	7.5%	General Acute Care
Tawas St. Joseph Hospital	100	\$2.7	\$1.4	7.0%	3.9%	General Acute Care
University of Michigan Health System	46	\$54.5	\$54.6	2.5%	2.4%	General Acute Care
<i>Subtotal, hospitals with FY end in June</i>		<i>\$553.0</i>	<i>\$482.8</i>	<i>4.9%</i>	<i>4.2%</i>	
Fiscal year ends in September						
Baraga County Memorial Hospital	1307	\$1.0	\$0.8	6.9%	5.1%	Critical Access
Barbara Ann Karmanos Cancer Hospital	297	\$2.1	\$1.9	1.0%	0.9%	General Acute Care
Hills & Dales General Hospital	1316	\$0.6	\$0.5	3.4%	2.5%	Critical Access
Huron Medical Center	118	\$0.9	\$0.7	3.2%	2.7%	General Acute Care
Lakeland Community Hospital - Watervliet	78	\$2.0	\$1.6	9.5%	6.7%	General Acute Care
Lakeland Hospital - St. Joseph	21	\$14.3	\$12.1	5.5%	4.3%	General Acute Care
McKenzie Memorial Hospital	1314	\$0.6	\$0.4	4.6%	3.3%	Critical Access
McLaren - Central Michigan	80	\$2.5	\$2.1	3.5%	3.0%	General Acute Care
McLaren - Greater Lansing	167	\$8.0	\$11.2	3.1%	4.4%	General Acute Care
McLaren Bay Regional	41	\$9.0	\$5.8	4.1%	2.5%	General Acute Care
McLaren Flint	141	\$14.4	\$12.9	3.9%	3.4%	General Acute Care
McLaren Lapeer Region	193	\$6.2	\$5.8	6.5%	6.1%	General Acute Care
McLaren Oakland	207	\$6.5	\$6.5	5.5%	5.2%	General Acute Care
McLaren-Northern Michigan	105	\$5.4	\$3.4	3.1%	1.9%	General Acute Care

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Hospital Name	CMS ID	Uncompensated Care Cost (\$M)		Uncompensated Care Ratio to Net Expenses (%)		Hospital Type
		2013	2014	2013	2014	
		Extract	Extract	Extract	Extract	
Fiscal year ends in September (continued)						
Mount Clemens Regional Medical Center	227	\$18.6	\$18.2	8.2%	7.5%	General Acute Care
Pennock Hospital	40	\$2.5	\$2.6	5.3%	5.9%	General Acute Care
Port Huron Hospital	216	\$8.7	\$6.3	5.7%	4.0%	General Acute Care
St. Francis Hospital & Medical Group	1337	\$3.9	\$3.2	7.0%	6.2%	Critical Access
Sturgis Memorial Hospital	96	\$2.0	\$1.9	6.1%	5.5%	General Acute Care
<i>Subtotal, hospitals with FY end in Sept.</i>		<i>\$109.2</i>	<i>\$97.7</i>	<i>4.6%</i>	<i>4.0%</i>	
Grand Total		\$1,151.6	\$1,076.0	5.1%	4.6%	

Appendix D: HCUP Hospital Discharge Data by Quarter

Year-Quarter	Medicaid	Uninsured	Private	Medicare
20031	10%	2%	43%	44%
20032	11%	2%	42%	45%
20033	12%	2%	42%	45%
20034	12%	2%	41%	46%
20041	13%	2%	40%	46%
20042	13%	2%	40%	46%
20043	13%	2%	39%	45%
20044	13%	2%	39%	46%
20051	13%	2%	39%	47%
20052	12%	2%	39%	47%
20053	13%	3%	39%	45%
20054	13%	3%	39%	46%
20061	13%	3%	39%	46%
20062	13%	3%	38%	46%
20063	13%	3%	38%	46%
20064	13%	3%	37%	47%
20071	14%	3%	37%	46%
20072	14%	3%	37%	46%
20073	14%	4%	37%	46%
20074	14%	3%	36%	47%
20081	14%	3%	35%	47%
20082	14%	4%	36%	47%
20083	14%	4%	36%	46%
20084	14%	4%	36%	47%
20091	15%	4%	35%	46%
20092	15%	4%	35%	47%
20093	15%	4%	35%	46%
20094	15%	4%	34%	47%
20101	15%	4%	34%	48%
20102	15%	4%	33%	48%
20103	16%	4%	33%	47%
20104	15%	4%	33%	48%
20111	15%	4%	33%	48%
20112	15%	4%	33%	48%
20113	16%	4%	33%	47%
20114	15%	4%	33%	49%
20121	15%	3%	33%	49%
20122	15%	4%	33%	49%

20123	15%	4%	33%	48%
20124	15%	4%	33%	49%
Year-Quarter	Medicaid	Uninsured	Private	Medicare
20131	15%	4%	31%	50%
20132	15%	4%	32%	49%
20133	16%	4%	32%	48%
20134	16%	4%	32%	48%
20141	17%	4%	30%	49%
20142	19%	2%	30%	49%
20143	20%	1%	30%	48%

Source: Discharge Data for Michigan, 2003Q1-2014Q3, from the Hospital Cost and Utilization Project, Fast Stats online tool, available at <https://www.hcup-us.ahrq.gov/faststats/statepayer/states.jsp>.

Appendix E: Insurance Rates Analysis Tables and Graphs

The findings from the rate filings is organized into four sections:

- A) Number and type of filing
- B) Magnitude of the premium rate change requested
- C) Reasons for premium rate changes requested
- D) Medical cost trend rates noted in filings

All data are presented by year of filing (2013, 2014).

Findings: Highlights

A) Number and types of filings

Number of filings requesting premium rate changes

<u>Year</u>	<u>Filings</u>
2013	54
2014	44

Number of filings by market segment

<u>Year</u>	<u>Individual</u>	<u>Large group</u>	<u>Small group</u>
2013	10	42	2
2014	7	19	18

Number of filings by product

Product types include: Health Maintenance Organization (HMO), Preferred Provider Organization (PPO), Point of Service Plan (POS), and Major Medical Expense Plan (MM)

<u>Year</u>	<u>HMO</u>	<u>MM</u>	<u>POS</u>	<u>PPO</u>
2013	36	10	1	7
2014	22	8	2	12

B) Magnitude of the premium rate change requested

Average rate change requested by year (%)

<u>Year</u>	<u>#Filings</u>	<u>Average %</u>	<u>Min</u>	<u>Max</u>
2013	54	7.55	-3.97	25
2014	44	5.77	-5.10	21

Average rate change requests by market (%)

<u>Year</u>	<u>Market</u>	<u>#Filings</u>	<u>Average%</u>	<u>Min%</u>	<u>Max%</u>
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
2014	Individual	7	10.90	4.90	21.00
2014	Large group	19	3.07	5.10	15.00
2014	Small group	18	6.63	3.70	9.90

Average rate change by product (%)

Year	Product	#Filings	Average%	Min%	Max%
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
2014	HMO	22	2.41	-5.10	9.50
2014	MM	8	12.00	9.00	21.00
2014	POS	2	5.84	2.90	8.77
2014	PPO	12	7.76	1.27	19.00

C) Reasons for premium rate changes requested

Number of filings with rate change increase or decrease

Year	Decrease	Increase	Total
2013	4	50	54
2014	8	36	44

Recorded reasons for premium rate change request

Year	ACA	Benefits	Medical costs	Morbidity	Utilization
2013	20	24	46	8	28
2014	24	21	30	10	28

Reasons for rate change by market

Year	Market	ACA	Benefits	Medical costs	Morbidity	Utilization
2013	Individual	4	4	8	1	5
2013	Large group	15	19	36	7	22
2013	Small group	1	1	2	0	1
2014	Individual	3	3	5	0	5
2014	Large group	6	12	9	4	7
2014	Small group	15	6	16	6	16

Reasons for rate change by product

Year	Product	ACA	Benefits	Medical costs	Morbidity	Utilization
2013	HMO	12	18	32	6	20
2013	MM	5	2	9	1	6
2013	POS	0	1	0	0	0
2013	PPO	3	3	5	1	2
2014	HMO	10	14	12	4	11
2014	MM	5	3	7	4	7
2014	POS	0	0	1	0	0
2014	PPO	9	4	10	2	10

D) Medical cost trend rates noted in filings

Medical cost trend rate

<u>Year</u>	<u>#Filings</u>	<u>Average</u>	<u>Min</u>	<u>Max</u>
2013	54	7.33	4.0	14.6
2014	44	8.70	2.5	19.0

Medical cost trend rate

<u>Year</u>	<u>Market</u>	<u># Filings</u>	<u>Average</u>	<u>Min</u>	<u>Max</u>
2013	Individual	10	7.60	4.0	14.60
2013	Large group	42	7.22	4.2	8.84
2013	Small group	2	7.85	7.2	8.50
2014	Individual	7	10.06	7.5	19.00
2014	Large group	19	7.71	2.5	13.70
2014	Small group	18	9.16	6.0	13.00

Medical cost trend rate by product

<u>Year</u>	<u>Product</u>	<u># Filings</u>	<u>Average</u>	<u>Min</u>	<u>Max</u>
2013	HMO	36	6.88	4.00	8.9
2013	MM	10	9.64	7.90	14.6
2013	POS	1	7.70	7.70	7.7
2013	PPO	7	7.41	5.18	9.1
2014	HMO	22	8.05	2.90	13.7
2014	MM	8	13.37	9.60	19.0
2014	POS	2	4.25	2.50	6.0
2014	PPO	12	7.91	6.00	9.9

Findings: Expanded Display

A) Number and Types of Filings

Number of filings for premium rate changes

<u>Year</u>	<u>Filings</u>
2013	54
2014	44

Number of filings with rate change increase or decrease

<u>Year</u>	<u>Decrease</u>	<u>Increase</u>
2013	4	50
2014	8	36

Filings corresponding to a decrease were more common in 2014 than 2013, but still quite rare.

Number of filings requesting increase or decrease in rate requested by market, by year

<u>Year</u>	<u>Market</u>	<u>Decrease</u>	<u>Increase</u>
2013	Individual	1	9
2013	Large group	3	39
2013	Small group	0	2
2014	Individual	1	6
2014	Large group	6	13
2014	Small group	1	17

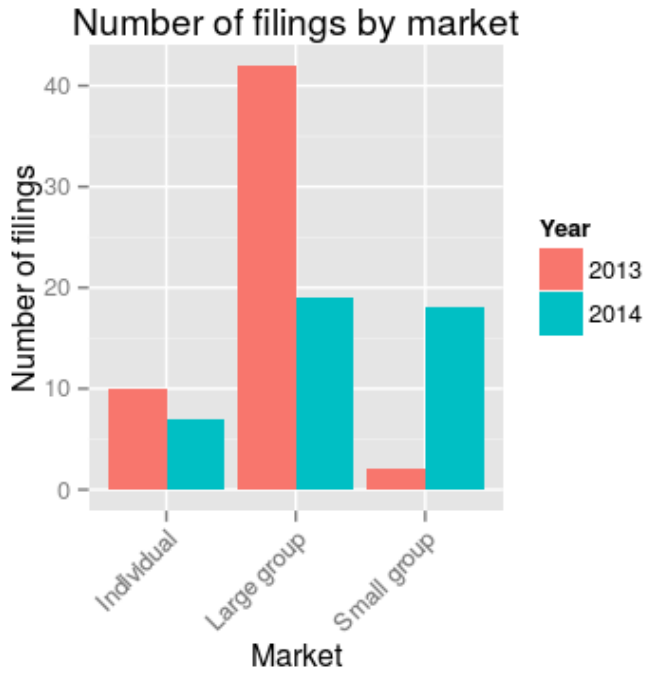
Most of the decreases tend to be for large groups.

Number of filings requesting increase or decrease in rate requested by product, by year

<u>Year</u>	<u>Product</u>	<u>Decrease</u>	<u>Increase</u>
2013	HMO	4	32
2013	MM	0	10
2013	POS	0	1
2013	PPO	0	7
2014	HMO	8	14
2014	MM	0	8
2014	POS	0	2
2014	PPO	0	12

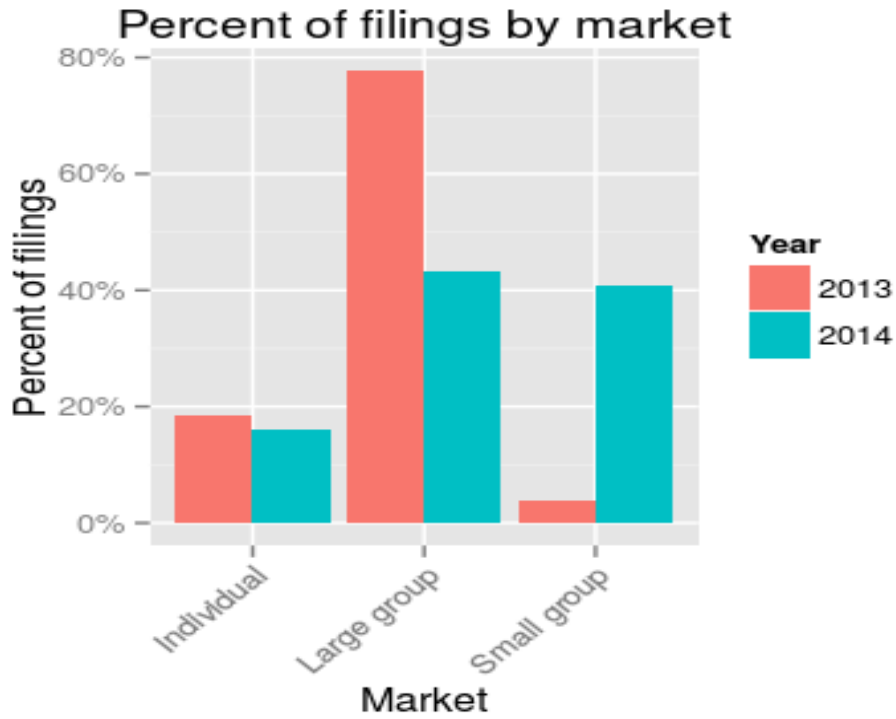
Number of filings requesting rate change by market, by year

<u>Year</u>	<u>Individual</u>	<u>Large group</u>	<u>Small group</u>
2013	10	42	2
2014	7	19	18



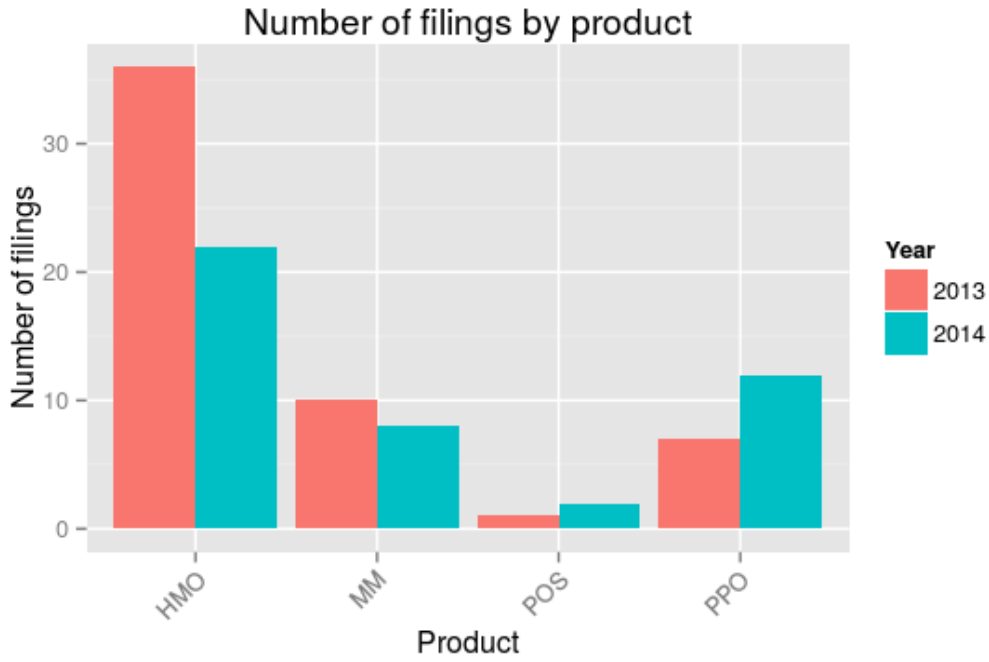
Percent of filings requesting rate change by market, by year

<u>Year</u>	<u>Individual</u>	<u>Large group</u>	<u>Small group</u>
2013	18.5%	77.8%	3.7%
2014	15.9%	43.2%	40.9%



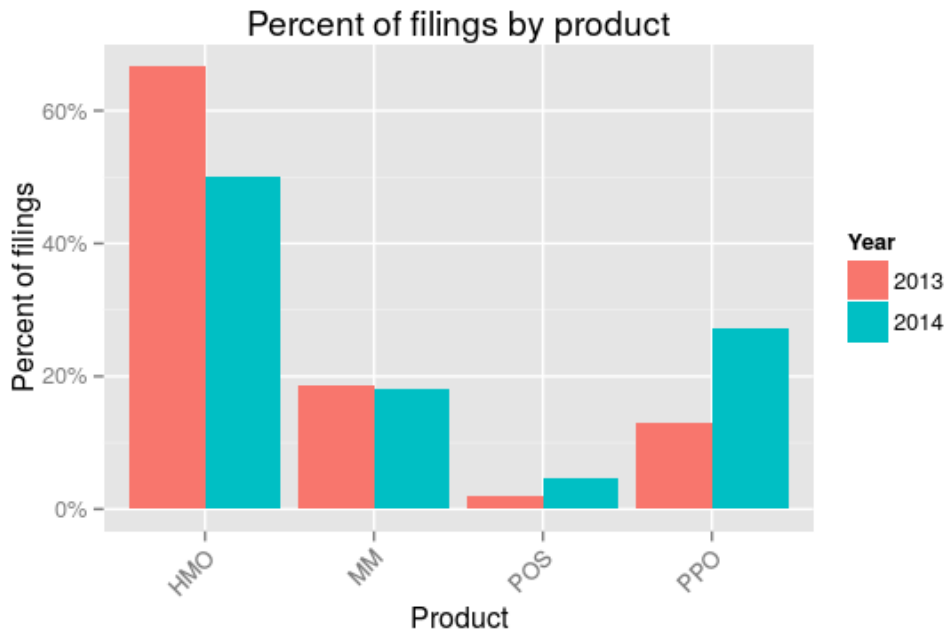
Number of filings requesting rate change by product, by year

<u>Year</u>	<u>HMO</u>	<u>MM</u>	<u>POS</u>	<u>PPO</u>
2013	36	10	1	7
2014	22	8	2	12



Percent of filings requesting rate change by product by year

<u>Year</u>	<u>HMO</u>	<u>MM</u>	<u>POS</u>	<u>PPO</u>
2013	66.7%	18.5%	1.9%	13.0%
2014	50.0%	18.2%	4.5%	27.3%



B) Magnitude of the Premium Rate Change Requested

Number of filings by average rate change requested, by year

Year	Filings	Average	Min	Max
2013	54	7.55	-3.97	25
2014	44	5.77	-5.10	21

Number of filings by average rate change requested by market, by year

Year	Market	Filings	Average	Min	Max
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
2014	Individual	7	10.90	4.90	21.00
2014	Large group	19	3.07	5.10	15.00
2014	Small group	18	6.63	3.70	9.90



Number of filings by average rate change request by product, by year

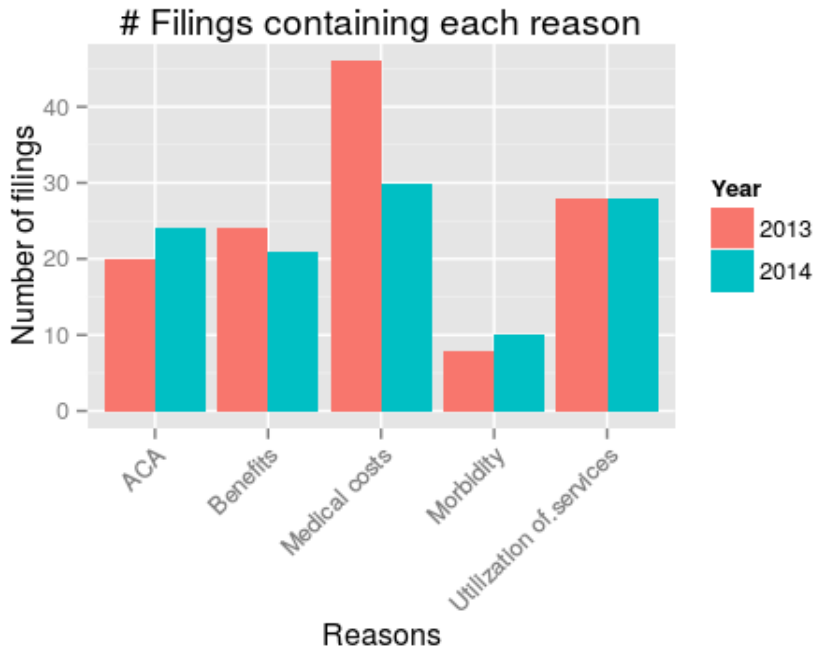
Year	Product	Filings	Average	Min	Max
2013	HMO	36	6.20	-3.97	18.50
2013	MM	10	11.69	5.48	25.00
2013	POS	1	6.73	6.73	6.73
2013	PPO	7	8.67	0.50	14.60
2014	HMO	22	2.41	-5.10	9.50
2014	MM	8	12.00	9.00	21.00
2014	POS	2	5.84	2.90	8.77
2014	PPO	12	7.76	1.27	19.00



C) Reasons for premium rate changes requested

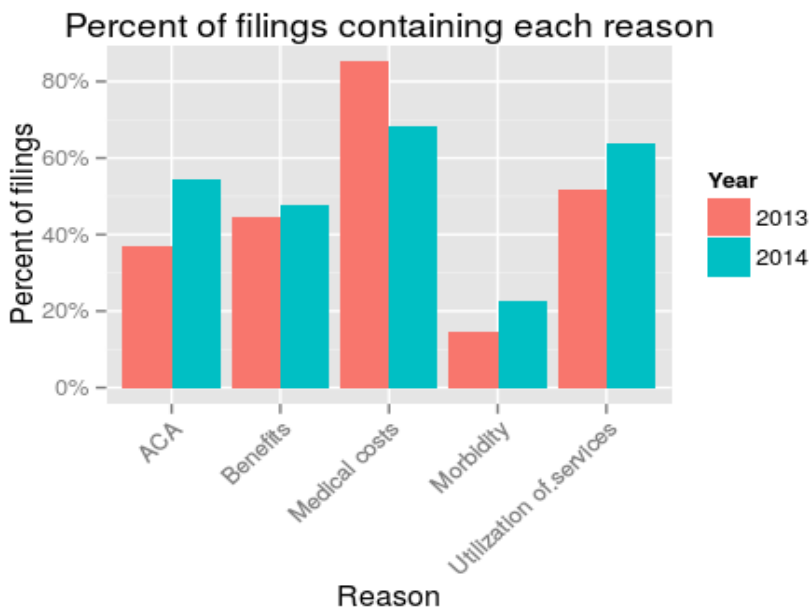
Number of filings by reasons for rate change request, by year

Year	ACA	Benefits	Medical costs	Morbidity	Utilization of services
2013	20	24	46	8	28
2014	24	21	30	10	28



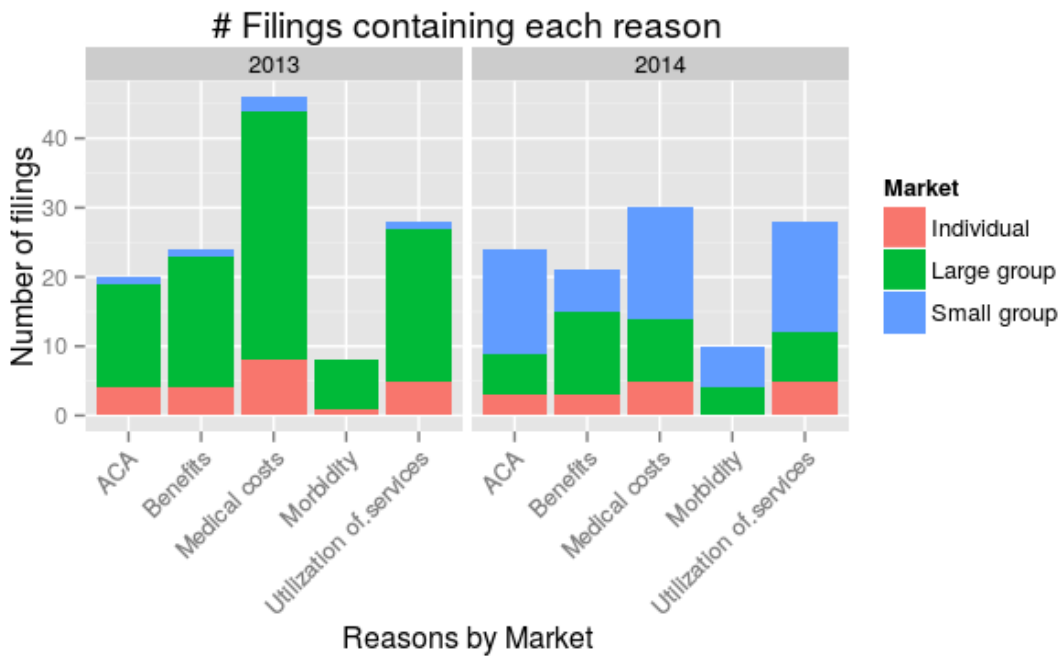
Percent of filings by reasons for rate change request, by year

Year	ACA	Benefits	Medical costs	Morbidity	Utilization of services
2013	37.0%	44.4%	85.2%	14.8%	51.9%
2014	54.5%	47.7%	68.2%	22.7%	63.6%



Number of filings noting selected reasons for changes in premium rates by market, by year

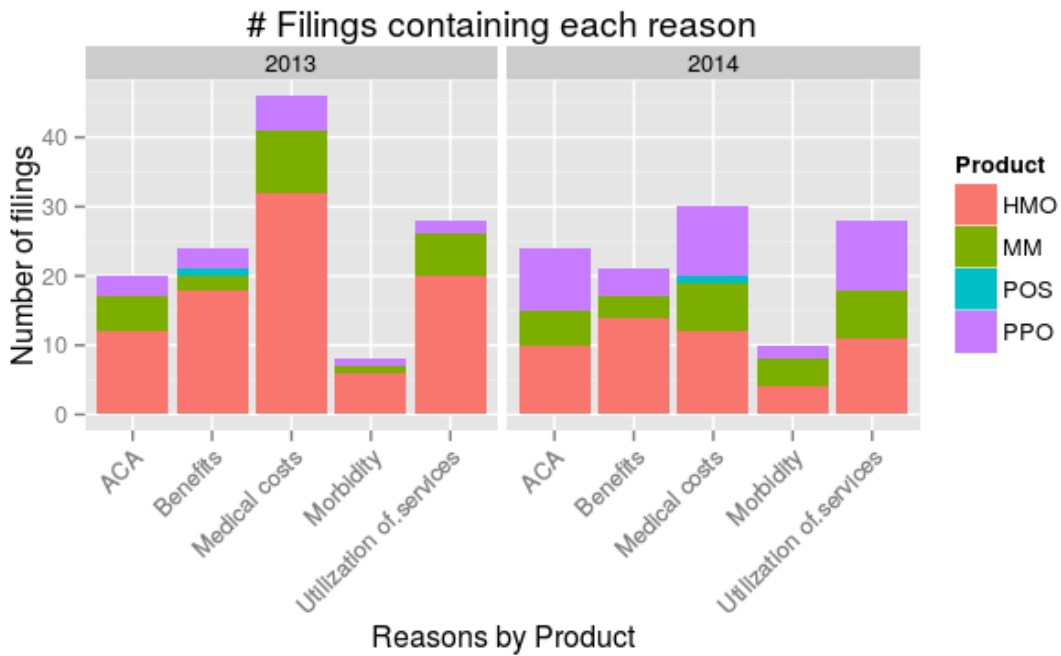
Year	Market	ACA	Benefits	Medical costs	Morbidity	Util. of services
2013	Individual	4	4	8	1	5
2013	Large group	15	19	36	7	22
2013	Small group	1	1	2	0	1
2014	Individual	3	3	5	0	5
2014	Large group	6	12	9	4	7
2014	Small group	15	6	16	6	16



In 2014, filings claiming “benefits” as a reason were disproportionately from Large Groups. Otherwise, there were no significant trends by market.

Number of filings noting selected reasons for changes in premium rates by product, by year

<u>Year</u>	<u>Product</u>	<u>ACA</u>	<u>Benefits</u>	<u>Medical costs</u>	<u>Morbidity</u>	<u>Util. of services</u>
2013	HMO	12	18	32	6	20
2013	MM	5	2	9	1	6
2013	POS	0	1	0	0	0
2013	PPO	3	3	5	1	2
2014	HMO	10	14	12	4	11
2014	MM	5	3	7	4	7
2014	POS	0	0	1	0	0
2014	PPO	9	4	10	2	10



In both years, HMOs were disproportionately more likely to cite “benefits” as a reason.

D. Medical cost trend rates noted in filings

Availability of medical cost trend rates in filings, by year

Note that Medical cost trends are only available for some of the records:

<u>Year</u>	<u>Has trend</u>	<u>Missing trend</u>
2013	41	13
2014	43	1

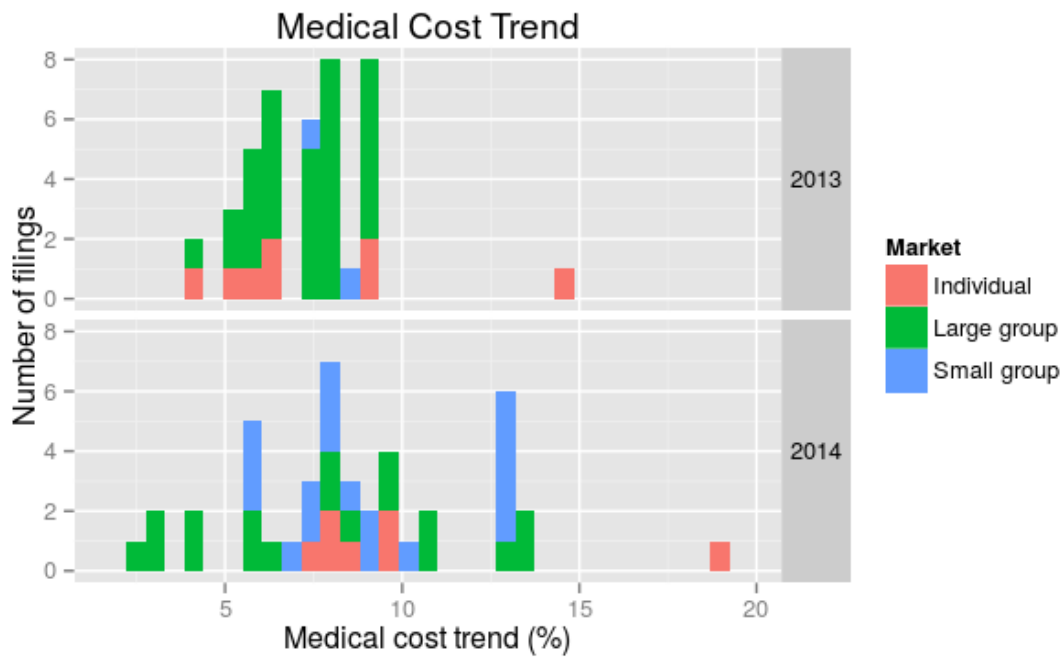
Number of filings by average medical cost trend rates, by year

<u>Year</u>	<u>Filings</u>	<u>Average</u>	<u>Min</u>	<u>Max</u>
2013	54	7.33	4.0	14.6
2014	44	8.70	2.5	19.0

Significantly higher medical cost trends were identified in the 2014 reports. Only one was above 10% in 2013, while 12 reported medical cost trends above 10% in 2014.

Number of filings by medical cost trend rates by market, by year

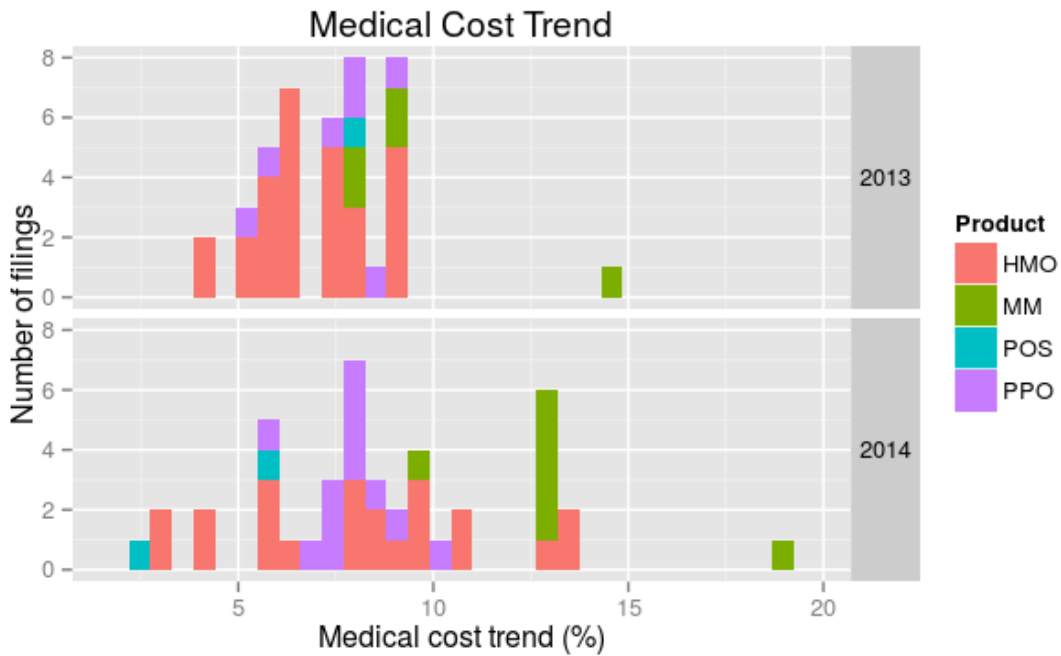
Year	Market	Filings	Average	Min	Max
2013	Individual	10	7.60	4.0	14.60
2013	Large group	42	7.22	4.2	8.84
2013	Small group	2	7.85	7.2	8.50
2014	Individual	7	10.06	7.5	19.00
2014	Large group	19	7.71	2.5	13.70
2014	Small group	18	9.16	6.0	13.00



Number of filings by medical cost trend rates, by product

Year	Product	Filings	Average%	Min	Max
2013	HMO	36	6.88	4.00	8.9
2013	MM	10	9.64	7.90	14.6
2013	POS	1	7.70	7.70	7.7
2013	PPO	7	7.41	5.18	9.1
2014	HMO	22	8.05	2.90	13.7
2014	MM	8	13.37	9.60	19.0
2014	POS	2	4.25	2.50	6.0
2014	PPO	12	7.91	6.00	9.9

Filings with high medical cost trend filings tended to be from HMOs and MMs in both years.



Appendix F: Filings Sampling Exclusions, Inclusions and Rationale

Filings Sampling Exclusions

- Filings without a premium rate change. We are interested in the causes of rate change, thus we are excluding from our sample filings that did not submit a rate increase or decrease.
- New products. New products are filings that are submitted to go on the market in the coming year. These filings do not have any prior experience or claims data to compare or predict change in premium rates.
- 2015 filing data. 2015 filing data is incomplete; not all of the filings have been submitted which will apply to 2016 premium rates. Therefore, due to the limited data set, 2015 filings data are excluded.

Filings Sampling Inclusions

Insurance filings provide a multitude of data. The following elements were abstracted from each 2013 filing for which a change (negative or positive) in rates was requested.

- Descriptive Data:
 - Filing Number
 - Date
 - Company Name
- Market
 - Health Insurance Market (Individual, Small Group, Large Group, Other)
 - Product Type
- Reason(s) for Rate Change
 - Reason for Rate Change (direct quotes from filings if available)
 - Medical Costs (trend in cost of medical care, physician contracts, etc)
 - Morbidity (change in morbidity level of risk pool)
 - Benefits (change in benefits offered)
 - ACA (i.e., taxes and fees, legislative compliance, essential health benefits)
 - Utilization of Services (increasing or decreasing)
 - Demographics (age, community rating)
 - Other (i.e., tobacco Status)

Experience [Experience period is a time period used to calculate the premium in order to evaluate risk and return] and Claims

- Affected Policy Holders
- Covered Lives Benefit Change
- Benefit Change
- % Change Approved – weighted average
- Percent Rate Change Requested – weighted average
- Requested Rate: Annual – weighted average

Total Annual Premium Rate

- Premium Rate Change
- Prior Rate: Annual – weighted average
- Projected Earned Premium
- Projected Incurred Claims (Annual Dollars)

Medical Costs

- Trend Factors %
- Medical Trend %
- MLR %
- Pharmacy Trend %

Administrative

- Administrative Fees (Dollars PMPM)
- Administrative Fees % of Premium
- Profit and Risk % of Premium
- Taxes and Fees
 - Taxes and Fees % of Premium
- Uniform Rate Review Template
 - Administrative Expenses % (projected experience)
 - Profit and Risk % (projected experience)
 - Taxes and Fees % (PMPM component of premium increase)
 - Taxes and Fees as a percentage % (projected experience)
 - Single Risk Pool Gross Premium Avg Rate (PMPM)
 - Inpatient (Component of Premium Increase Dollars PMPM)
 - Outpatient (Component of Premium Increase Dollars PMPM)
 - Professional (Component of Premium Increase Dollars PMPM)
 - Prescription (Component of Premium Increase Dollars PMPM)
 - Other (Component of Premium Increase Dollars PMPM)

Rationale for Inclusions (Drivers of Premium Rates)

Health insurers include several factors in the creation of the premium rate. The state requires that filings include the actuarial methods and data used. Often, this section of the filings is noted as “Confidential/Proprietary/Trade Secret.” Many insurers 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 often calculated using proprietary methods.
- **Benefit Categories:** Claims are assigned to each of the varying benefit category by place 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% on Michigan gross direct premiums written 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 insurer'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 benefit year 2015, HHS imposes a per-enrollee-per-month risk adjustment fee of \$0.10, and for 2016 benefit year, \$0.15. (See Federal Register / Vol. 80, No. 39 / Friday, February 27, 2015 / Rules and Regulations 10759).
 - **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 insurer is 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.

Appendix G: MCIR Descriptions and Rationale

The Michigan Care Improvement Registry (MCIR) was created in 1998 to collect reliable immunization information for children and make it accessible to authorized users. The registry divides the state into six regions (MCIR regions) made up of contiguous counties. Employer sampling was targeted to counties/regions with the highest percent HMP enrollment in the first 100 days of HMP. For more information, see Ayanian, JZ, Clark, SJ, Tipirneni, R. Launching the Healthy Michigan Plan - The First 100 Days. N Engl J Med. 2014; 371:1573-1575.

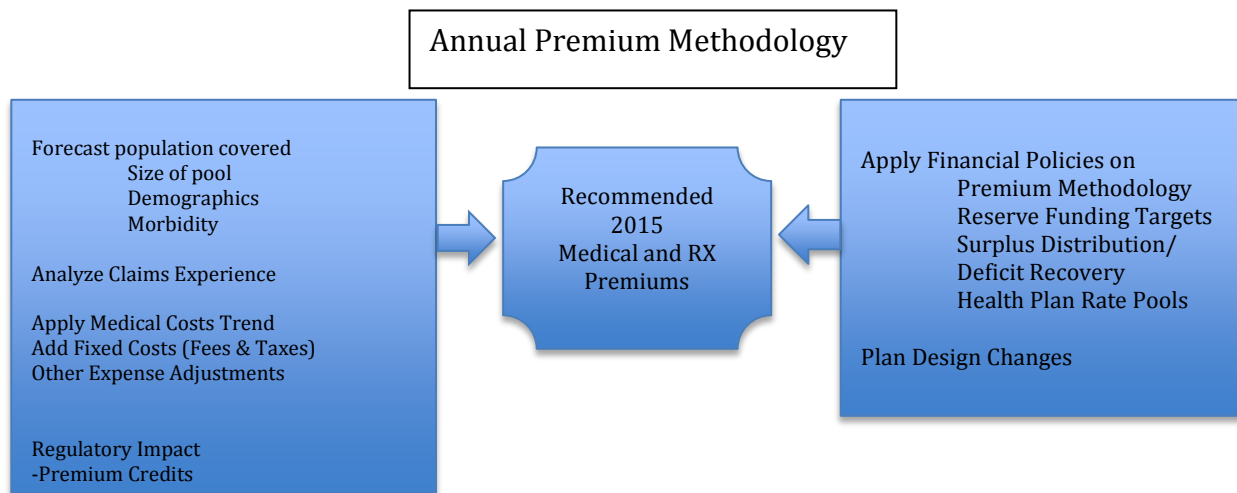
Enrollment figures ranged from 73 in rural Keweenaw County on Lake Superior (3.3% of the population) to 90,690 in Wayne County, which includes Detroit and nearby suburbs (5.1% of the population)

Percent enrollment in the first 100 days and Counties in each region:

Southeast	48%	City of Detroit; and counties of Livingston, Macomb, Monroe, Oakland, St. Clair, Washtenaw and Wayne
Southwest	20%	Allegan, Berrien, Branch, Calhoun, Cass, Hillsdale, Ionia, Jackson, Kalamazoo, Kent, Lenawee, Muskegon, Ottawa, St. Joseph, and Van Buren
East Central	14%	Bay, Genesee, Huron, Lapeer, Midland, Saginaw, Sanilac, Shiawassee, and Tuscola
Central	6%	Barry, Clinton, Eaton, Gratiot, Ingham, and Montcalm
Northern Lower Peninsula	9%	Alcona, Alpena, Antrim, Arenac, Benzie, Charlevoix, Cheboygan, Clare, Crawford, Emmet, Gladwin, Grand Traverse, Iosco, Isabella, Kalkaska, Lake, Leelanau, Manistee, Mason, Mecosta, Missaukee, Montmorency, Newaygo, Oceana, Ogemaw, Oscoda, Osceola, Otsego, Presque Isle, Roscommon, and Wexford
Upper Peninsula	2%	Alger, Baraga, Chippewa, Delta, Dickinson, Gogebic, Houghton, Iron, Keweenaw, Luce, Mackinac, Marquette, Menominee, Ontonagon, and Schoolcraft

Appendix H: 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 I: Major Drivers of Premium Rate Changes Over Time

<i>FACTORS IN PREMIUM INCREASES</i>	
<i>Risk Pool Composition</i>	
Composition of the risk pool and How it compares to what was projected How it is expected to change	<p>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.</p> <p>Insurer expectations regarding the composition of the enrollee risk pool, including the distribution of enrollees by age, gender, and health status.</p>
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 insurers.
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 (For more information see: http://kff.org/health-reform/issue-brief/explaining-health-care-reform-risk-adjustment-reinsurance-and-risk-corridors/).

<i>Prices & use of services</i>	
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
	<p>Short term National projection: National Health spending growth projected to rise 6.1% 2014-2015 (adjusted for inflation (CPI-U))</p> <p>Long term projection: 2015-2022 national health spending projected to grow 6.2% annually</p> <p>Health care reform impact on trend projected to be an average increase of 0.1% annually from 2012 to 2022 (CMS report on National Health Expenditure Projections 2012-2022)</p>
<i>Employer Plan Taxes & Fees</i>	
Temporary Reinsurance Fees (2014 thru 2016)	<p>Fees from self-insured plans will be used to make reinsurance payments to individual market insurers that cover high-cost individuals in each state.</p> <p>National fee rate of \$63 per (non-Medicare) member per year for 2014, \$44 PMPY for 2015, and \$31.50 PMPY for 2016.</p>
Temporary tax for PCORI fees (2012 thru 2018)	<p>Assessments will fund “patient centered outcomes research trust fund”</p> <p>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.</p>
Employer Shared Responsibility for Health Care, “Pay or Play”	<p>Requires large employers to “offer” medical coverage to employees averaging 30 or more hours of work per week</p> <p>Health care coverage will be offered to temporary employees</p> <p>Medical plans offered must satisfy mandated coverage levels; Employee premium must not exceed 9.5% of the employees pay rate</p>
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
<i>Plan Structure & Operations</i>	
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 (See 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).
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.

	<p>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.</p>
<p><i>Market Competition</i></p>	
<p>Market forces and product positioning</p>	<p>Insurers might withstand short-term losses in order to achieve long-term goals.</p> <p>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.</p>