



2012 Milliman Medical Index

Healthcare costs for American families in 2012 exceed \$20,000 for the first time

Because of the way employer-sponsored health insurance is paid for, many families may not realize the cost of their healthcare for a single year is roughly equivalent to the cost of a basic mid-size sedan.





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EXECUTIVE SUMMARY

The annual Milliman Medical Index (MMI) measures the total cost of healthcare for a typical family of four covered by a preferred provider plan (PPO). The 2012 MMI cost is \$20,728, an increase of \$1,335, or 6.9% over 2011. The rate of increase is not as high as in the past, but the total dollar increase was still a record. This is the first year the average cost of healthcare for the typical American family of four has surpassed \$20,000.

Key considerations

Our family of four is insured by an employer-sponsored PPO plan, which includes certain out-of-pocket costs such as copays and deductibles. The plan's premiums are paid jointly by the employer and by the employee via payroll deductions. Healthcare benefits are a substantial portion of the employee's compensation.

Our family of four may be surprised to learn that their annual healthcare costs are nearing \$21,000, because their own out-of-pocket costs, at an average of \$3,470, are the portion of the cost of care most visible to them (see Figure 7). Some employees may also be acutely aware of the \$5,114 in payroll deductions. This brings the employee's total share to \$8,584 (see Figure 9).

While the annual rate of increase fell below 7% for the first time in the 12 years tracked by the MMI, the total dollar amount of the increase overshadows any relief that consumers might derive from the slowing percentage increase.

As of the release date of this report, the nation is awaiting a U.S. Supreme Court decision on the future of the Patient Protection and Affordable Care Act (PPACA). To date, PPACA has had only a limited effect on total healthcare costs for the MMI's illustrative family of four. With the MMI release in between the Supreme Court deliberations and its decision, we are left with more uncertainty about the future of healthcare costs than usual. As we examine the different components of the MMI, we offer considerations for the future both with and without reform (see page 7).

FIGURE 1

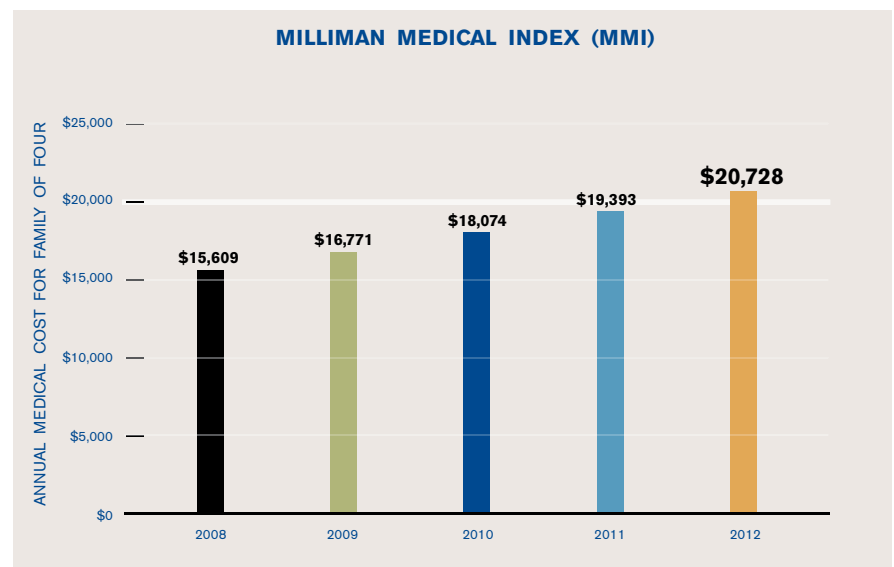
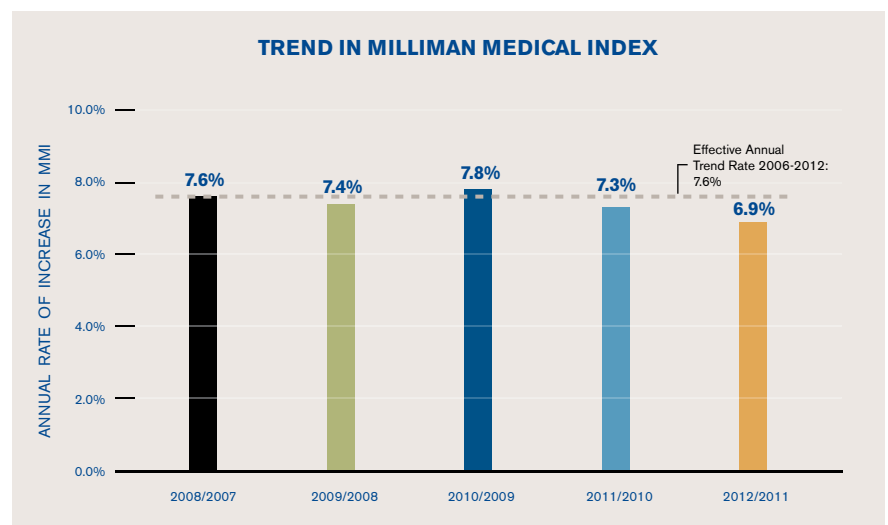


FIGURE 2



The 6.9% cost increase in 2012 is the lowest in the history of the MMI yet the total dollar increase of \$1,335 is the highest.

Specific findings

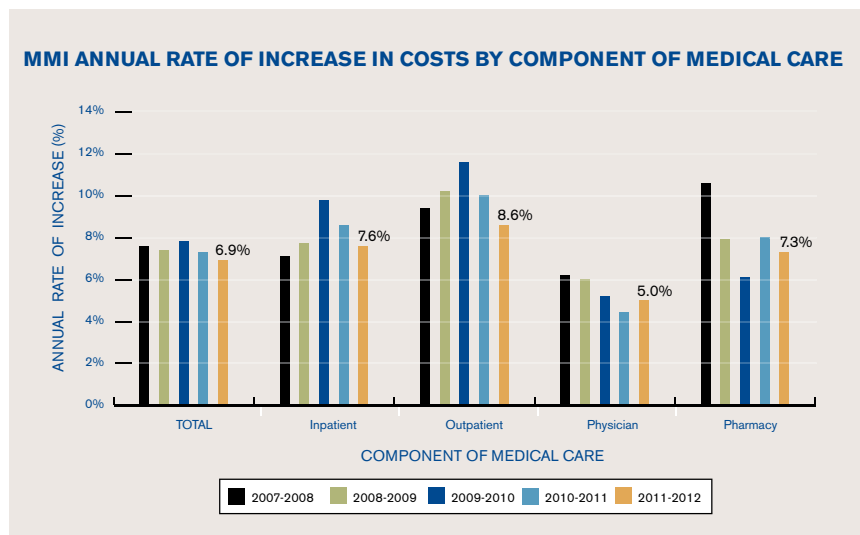
- Between 2011 and 2012, the MMI increased \$1,335, just surpassing the record \$1,319 increase set between 2010 and 2011.
- But there is a silver lining: The 2012 increase in the MMI cost moderated to 6.9%, marking the second year in a row the percentage increase has reached a new low since the inception of the MMI.
- This year the 6.7% increase in the employer's portion of costs was slightly less than the overall trend of 6.9%. The 7.2% growth in the employee's share of costs was slightly more than the overall trend of 6.9%. This latter number includes an 8.2% cost increase in payroll deductions and a 5.8% increase in out-of-pocket costs.
- Of the cities profiled by the MMI, the most expensive was Miami, at \$24,965, and the least expensive was Phoenix, at \$18,365. Phoenix is one of three of the 14 cities studied by the MMI whose cost for our family of four remains below \$20,000.

COMPONENTS OF COST

The total cost of care represented by the MMI reflects utilization of care, the amount charged for each service, and the mix of services that are used. We examine the trends in each of these components for each type of medical care provided to our family of four and then summarize those trends by five major categories:

- Inpatient facility care
- Outpatient facility care
- Professional services
- Pharmacy
- Other

FIGURE 3



There are several key takeaways from this year's analysis of healthcare service areas:

- At less than 9%, outpatient cost increases are single-digit for the first time in four years. Outpatient costs still exhibit the highest rate of increase of all major categories of care.
- Hospital inpatient care trends also exceed the overall trend rate, now accounting for nearly as much in total dollars as physician care. Utilization remained approximately unchanged, but the average charge per day increased 7.6%.
- Pharmacy's rate of growth is lower than in 2011 due to ongoing increases in the availability of generics. Specialty drugs will have an increasing impact on trends in the future but are currently still a minor portion of costs.
- Physician cost increases are up but still less than overall MMI trends.

On a percentage basis, cost increases are down in every service category other than physician costs. On a dollar basis, the increase is still noticeable for the MMI family of four.

Costs are going up across all service categories, and in each category the total is enough to constitute a significant household expense. For any given family, these costs may vary, with many families accumulating less than \$20,000 in medical costs this year and others seeing expenses in excess of \$20,000. This kind of variance is to be expected. Insurance helps make healthcare a more predictable expense for these families by spreading the risk and expense across the insurance pool and over a prolonged period of time.

While many of these expenses remain obscured to the consumer, and while there is much variation from year to year, on average these costs quietly constitute among the highest household expenses for many families. For example, pharmacy costs for our family of four in 2012 exceed \$3,000 for the first time, and the costs of inpatient and outpatient facility care combined exceed \$10,000. Even when divided up, the pieces of a \$20,000 pie are pretty big.

FIGURE 4

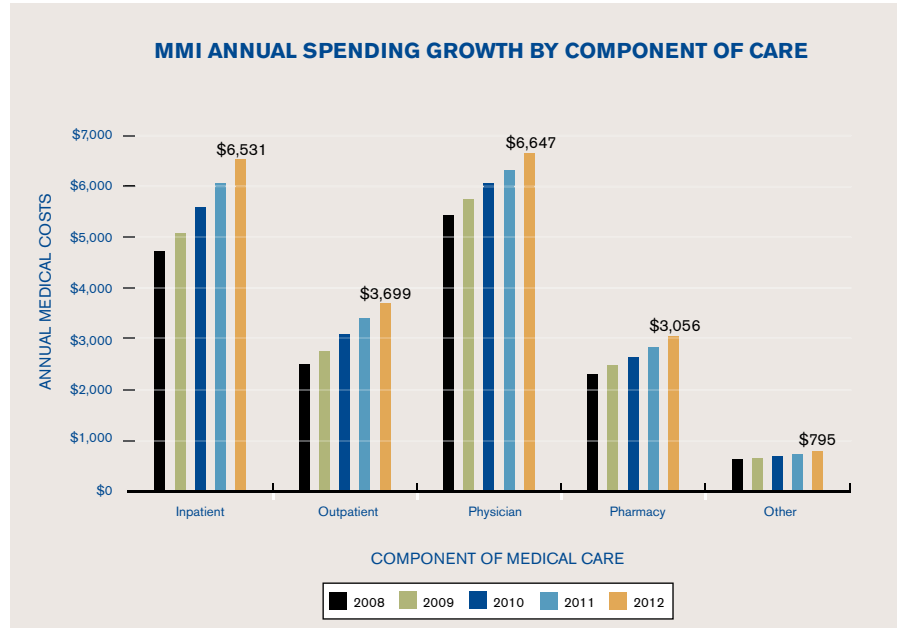
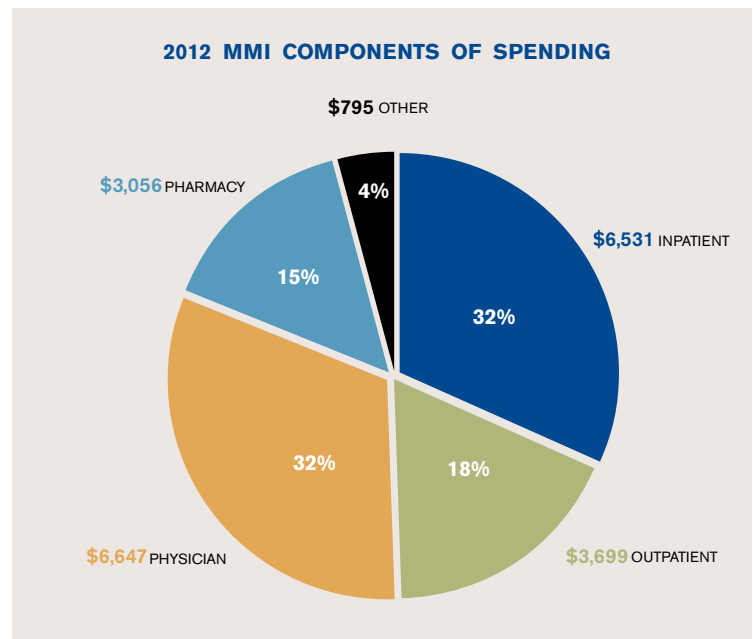


FIGURE 5



Pharmacy costs for our family of four in 2012 exceed \$3,000 for the first time, and the costs of inpatient and outpatient facility care combined exceed \$10,000.

GEOGRAPHIC COST DIFFERENCES

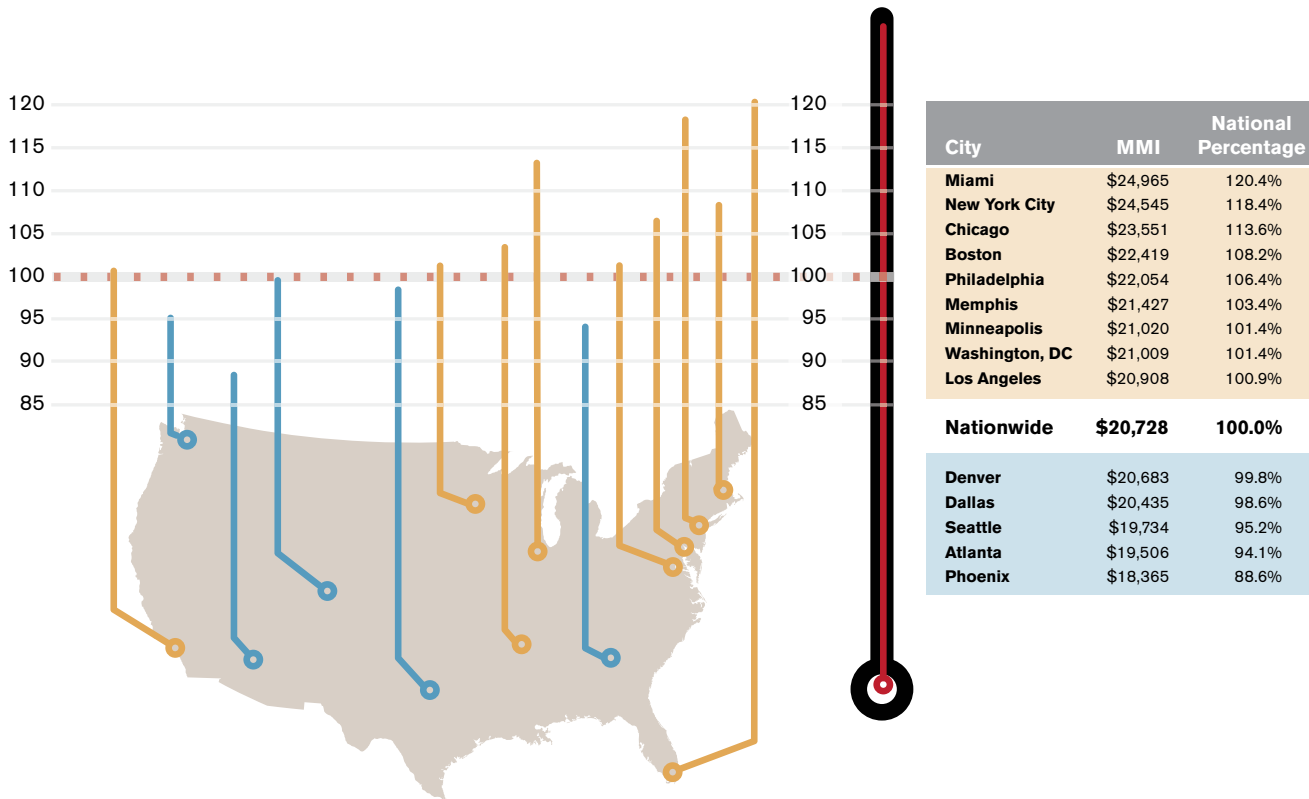
While the underlying drivers of healthcare costs are ultimately the same—the cost of services provided and the volume of services utilized—they vary from one location to another. Every year, the MMI examines costs in 14 different cities across the United States as a way of illustrating the regional nature of healthcare costs.

This year, all but three of the cities studied exceeded \$20,000 in the cost of care for the typical family of four. As has been the case for several years, Miami (\$24,965) was the most expensive city studied and Phoenix (\$18,365) was the least expensive. In 2012, the difference in cost between the two cities is \$6,600, nearly a third of the national average MMI.

There are a number of reasons why costs for any specific family in one of these cities will vary from the national average. For comparison purposes, the MMI equalizes for differences such as plan design and demographics. What's left in the illustrated differentials by city is a reflection of differences in how care is delivered as well as the amount that providers and payors negotiate as payment for services.

FIGURE 6

PERCENTAGE OF NATIONAL AVERAGE



EMPLOYEES' SHARE OF HEALTHCARE COSTS

In order to understand the drivers behind the employer and employee portions, it is necessary to clearly define each source of payment for medical care. For the MMI, we use three main categories:

- **Employer subsidy.** Employers subsidize a portion of the monthly premium costs for their employees' coverage.
- **Employee contributions.** Employees who choose to participate in the plan pay the remainder of the monthly premium costs, usually through payroll deductions.
- **Employee out-of-pocket cost at time of service.** Employees who receive care may have copays, deductibles, and other design elements that are paid out of pocket at the time of service.

In total, employers continue to shoulder the larger share of these costs. However, in all but one year between 2007 and 2012, employee costs increased by a greater percentage than employer costs.

Figure 7 shows the relative proportions of each of these three categories. Of the \$20,728 medical cost for a family of four, the employer pays about \$12,144 in employer subsidy while the employee pays the remaining \$8,584, consisting of \$5,114 in employee contributions and \$3,470 in employee out-of-pocket costs.

Out-of-pocket costs are of particular significance given PPACA's focus on *actuarial value*, a concept predicated on the percentage of a plan's costs that is paid out of pocket by the insured. Figure 8 indicates how, as was the case last year, the MMI's plan remains slightly better than a *gold* plan as defined by PPACA. The MMI plan has maintained a relatively stable actuarial value over time because employers typically adjust their plan designs on an annual basis to keep pace with increases in the underlying medical trend. If no such adjustments were made and deductibles and copays remained static, the plan would become richer and would eventually exceed the *platinum* threshold.

In addition to a typical PPO plan, many employers are providing employees an option that includes higher out-of-pocket cost sharing in exchange for employer contributions to a health savings account and lower payroll deductions. Some believe that these kinds of high-deductible concepts lead to greater cost awareness by patients. Along these lines, some plans that may become available through the state insurance exchanges may contain lower actuarial values than the type of plan exemplified by the MMI.

FIGURE 7

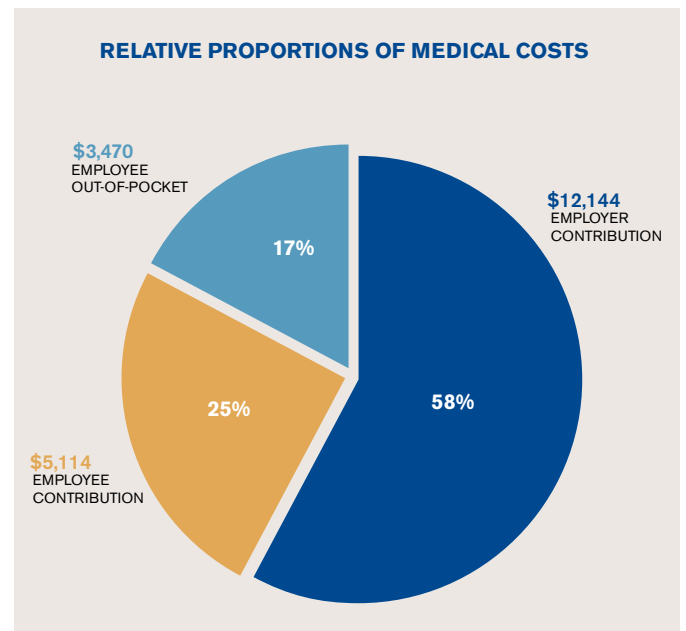
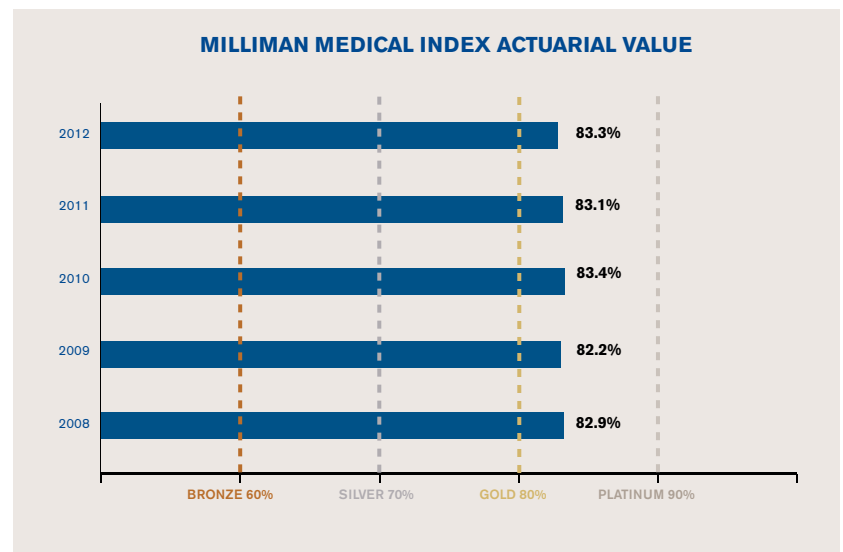
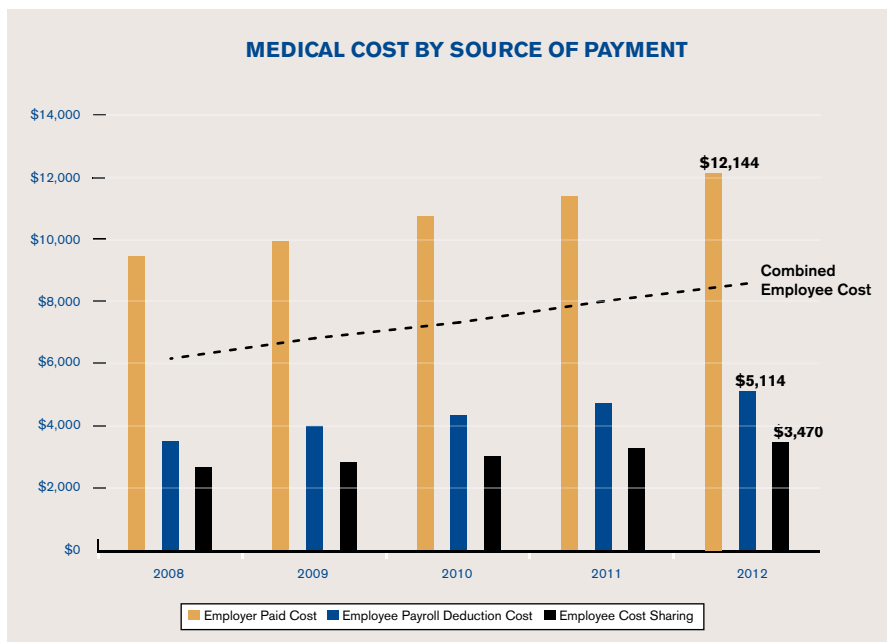


FIGURE 8



Figures 9 and 10 illustrate how cost sharing has evolved over time. In 2012, employers assumed \$759 of the total increase. Employees saw a dollar increase of \$576. The employee's 7.2% increase in the amount of out-of-pocket costs and payroll deductions was less than the prior year, when employees faced a 9.3% cost increase.

FIGURE 9



In the past year, the MMI plan did not undergo significant design changes. Long-term, employers may be looking for new design concepts that tackle the ongoing cost-control challenge. Design concepts under consideration may include a possible move toward increased use of defined contribution concepts and continued momentum toward high-deductible plans or plans leveraging accountable care organizations (ACOs).

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FIGURE 10

ANNUAL INCREASE IN SPENDING SPLIT BY EMPLOYER AND EMPLOYEE PORTIONS

	2008/2007	2009/2008	2010/2009	2011/2010	2012/2011
TOTAL MEDICAL COST (EMPLOYER & EMPLOYEE)	7.6%	7.4%	7.8%	7.3%	6.9%
EMPLOYEE OUT-OF-POCKET COST SHARING	10.5%	5.4%	6.6%	9.2%	5.8%
EMPLOYEE PAYROLL DEDUCTION	10.1%	14.7%	8.0%	9.3%	8.2%
EMPLOYER PORTION	6.0%	5.4%	8.0%	6.0%	6.7%

HEALTH REFORM AND HEALTHCARE COSTS

PPACA institutes widespread changes to the healthcare system. With the constitutionality of the law currently under scrutiny by the U.S. Supreme Court, there are several scenarios for the future of American healthcare. PPACA may be upheld entirely, it may be only partially upheld, or it may be struck down entirely.

While each of these scenarios has implications for how healthcare is accessed and financed, they are not necessarily significant when it comes to actual healthcare costs. Healthcare cost drivers include the cost of services and the volume of services used. The main focus of PPACA is on expanding coverage and on who should pay for these services. PPACA contains limited direct focus on reducing overall healthcare spending for a family of four covered by an employer-sponsored PPO.

There are implications for consumers, employers, providers, and the federal government. We will examine the implications for each of these points of view.

CONSUMERS

Employees receiving healthcare coverage as a benefit of employment may have already noticed changes that are due to PPACA. Those include benefit eligibility for adult dependents up to age 26, coverage of preventive care without any out-of-pocket cost sharing, and elimination of maximum benefit limits. What will they see in the coming years?

With PPACA fully intact

If PPACA proceeds fully intact, then the changes for employees will depend on what strategy their employer decides to utilize. Some employers will retain the same basic benefit structure but may implement larger-than-average increases in out-of-pocket cost sharing or payroll contributions toward premium in order to offset the increased employer obligations required by PPACA.

Some employees may decide that they prefer the healthcare coverage provided through the exchange. Other employees may be forced to pursue alternatives if their employers terminate healthcare coverage and possibly replace it with cash compensation. In either case, if employees become responsible for purchasing their own healthcare coverage then they would likely find more coverage options than were previously available to them when their employers preselected a menu of options. They might be surprised, however, to see the total premium cost because they have potentially been insulated from the total cost of care.

With no individual mandate

Employees with coverage available through their employer-sponsored health plans currently make a decision about whether participation is right for them. Without the individual mandate, they would continue to make a similar decision based on the plan options offered, their personal financial situation, and perceived potential need for healthcare.

No PPACA

If all provisions of PPACA were struck down or repealed then consumers would be in a situation similar to where they are now. Furthermore, their employers may decide to roll back some of the changes already implemented, such as covering dependents up to age 26.

EMPLOYERS

Employers have been implementing changes to comply with PPACA over the last two years, including extending eligibility to adult dependents up to age 26, covering preventive care with no out-of-pocket cost sharing, providing unlimited lifetime benefit maximums, and other coverage requirement provisions.¹ Employers that wanted to delay some of the early requirements of PPACA could do so by maintaining grandfathered status.²

With PPACA fully intact

Proactive employers have been planning their benefit strategies to be in compliance with PPACA. Depending on the particulars of their workforces and existing benefit plans, they may expect increased costs that are due to more employees being eligible for and participating in the plan. Other cost drivers include selection risk, fees and potential penalties, an excise tax for very expensive plans, and the possibility that automatic enrollment materially impacts plan enrollment. For the most part, employers are planning to adjust their plans to offset these costs. In other words, PPACA's required changes that shift more of the financial burden to the employer are being offset by other changes that either reduce the overall cost of care and/or pass a similar portion of costs back to the employee. In some cases, the possibility of eliminating or substantially reducing coverage is one of the options under consideration, even though there are penalties that offset some of the savings. Small employers may have additional options, including the Small Business Health Options Program (SHOP) exchange or dropping coverage without the same penalties facing large employers.

With no individual mandate

The presence of an individual mandate has little effect on employers unless other provisions, such as automatic enrollment into the employer's plan, would also be eliminated. For a fully insured employer, such as small groups, there could be an effect on insurance premiums if guaranteed issue remains, since the average health status of employees covered in this scenario may change. This does not, however, substantially change the underlying cost of care for the typical family of four.

No PPACA

If all of PPACA were eliminated, each employer would face the decision of whether to roll back plan changes that have already been made and in some cases have already become valued benefits for employees.

1 Haynes, R., Chanin, J., & Bonsee, P. Healthcare reform and employers: Next steps. Milliman Insight. (2010, October 21.) Accessed May 8, 2012 at http://insight.milliman.com/article.php?cntid=7408&utm_source=healthcare&utm_medium=web&utm_content=7408&utm_campaign=Milliman%20On%20Healthcare

2 O'Connor, J. Patient Protection and Affordable Care Act: Implications of Status as a Grandfathered Plan. *Benefits Quarterly*. (2011, First Quarter). Accessed May 8, 2012, at www.ifebp.org/inforequest/0159542.pdf

PROVIDERS

Providers face a number of new obligations under PPACA, and they have already begun to take on increased financial risk in ways that alter the fee-for-service dynamic that has created a perverse incentive to utilize care. While PPACA's primary focus is on health insurance reform, it may lead to changes in the way that providers work and are paid. Providers may move toward more *accountable* care, and provider risk sharing may lead to an improved healthcare cost environment.

With PPACA fully intact

PPACA introduces the possibility for providers to offer new arrangements such as ACOs. These concepts are already being explored by physicians and hospitals with employers and insurers. Over the long term, the typical family of four may find these options available through its employers or on insurance exchanges.

With fewer people uninsured, providers will see less uncompensated care. However, they may face capacity issues, and an influx of patients covered by Medicaid may also have compensation implications.³

With no individual mandate

Upward cost pressures are more probable. Without the individual mandate, there will be fewer incentives for uninsured individuals to purchase insurance unless they have significant healthcare needs.⁴ Over time, this may create adverse selection and drive up insurance premiums, resulting in more uninsured patients.⁵

No PPACA

PPACA is just one force already motivating changes by providers in how they deliver care to a family of four and how they are compensated for that care. Many initiatives that providers are exploring to improve care delivery, such as patient-centered medical homes (PCMH), may continue even without PPACA. The pressures to lower healthcare costs, including a focus on provider reimbursement, coordination of care, and narrower networks, will not go away.

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- 3 Proebsting, D. Why hospital cost shifting is no longer a viable strategy. Milliman Insight. (2010, June 24). Accessed May 8, 2012, at http://insight.milliman.com/article.php?cntid=7254&utm_source=search&utm_medium=web&utm_content=7254&utm_campaign=Search
 - 4 Houchens, P. Measuring the strength of the individual mandate. Milliman Insight. (2012, March 6). Accessed May 8, 2012, at http://insight.milliman.com/article.php?cntid=8039&utm_source=healthreform&utm_medium=web&utm_content=8039&utm_campaign=Milliman%20On%20Healthcare
 - 5 Snook, T. & Harris, R. Adverse selection and the individual mandate. Milliman Insight. (2009, October 19). Accessed May 8, 2012, at http://insight.milliman.com/article.php?cntid=7159&utm_source=search&utm_medium=web&utm_content=7159&utm_campaign=Search

GOVERNMENT

The government is by far the largest purchaser of healthcare services, so its actions as a healthcare purchaser affect the rest of the market. In addition, government regulations strongly influence the nature of employer-sponsored healthcare benefits, and can influence plans via mandates and taxes.

With PPACA fully intact

When fully implemented, PPACA would reduce the number of the uninsured and, in turn, the amount of uncompensated care. In theory, this would reduce cost shifting by providers and reduce the charge for healthcare services that is paid by insured plans. Offsetting this effect is the increase in Medicaid enrollees. Because Medicaid typically reimburses substantially less than other payors, providers with substantial Medicaid patients typically subsidize the Medicaid care they provide through charges to other payors such as commercial insurers.

With no individual mandate

Even without the individual mandate, there are other incentives such as subsidies that could entice some previously uninsured individuals to obtain coverage. If these efforts were unsuccessful in substantially increasing the number of citizens with coverage, the government might still face pressure to reduce the number of uninsured.

No PPACA

Although opinions about what solutions the country should pursue are diverse, government leaders across the political spectrum agree that the current access and cost dynamics are not sustainable. If PPACA is overturned, these dynamics will continue to be problems in search of solutions.

IMPACT ON MMI FAMILY OF FOUR

While several aspects of healthcare reform would have meaningful impact on the cost of insurance coverage, the effect on the total cost of care is very limited for our family of four. For example, medical loss ratio rules and stringent review of health insurance increases may reduce insurer profits and also put pressure on insurers to be as efficient and low-cost as possible. But the cost of care for this family of four is still \$20,728, which excludes insurer profits and administrative expenses.

While efforts to be more administratively efficient may lead to lower premiums, they do not directly affect the cost of delivering healthcare to the MMI family of four.

What will it take to significantly affect the cost of care? Some of the movements already under way may help. Examples include better care coordination, a focus on outcomes and efficiency, increased patient accountability, and healthier lifestyle choices.

Whether the nation is next debating new legislation from scratch or next steps to take us beyond the financing issues of PPACA to meaningful cost reforms, the amounts at stake will not go unnoticed.

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TECHNICAL APPENDIX

The Milliman Medical Index (MMI) is made possible through Milliman's ongoing research in healthcare costs. The MMI is derived from Milliman's flagship health cost research tool, the Health Cost Guidelines™, as well as a variety of other Milliman and industry data sources, including Milliman's *MidMarket Survey*.

The MMI represents the projected total cost of medical care for a hypothetical American family of four (two adults and two children) covered under an employer-sponsored PPO health benefit program. The MMI reflects the following:

- Nationwide average provider fee levels negotiated by insurance companies and preferred provider networks
- Average PPO benefit levels offered under employer-sponsored health benefit programs⁶
- Utilization levels representative of the average for the commercially insured (non-Medicare, non-Medicaid) U.S. population

Variation in costs

While the MMI measures cost for a typical family of four, any particular family or individual could have significantly different costs. Variables that impact costs include:

Age and gender. There is wide variation in costs by age, with older people generally having higher average costs than younger people. Variation also exists by gender.

Individual health status. Tremendous variation also results from health status differences. People with chronic conditions are likely to have much higher average healthcare costs than people without these conditions.

Geographic area. Significant variation exists among healthcare costs by geographic areas because of differences in healthcare provider practice patterns and average costs for the same services.

Provider variation. The cost of healthcare depends on the specific providers used. Costs also vary widely because of differences in both billed charge levels and discounts that payors negotiate.

Insurance coverage. The presence of insurance coverage and the amount of required out-of-pocket cost sharing also affects healthcare spending.

⁶ For example, for 2012, average benefits are assumed to have an in-network deductible of \$610, various copays (e.g., \$110 for emergency room visits, \$25 for physician office visits, \$11/18%/25% for generic/formulary brand/non-formulary brand drugs), coinsurance of 17% for non-copay services, etc.

For further perspective on how the Milliman Medical Index fits in the evolving healthcare system, visit our blog at:

<http://www.healthcaretownhall.com/?tag=milliman-medical-index>



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