

# THE UNKNOWN COSTS OF HEALTH CARE MANDATES



According to the [2024 Oklahoma Scorecard](#), Oklahoma ranks 44th in health care; this includes outcomes, supply, coverage, and costs. A key factor contributing to these rising costs is the implementation of state-mandated regulations on health insurance providers. These mandates, both administrative and coverage-related, shape how insurance operates and what benefits must be included. However, Oklahoma currently lacks a formal mechanism to assess the financial impact of these mandates, making it difficult to predict their long-term consequences for businesses and consumers.

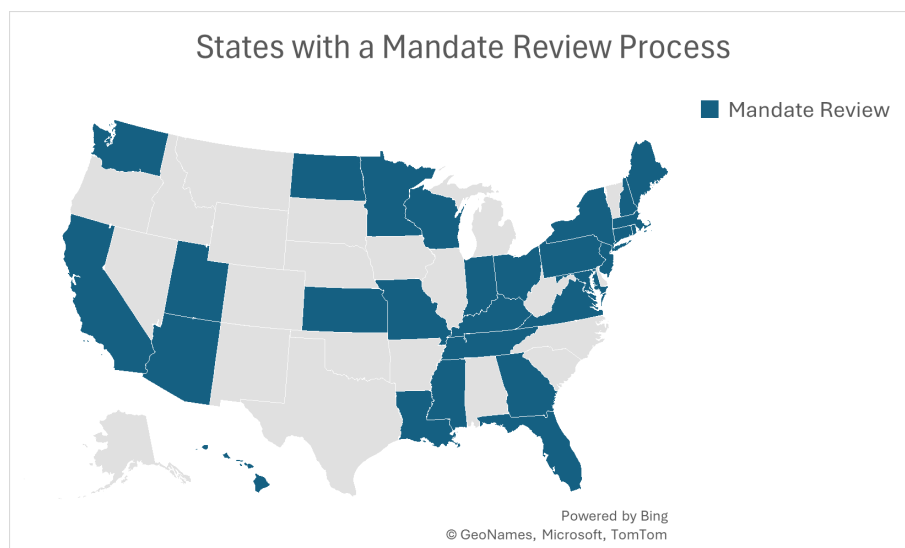
According to [KFF's 2024 Employer Health Benefits Survey](#), over the last ten years, health insurance premiums have increased, outpacing inflation for coverage of a family by 20%. Employers also saw an increase in premiums over the same time. Small firms saw a 49% increase in premiums, while large firms saw a 59% increase in premiums.

The increasing premium costs are driven, in part, by state mandated regulations on health insurance providers. Generally, there are two types of mandates: administrative and coverage. Oklahoma enacted 18 market health mandates (both administrative and benefits coverage) between 2022 and 2024, according to [NCSL, Health Costs, Coverage and Delivery State Legislation Data Base](#). (Ranking second, regionally, only behind Colorado, enacting 24.)

**Administrative Mandates:** These are rules or requirements that direct insurers or healthcare providers to take certain actions that are not directly related to covering medical treatments or services. For example, they might require insurers to provide certain notices to patients, report specific data to government agencies, or implement procedures for claims processing. These mandates focus on how things are done, not what medical care is covered.

**Benefits Coverage Mandates:** These require health insurance plans to include coverage for specific medical services, treatments, or procedures. For example, a mandate might require insurance to cover preventive care like vaccinations, mental health services, or maternity care. These mandates ensure certain types of healthcare are part of the plan's benefits.

Both types of mandates have cost impacts on health insurance plans but are often unknown to policy makers adopting these mandates. [Oklahoma and 21 other states](#) do not have a mechanism to evaluate the cost that these mandates may have on health insurance benefit plans, consumers, and businesses. The other 28 states either have a legislative body, an insurance commission function, or other system to review each proposed mandate.



Because of these unknown costs, the State Chamber Research Foundation contracted Milliman Inc. to analyze the impact of the two different types of private health insurance mandates from recently enacted legislation. HB 2872, passed in 2024, which prevents balanced billing for ambulance services and sets reimbursement rates at 325% of Medicare rates if not contracted, an administrative mandate. HB 3504, passed in 2022, which mandates coverage for cancer screenings for women, increasing from once every five years to annually with age, a coverage mandate.

[Milliman](#) offers services that help clients “improve healthcare, expand access to insurance, manage emerging risks, and advance financial security.” Their team of experts includes numerous actuaries who assessed the mandates to determine what the impact cost will be on the private market.

**As this report highlights, both types of mandates will likely increase the average premium per member per month, contributing to the increasing health care costs in the state. However, not all mandates are equal.**

**All mandates have varying factors and will not impact consumers and plan sponsors the same. Policymakers should consider implementing a formal review process to balance the need for comprehensive health care coverage with the growing costs of health care on consumers and businesses alike.**



MILLIMAN REPORT

# Analysis of Oklahoma House Bill 2872

Oklahoma HB 2872: Out-of-Network Ambulance Reform

*Sponsored by the State Chamber Research Foundation*

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## Executive Summary

Many states conduct independent estimates of the cost impact of proposed health insurance legislation as one resource for legislators to consider when evaluating a bill. These cost impacts are typically performed by health actuaries. The State Chamber Research Foundation retained Milliman, Inc. (Milliman) to provide an independent estimate of the cost impact of House Bill (HB) 2872 on premiums in Oklahoma's individual market. The individual market was chosen as an example to illustrate this type of analysis. We provide a high-level discussion of impacts on other markets in the section Other Oklahoma Insurance Markets.

The Oklahoma legislature passed HB 2872 during the 2024 legislative session. HB 2872 prevents balance billing<sup>1</sup> for ambulance services covered under a patient's medical policy in Oklahoma. It also sets reimbursement to the lesser of the ambulance provider's billed charges or 325% of Medicare rates if the ambulance provider has not contracted with the health insurer or rates are not set by a local governmental entity. As written, the law applies to health insurers, health maintenance organizations, hospital and medical service corporations, risk-based provider organizations, and sponsor or self-funded health plans. The law took effect on January 1, 2025. The full text of the law is available in Appendix A. Figure 1 provides high level estimates of the impact of this legislation on premiums, cost sharing, and patient costs for non-covered services (balance billing) for the individual health insurance market.

**Figure 1: Impact of HB 2872 on Individual Market (Oklahoma, 2025)**

Description	Without HB 2872	With HB 2872	Change (%)
<b>Number of enrollees in individual market</b>	199,000	199,000	0 (0.0%)
<b>Average insurance premium per member per month (PMPM)</b>	\$680.02 PMPM	\$683.41 PMPM	\$3.40 PMPM (0.5%)
<b>TOTAL AMBULANCE ENCOUNTERS</b>	<b>10,268</b>	<b>10,473</b>	<b>205 (2.0%)</b>
In-network	6,123	3,123	-3,000 (-49.0%)
Out-of-network w/o balance billing	1,813	7,350	5,537 (305.4%)
Out-of-network w/ balance billing	2,331	0	-2,331 (-100.0%)
<b>% of Trips with balance billing</b>	<b>23%</b>	<b>0%</b>	<b>-23% (N/A)</b>
<b>COST PER AMBULANCE CLAIM (ALLOWED)</b>	<b>\$1,116.38</b>	<b>\$1,789.93</b>	<b>\$673.55 (60.3%)</b>
In-network	\$977.24	\$1,465.86	\$488.62 (50.0%)
Out-of-network	\$1,321.92	\$1,927.60	\$605.68 (45.8%)
<b>PATIENT RESPONSIBILITY (PER AMBULANCE ENCOUNTER)</b>	<b>\$282.27</b>	<b>\$241.65</b>	<b>-\$40.62 (-14.4%)</b>
In-network	\$200.44	\$241.81	\$41.37 (20.6%)
Out-of-network w/o balance billing	\$200.50	\$241.59	\$41.09 (20.5%)
Out-of-network w/ balance billing	\$560.78	N/A	-\$560.78 (-100.0%)
<b>Total expenditures</b>	<b>\$1,629,010,000</b>	<b>\$1,636,770,000</b>	<b>\$7,750,000 (0.5%)</b>
Total premiums	\$1,626,120,000	\$1,634,240,000	\$8,120,000 (0.5%)
Total patient responsibility	\$2,900,000	\$2,530,000	-\$370,000 (-12.7%)
Cost sharing	\$2,150,000	\$2,530,000	\$380,000 (17.7%)
Balance billing (collected)	\$750,000	\$0	-\$750,000 (-100.0%)

<sup>1</sup> Out-of-network providers do not have contracts with health insurers. The health insurer typically has an "allowed charge" that is then allocated between health insurer and the member according to the cost sharing (deductibles, copays, coinsurance) in the plan design. Any difference between the allowed charge and billed charge could be charged to the member as balance billing directly by the ambulance provider. This is called balance billing.

## Financial impact on insurance premiums

As shown in Figure 1, we anticipate that HB 2872 will raise insurance premiums by 0.5% or \$3.40 PMPM in the Oklahoma individual market. The increased premiums are due to three factors.

1. Increase in in-network reimbursement or decrease in network participation. We anticipate that in-network providers may be able to negotiate higher contracted rates or may terminate their contracts and become out-of-network providers since the new out-of-network reimbursement of 325% of Medicare is higher than prevailing in-network rates. For the average ambulance trip, in-network ambulance providers will see an increase in average allowed charges from \$977.24 (164% of Medicare) to \$1,465.86 (245% of Medicare). Additional sensitivity testing on network impact is shown in Figure 3 below.

2. Increase in reimbursement for out-of-network providers. The allowed charges for out-of-network ambulance services will increase because the new mandated reimbursement of 325% of Medicare appears higher than most current out-of-network allowed amounts. For the average ambulance trip, out-of-network ambulance providers will see an increase in average allowed charges from \$1,321.92 (223% of Medicare) to \$1,927.60 (325% of Medicare).

3. Increase in use of ambulance services. We anticipate that the overall level of ambulance services may increase as patients will be more likely to use ambulance services if they no longer risk balance billing. We estimate a 2.0% increase in the number of ambulance claims from 10,268 claims to 10,473 claims (52.1 per 1,000 member years to 53.1 per 1,000 member years; see Appendix B for details).

Additional details and rationale are available in the Methodology section below.

## Financial impact for patients

This bill prohibits balance billing.<sup>2</sup> Balance billing occurs when an out-of-network provider does not accept reimbursement from a health insurer as payment in full, and subsequently directly bills a patient for the difference between the billed amount and the health insurer's allowed amount.

There is not a comprehensive source of claims data that identifies whether or not an individual was balance billed for a particular claim. Without HB 2872, we estimate that 23% of ambulance claims resulted in balance billing with an average collected amount of \$360.28 (this is in addition to cost sharing of \$200.50 paid for such claims, resulting in total patient responsibility of \$560.78 for claims with balance billing). The figures presented in Figure 1 are averages and reflect estimated amounts collected through balance billing. We note that the amount of balance billing could be \$2,000 or more depending on the intensity of the services provided. HB 2872 would eliminate all balance billing.

Patients would continue to be responsible for cost sharing (deductibles, copays, coinsurance, etc.) for ambulance services. We anticipate that the average overall cost sharing will increase from \$200 per claim to \$240 per claim due to the increased allowed charges discussed above. This would primarily occur for policies with deductibles and coinsurance where higher allowed charges generally result in higher cost sharing.

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<sup>2</sup> Balance billing and surprise billing often used interchangeably. Surprise billing is a subset of balance billing for bills from out-of-network ancillary providers (e.g. anesthesia, radiology, lab) occurring in conjunction with an in-network facility visit.

### **Financial impact for ambulance providers**

This bill is expected to increase the average reimbursement for ambulance providers. In Figure 1, we show this as an estimated 60.3% increase in reimbursement for ambulance services.



## Discussion of Policy Context

At least 18 states have recently evaluated or passed legislation relating to surprise billing for out-of-network ambulance services.<sup>3</sup> Notably, Louisiana passed similar legislation (LA Senate Bill No. 109) which became effective on August 1, 2023.

The focus of our analysis is the impact of the legislation on health insurance premiums. There are also impacts on patients and providers. Here are some items where HB 2872 may impact patients and providers.

- Oklahomans may see reduced medical debt.
- Patients may no longer experience the confusion caused by balance billing. For example, most patients do not regularly use ambulance services and may be surprised when balance billing occurs. Similarly, such a change may reduce the burden of insurance companies which expend resources to explain such items to their members who have been balance billed.
- It is possible that patients will be more likely to seek care in general, which may lead to an increase in medically necessary care and improved health outcomes. It is also possible that there would be increases in care that could be provided more efficiently in a less acute setting. For example, there may be increases in emergency department visits that could be provided more efficiently in a primary care or urgent care setting.
- It is possible that the legislation will not completely eliminate direct billing by ambulance providers. For example, if a health plan determines that ambulance services were not covered under the insured's policy, HB 2872 would not protect the patient, and the ambulance provider could still bill the patient directly.
- It is possible that the mandate would relieve financial pressures on some ambulance providers which have found reimbursement inadequate to cover their expenses. Furthermore, it is possible that increased levels of reimbursement could increase the accessibility and quality of ground ambulance services. The mandate would relieve the burden of balance billing from ambulance providers.
- The wording of the bill allows the possibility that ambulance providers affiliated with local governments could see increases in reimbursement above 325% of Medicare. Prior to HB 2872, local governments may have been hesitant to raise rates as there was no guarantee that an insurance company would reimburse the local affiliated ambulance provider at this rate. With the enactment of HB 2872, insurance companies must reimburse at the local government rate.
- The new legislation may ease the burden on local municipalities for developing their own ordinances relating to ambulance services.

Because HB 2872 sets reimbursement as a percentage of Medicare, it is worth understanding a few payment basics with respect to the Medicare ambulance services payment system. In particular, Medicare reimbursement varies by zip code, with urban, rural, and super-rural zip codes receiving different levels of reimbursement based upon a predetermined formula.<sup>4</sup>

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<sup>3</sup> (Stovicek, 2024)

<sup>4</sup> (MedPAC, 2024)

- A base rate is calculated for each ambulance trip depending on the relative value unit of the services rendered and the current ambulance conversion factor. Reimbursement is then adjusted by a geographic adjustment factor. This result is known as the base payment.
  - Rural areas see an add-on payment of 3% to the base payment.
  - Super-rural areas see an add-on payment of 22.6% of the base payment. This fact leads to a dynamic where a super-rural region with an add-on payment of 22.6% would see its add-on payment become 73.45% (325% \* 22.6%) of the base payment.
- A mileage payment is calculated separately using the raw mileage and a mileage rate set by CMS.
  - Rural (including super-rural) areas see a 50% add-on payment for the first 17 miles.

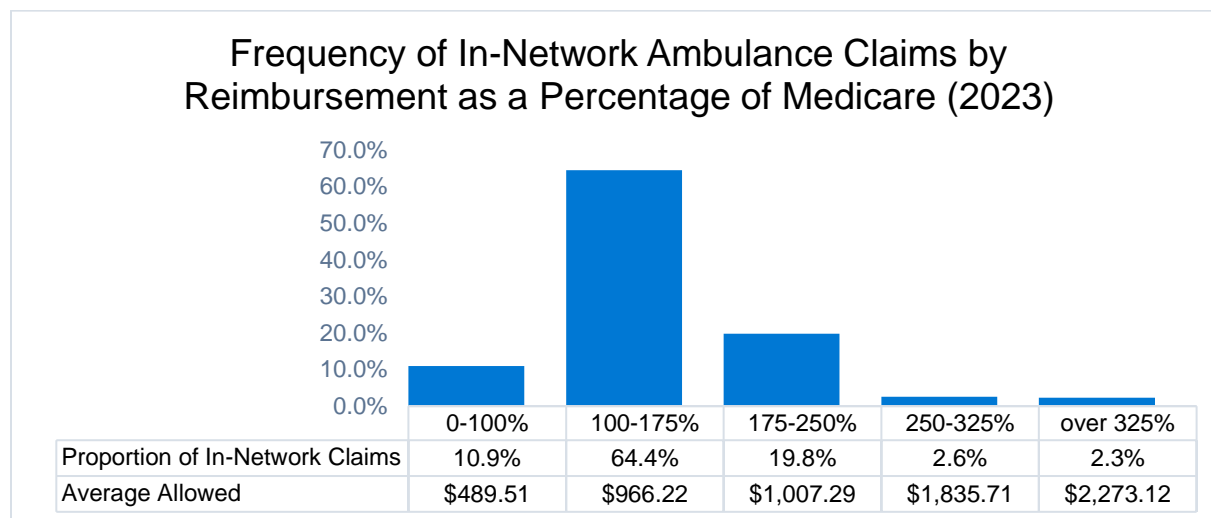
During our analysis, we noted that the bill language does not specify whether the factor of 325% would apply to the Medicare base rate or add-on payments or both. Our analysis assumes that commercial plans will be required to pay 325% of the Medicare base rate plus the add-on payments. If the mandate is reevaluated by the legislature, we recommend that the appropriate interpretation be clarified in the bill language. Alternatively, the updated mandate could require that guidance be promulgated by the appropriate state agency.

## In-Network Reimbursement and Sensitivity Testing

The impact of HB 2872 on insurance premiums will largely be driven by the behavior of ambulance providers currently contracted with health payers (in-network providers).

Figure 2 provides insights into the current level of reimbursement for in-network ambulance providers. As shown in Figure 2, 97.7% of in-network ambulance claims in Oklahoma are reimbursed less than 325% of Medicare FFS rates and 75.3% of in-network ambulance claims are reimbursed less than 175% of Medicare FFS rates. Given this, under HB 2872, in-network ambulance providers have an incentive to terminate their contracts with carriers and obtain out-of-network reimbursement at 325% of Medicare.

**Figure 2: In-Network Reimbursement Levels (2023)**



It is possible and likely that in-network providers will use their leverage to request in-network reimbursement rates that are somewhere between current levels and 325% of Medicare.

We do not anticipate that the impact of HB 2872 would be uniform across the state. In Oklahoma, several large municipalities have formed publicly-funded emergency ambulance services with the goal of improving access, quality, and reducing balance billing. For example, the Emergency Medical Services Authority (EMSA) operates in the Oklahoma City and Tulsa areas. These two municipalities approve the reimbursement rate. As discussed above, our analysis provides a state-wide average. Below, we provide additional discussion of how our analysis may vary by region throughout Oklahoma.

- Local government ambulance providers may not react to HB 2872 as quickly as private ambulance providers and may even consider their current rates sufficient to meet their desired access and quality standards. As such, in regions with more local government ambulance providers, it is possible that there will be less change in reimbursement, and thus a smaller change in insurance premiums.
- HB 2872 may be an opportunity for local government ambulance providers to increase reimbursement. There is nothing restricting a local government from passing a municipal ordinance that would increase rates above 500% or more of Medicare. Therefore, it is also possible that some regions with local government ambulance providers could see a larger change in insurance premiums.
- Within areas of the state without local government rates, some regions may be served predominantly by for-profit ambulance providers whereas other regions may be served by non-profit entities. In our experience, we anticipate that for-profit providers may be more driven to seek higher reimbursement as compared to non-profit providers. Such regions could see a larger change in insurance premiums.

Figure 3 provides a sensitivity analysis of how the behavior of in-network ambulance providers would impact health insurance premiums on the individual market. If only 10% of in-network ambulance providers terminated their contracts, premiums would increase by about \$2.83 PMPM (0.4%). If 90% of in-network ambulance providers terminated their contracts, premiums would increase by about \$3.96 PMPM (0.6%).

**Figure 3: Sensitivity of In-Network Behavior (2023)**

Percentage of In-Network Ambulance Providers Terminating Contract	Impact on Premiums	Comments
10%	\$2.83 PMPM (0.4%)	
50%	\$3.40 PMPM (0.5%)	Same as Table 1.
90%	\$3.96 PMPM (0.6%)	

## Other Oklahoma Insurance Markets

Our numerical analysis focused on the individual health insurance market in Oklahoma. Because HB 2872 impacts nearly all lines of business (e.g. individual market, small group market, fully-insured large group, and self-insured large group), we have included a non-numerical discussion of how other insurance markets in Oklahoma may be affected.

About half (1.7 million individuals or 48.2%) of Oklahoma's population has employer-sponsored insurance.<sup>5</sup> We would expect an analysis of the employer-sponsored market to be generally similar to

<sup>5</sup> (Kaiser Family Foundation, 2023)

this analysis of the Oklahoma individual market, with some exceptions. First, the overall impact would be influenced by the frequency of ambulance trips for patients with employer-sponsored insurance. Second, the overall impact would be influenced by the number of contracted ambulance providers and the terms of their contracts. While we have not collected specific data and information on these dynamics in Oklahoma, our data sources indicate that the frequency of ambulance trips is lower for patients with employer-sponsored insurance than those with individual insurance.

We note that self-funded employer-sponsored coverage is typically governed by ERISA. State mandates impacting insurance code do not usually apply to these plans. It is not clear to the authors of this report whether self-funded plans would be required to reimburse out-of-network ambulance providers at a rate of up to 325% of Medicare.

HB 2872 does not apply to Medicaid plans (SoonerCare). Therefore, there is no impact on this insurance market.

Existing regulations and policies may already prevent balance billing for Oklahoma residents with health coverage through VA, TRICARE, and Indian Health Services. Therefore, HB 2872 would not impact balance billing for these markets. It may impact reimbursement levels. Each of these markets has unique requirements, and our analysis presented in this report would not generally be applicable.

Medicare is generally regulated by the federal government and may take the form of traditional fee-for-service (FFS) coverage or managed Medicare Advantage plans. Prior to the enactment of HB 2872, patients with Medicare coverage would face the possibility of balance billing similar to patients with coverage in the individual market. In fact, CMS has established an advisory committee aimed at making recommendations to state legislatures and Congress on this topic.<sup>6</sup> We also note that for Medicare Advantage plans, out-of-network ambulance providers may be reimbursed at 100% of Medicare FFS rates.<sup>7</sup> This amount is much lower than the reimbursement level set by HB 2872. Understanding the interaction between state law and federal regulations is outside the scope of our analysis. It is not clear to the authors of this report whether Medicare Advantage plans would be required to reimburse out-of-network ambulance providers at a rate of up to 325% of Medicare.

Patients who are completely uninsured would not benefit from the protections of HB 2872, as their ambulance services are not covered under a health care benefit plan which is a key requirement of the legislation. If billed charges increase as a result of HB 2872, these patients may receive higher bills than they would have prior to HB 2872.

## Data Sources

### HEALTH COST GUIDELINES

The Health Cost Guidelines (HCGs) are a health care pricing tool used by actuaries in many of the major health plans in the United States. The guidelines provide a flexible but consistent basis for estimating health care costs for a wide variety of commercial health insurance plans. It is likely that these organizations use the HCGs, among other tools, to determine the initial premium impact of any new mandate. Thus, in addition to producing accurate estimates of the costs of a mandate, we believe the HCG-based values are also good estimates of the premium impact as estimated by the HMOs and insurance companies.

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<sup>6</sup> (Ground Ambulance & Patient Billing Advisory Committee, 2024)

<sup>7</sup> (CMS, 2016)

## CONSOLIDATED HEALTH COST GUIDELINES DATABASE

We relied on Milliman’s proprietary health research databases to complete this study. Our research databases allow for the tracking of de-identified patients across multiple years. The most recent available underlying databases contain more than 900 million member years of data dating from 2010 to 2024. This data source is a combination of Milliman’s Consolidated Health Cost Guidelines Sources Database (CHSD) and Merative’s MarketScan. The database contains annual enrollment and paid medical and pharmacy claims for over 80 million commercially insured individuals covered by the benefit plans of large employers, health plans, and governmental and public organizations nationwide.

## Methodology

To help our audience understand the full impact of this mandate, we have assumed that the mandate is phased in completely with immediate effect. We recognize that in practice, most changes to policy do not result in instantaneous implementation in insurance markets. Our assumptions regarding changes in behavior for patients, ambulance service providers, and carriers are described below and represent immediate implementation on the effective date of the legislation for a full calendar year, 2025.

**Figure 4: Core Assumptions**

FEATURE	ASSUMPTION	COMMENTS
<b>Overall ambulance utilization</b>	+2.0%	We assume that the overall level of ambulance services will increase due to a prohibition on balance billing as patients will be less likely to avoid ambulance services for fear of financial repercussions. This is based upon research on induced utilization, also known as elasticity of demand, from the Milliman Health Cost Guidelines.
<b>Migration of network providers out of the network</b>	+50%	Due to potentially higher rates for out-of-network services, contracted, in-network ambulance providers may leave the network by terminating their contracts with insurance carriers. Our assumption reflects the recent trend of private equity firms acquiring ambulance providers. <sup>8</sup>
<b>Proportion of out-of-network claims with local government / billed charges rate</b>	0%	With the enactment of HB2872, some out-of-network claims could be reimbursed at the level of billed charges or be reimbursed at local government rates. We are implicitly assuming that all out-of-network ambulance providers will increase billed charges to at least 325% of Medicare. We are also assuming that providers with rates regulated by local governments will be in network or also increase reimbursement levels to 325% of Medicare. We are therefore assuming that all out-of-network reimbursement will be at 325% of Medicare. Our assumption is supported by economic theory that states that rational actors will maximize their advantage in any situation.
<b>Increase in In-Network Reimbursement</b>	50%	We assume that in-network reimbursement will increase by 50%. We assume that in-network providers will use HB 2872 and the possibility of moving out-of-network as leverage to negotiate rates, while remaining in-network. We

<sup>8</sup> (Shinkman, 2016)

FEATURE	ASSUMPTION	COMMENTS
		<p>assume that in-network rates will approach but not equal 325% of Medicare.</p> <p>HB2872 mandates that “The minimum allowable reimbursement rate under any health care benefit plan issued by a health care insurer to an out-of-network ambulance service provider for providing covered ambulance services shall be at the rates set or approved, whether in contract or ordinance, by a local governmental entity in the jurisdiction in which the covered ambulance services originate.” This provision supersedes the payment clause proposing the “lesser of billed charges or 325% of Medicare” provision.</p> <p>HB2872 does not set a cap on the reimbursement rates that a governmental entity may establish, either in ordinance or by contract with ambulance providers. As a result, some governmental entities and/or ambulance services may establish contracts or ordinances mandating reimbursement rates higher than 325% of Medicare. This supports the assumption that in-network rates will increase, as insurance carriers may contract with local governments.</p> <p>Based upon a review of our ambulance claims, some entities have reported ground ambulance reimbursement rates that exceed 325% of Medicare, with some as high as 600% of Medicare. We anticipate this trend may become more common upon enactment of HB 2872 due to the dynamic that local governments may set rates higher than 325% of Medicare.</p>
<b>Balance billing threshold</b>	\$250	We assume balance billing for out-of-network claims occurs when the difference between the billed and allowed charges is above this threshold. This results in the percentage of out-of-network claims with balance billing as displayed in Figure 1. There are no data sources with complete information about balance billing.
<b>Balance billing collection</b>	50%	Not all amounts that are balance billed will be collected. We assume that only 50% of these amounts are collected prior to the enactment of HB 2872. There are no data sources with complete information about balance billing.
<b>Claims trend</b>	4.5%	Nationwide claims trends are expected to average 4-5% per year.

Our basic approach to measure the impact of HB 2872 consisted of the following three steps, which we further explain below.

1. Identify 2023 ambulance claims experience.
2. Apply the above assumptions to adjust the claims experience.
3. Project the original and adjusted experience to the 2025 calendar year.

**1. Identify 2023 ambulance claims experience**

Milliman maintains a comprehensive nationwide database of claims experience described in the Data Sources section. We used calendar year 2023 claims from the commercial and individual markets from

this database to identify a representative sample of utilization and billed, allowed, and Medicare reimbursement amounts for ground ambulance claims in Oklahoma.

We assumed that the frequency of ambulance claims for the individual market would be similar to historical experience in Oklahoma.

A detailed summary of utilization and costs is in Appendix B.

## **2. Apply the assumptions to adjust the claims experience.**

For our analysis, we focus on the effect of HB 2872 in these three ways:

1. elimination of balance billing, reducing the patient responsibility,
2. potential increase in the reimbursement rates for out-of-network ambulance providers, and
3. potential increase in the reimbursement rates for in-network ambulance providers.

To measure the impact of the elimination of balance billing, we first identified where balance billing was likely to have occurred. We assumed that balance billing would occur when the difference between the billed and allowed amounts for out-of-network ambulance claims was sufficiently large, triggering collection. We used the balance billing threshold (\$250) in Figure 4 above to estimate these claims. We also made an adjustment (50%) to reflect that collection does not necessarily occur in all cases where ambulance providers pursue balance billing. For example, some patients may not have financial resources available to pay their medical debts. And, in such cases where collections occur, the balance may not be paid at all or may be negotiated down.

HB 2872 provides a rate for out-of-network ambulance claims, namely 325% of the Medicare rate for areas with no rate set by the local government. This could potentially induce some ambulance providers to move out of network to receive higher rates. This would also raise ambulance costs and member responsibility.

In order to identify the new rate, we used 325% of the Medicare rates for the out-of-network claims in the experience period. We assumed all out-of-network claims would be reimbursed at the new rate of 325% of Medicare. HB 2872 specifies that health insurers may reimburse an out-of-network ambulance provider's billed charges if this amount is below 325% of Medicare [where no local government rate exists]. As discussed in Figure 4, we assumed that in practice this would not occur upon enactment of HB 2872 because out-of-network ambulance providers would increase billed charges to at least 325% of Medicare.

Overall levels of reimbursement for ambulance services are driven by the frequency of out-of-network ambulance services as well as the increase in reimbursement for in-network and out-of-network ambulance providers.

We assumed that cost sharing would increase proportionally to the increase in allowed charges for a subset of ambulance encounters where copays are collected. We assumed that copays are collected in 41% of ambulance encounters based upon research available in the Milliman Health Cost Guidelines.

## **3. Project the original and adjusted experience to the 2025 calendar year.**

To measure the impact on the 2025 calendar year premiums, we used the 2024 Unified Rate Review Template (URRT) available on the CMS website.<sup>9</sup> We applied the claims trend to the 2024 individual

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<sup>9</sup> <https://www.cms.gov/files/zip/py20204-puf-20231031.zip>

market claims experience in the URRT to determine the projected 2025 claims and used the assumed medical loss ratio to determine the 2025 estimated premiums. Applying the adjustments described in the second step, we determined the estimated premium with HB 2872 (Average Insurance Premium row of Figure 1).

#### **IMPLICIT ASSUMPTIONS ON NETWORK FORMATION**

We considered whether in-network reimbursement would be higher or lower than out-of-network reimbursement.

Quite often, health insurers reimburse out-of-network providers based on a percentile of usual and customary rates. Ambulance providers may be willing to accept lower in-network rates because a contract with the health insurer can minimize payment disputes. Additionally, such a contract may lead to a higher volume of services, such as scheduled ambulance services that might not have occurred otherwise. In exchange for increased payment certainty and service volume, an ambulance provider may be willing to accept a lower rate.

Alternatively, if health insurers develop specific quality and service requirements for in-network status for contracted ambulance providers, it may be necessary for the health insurer to offer higher rates to in-network providers.

Historical claims data from six different states in and around Oklahoma showed average out-of-network reimbursement were higher than in-network reimbursement levels. Our approach implicitly assumes that this is true in Oklahoma and will continue upon enactment of HB 2872. We recognize that different health insurers may have different patterns.



## Limitations

Milliman does not intend to benefit any third-party recipient of its work product, even if Milliman consents to the release of its work product to such third party.

Differences between our projections and actual amounts depend on the extent to which future experience conforms to the assumptions made for this analysis. Actual experience is unlikely to conform exactly to the assumptions used in this analysis. Therefore, actual amounts will almost certainly differ from projected amounts. Milliman has developed certain models to estimate the values included in this report. The intent of the models was to estimate the impact of HB 2872 in 2025. We have reviewed the models, including their inputs, calculations, and outputs, for consistency, reasonableness, and appropriateness to the intended purpose and in compliance with generally accepted actuarial practice and relevant actuarial standards of practice (ASOP).

The models rely on data and information as input to the models. We have relied upon certain data and information provided discussed above for this purpose and accepted it without audit. To the extent that the data and information provided is not accurate, or is not complete, the values provided in this report may likewise be inaccurate or incomplete. Milliman's data and information reliance includes:

- Enrollment data provided by various sources
- Medical claims data provided by various sources
- Unified Rate Review Template (URRT) data provided by CMS

The models, including all input, calculations, and output, may not be appropriate for any other purpose.

We performed a limited review of the data used directly in our analysis for reasonableness and consistency and have not found material defects in the data. If there are material defects in the data, it is possible that they would be uncovered by a detailed, systematic review and comparison of the data to search for data values that are questionable or for relationships that are materially inconsistent. Such a review was beyond the scope of our assignment.

The authors of this report are not health insurance compliance experts and are not qualified to give legal opinions. It is strongly recommended that readers seek advice from qualified legal counsel and compliance experts.

Guidelines issued by the American Academy of Actuaries require actuaries to include their professional qualifications in all actuarial communications. John Rogers and Barb Dewey are members of the American Academy of Actuaries, and meet the qualification standards for performing the analyses in this report.

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## Appendix A: Text of HB 2872, An Act Relating to Ambulances

# An Act

ENROLLED HOUSE  
BILL NO. 2872

By: Wallace and Moore of the  
House

and

Rosino of the Senate

An Act relating to ambulances; creating the Out-of-Network Ambulance Service Provider Act; defining terms; setting minimum allowable rates; requiring certain payment to be considered payment in full; setting certain limits on certain payments; requiring compliance with certain claims requirements; providing for codification; and providing an effective date.

SUBJECT: Ambulances

BE IT ENACTED BY THE PEOPLE OF THE STATE OF OKLAHOMA:

SECTION 1. NEW LAW A new section of law to be codified in the Oklahoma Statutes as Section 6050.1 of Title 36, unless there is created a duplication in numbering, reads as follows:

This act shall be known and may be cited as the "Out-of-Network Ambulance Service Provider Act".

SECTION 2. NEW LAW A new section of law to be codified in the Oklahoma Statutes as Section 6050.2 of Title 36, unless there is created a duplication in numbering, reads as follows:

As used in the Out-of-Network Ambulance Service Provider Act:

1. "Ambulance service provider" means an ambulance service as defined by Section 1-2503 of Title 63 of the Oklahoma Statutes except that, for the purposes of this act, the term shall be limited to an ambulance service provider that provides ground transportation services;

2. "Covered ambulance services" means those ground ambulance services which an enrollee is entitled to receive under the terms of a health care benefit plan;

3. "Enrollee" means a person who is entitled to receive covered ambulance services under the terms of a health care benefit plan;

4. "Health care benefit plan" means a plan, policy, contract, certificate, agreement, or other evidence of coverage for health care services offered, issued, renewed, or extended in this state by a health care insurer, or government-sponsored self-insured plans. Health care benefit plan does not include any health plan offered by a contracted entity as defined in Section 4002.2 of Title 56 of the Oklahoma Statutes that provides coverage to members of the state Medicaid program;

5. "Health care insurer" means an entity that is subject to state insurance regulation and provides coverage for health benefits in this state and includes the following:

- a. an insurance company,
- b. a health maintenance organization,
- c. a hospital and medical service corporation,
- d. a risk-based provider organization, or
- e. a sponsor or self-funded plan.

Health care insurer does not include a contracted entity as defined in Section 4002.2 of Title 56 of the Oklahoma Statutes that provides coverage to members of the state Medicaid program;

6. "Out-of-network" means a provider that does not contract with the health care insurer of the enrollee receiving the covered ambulance services; and

7. "Clean claim" means a claim that has no defect of impropriety, including any lack of required substantiating documentation or particular circumstances requiring special treatment that prevents timely payment from being made on the claim.

SECTION 3. NEW LAW      A new section of law to be codified in the Oklahoma Statutes as Section 6050.3 of Title 36, unless there is created a duplication in numbering, reads as follows:

A. The minimum allowable reimbursement rate under any health care benefit plan issued by a health care insurer to an out-of-network ambulance service provider for providing covered ambulance services shall be at the rates set or approved, whether in contract or ordinance, by a local governmental entity in the jurisdiction in which the covered ambulance services originate.

B. In the absence of the rates as provided in subsection A of this section, the rate shall be the lesser of:

1. Three hundred twenty-five percent (325%) of the current published rate for ambulance services as established by the Centers for Medicare and Medicaid Services under Title XVIII of the Social Security Act for the same services provided in the same geographic area; or

2. The ambulance service provider's billed charges.

C. Payment made in compliance with this section shall be considered payment in full for the covered ambulance services provided, except for any copayment, coinsurance, deductible, and other cost-sharing feature amounts required to be paid by the enrollee. An ambulance service provider is prohibited from billing the enrollee for any additional amounts for the paid covered ambulance services in excess of what the health care insurer pays.

D. All copayments, coinsurance, deductible, and other cost-sharing feature amounts provided by subsection A of this section shall not exceed the in-network copayment, coinsurance, deductible, and other cost-sharing features for the covered ambulance services received by the enrollee.

E. In administering and paying claims, a health care insurer shall comply with Section 1219 of Title 36 of the Oklahoma Statutes.

SECTION 4. This act shall become effective January 1, 2025

## Appendix B: Actuarial Cost Model

Figure 5: Cost models with and without HB 2872 (Oklahoma Individual Market, 2025)

	Per 1,000 member years	Per claim				Per member per month			
		Claims	Allowed	Patient Responsibility (Cost Sharing)	Patient Responsibility (Balance Billing)	Plan Paid	Allowed	Patient Responsibility (Cost Sharing)	Patient Responsibility (Balance Billing)
<b>Without HB 2872</b>									
<b>Total</b>	<b>51.5</b>	<b>\$1,116.38</b>	<b>\$209.49</b>	<b>\$72.78</b>	<b>\$906.89</b>	<b>\$4.79</b>	<b>\$0.90</b>	<b>\$0.31</b>	<b>\$3.89</b>
In-network	30.7	\$977.24	\$200.44	\$0.00	\$776.80	\$2.50	\$0.51	\$0.00	\$1.99
Out-of-network without Balance Billing	9.1	\$1,288.05	\$200.50	\$0.00	\$1,087.55	\$0.98	\$0.15	\$0.00	\$0.82
Out-of-network with Balance Billing	11.7	\$1,348.26	\$240.25	\$320.53	\$1,108.01	\$1.31	\$0.23	\$0.31	\$1.08
<b>With HB 2872</b>									
<b>Total</b>	<b>52.6</b>	<b>\$1,789.93</b>	<b>\$241.65</b>	<b>\$0.00</b>	<b>\$1,548.27</b>	<b>\$7.84</b>	<b>\$1.06</b>	<b>\$0.00</b>	<b>\$6.78</b>
In-network	15.7	\$1,465.86	\$241.81	\$0.00	\$1,224.05	\$1.91	\$0.32	\$0.00	\$1.60
Out-of-network	36.9	\$1,927.60	\$241.59	\$0.00	\$1,686.01	\$5.93	\$0.74	\$0.00	\$5.18

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MILLIMAN REPORT

# Analysis of Oklahoma House Bill 3504

Oklahoma HB 3504: Breast Cancer Screening Expansion of  
Coverage

*Sponsored by the State Chamber Research Foundation*

John Rogers, ASA, MAAA, MS  
Geoff Apel, PhD  
Barbara Dewey, FSA, MAAA

March 10, 2025



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## Executive Summary and Key Findings

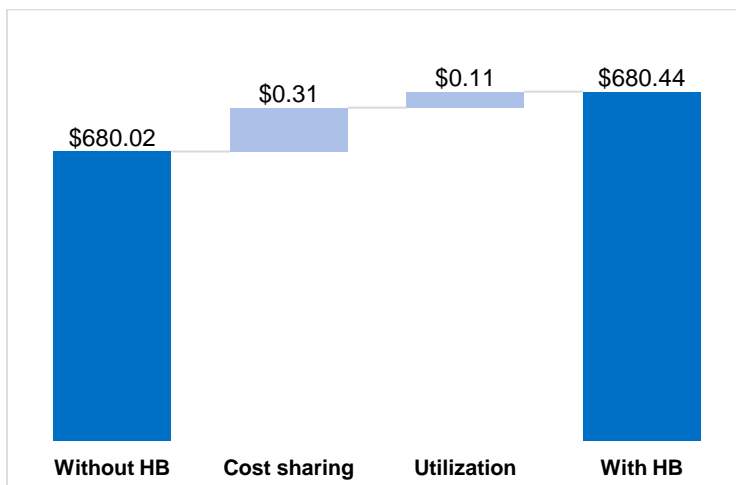
To assist legislators in evaluating proposed health insurance laws, many states independently estimate the associated cost impacts. These cost estimates are typically performed by health actuaries. The State Chamber Research Foundation retained Milliman, Inc. (Milliman) to provide an independent estimate of the cost impact of House Bill (HB) 3504 on premiums in Oklahoma's individual market. The individual market was chosen by the State Chamber Research Foundation as an example to illustrate this type of analysis. This is the second legislative analysis report we have prepared for the State Chamber Research Foundation on bills enacted by the Oklahoma legislature.

The Oklahoma legislature passed HB 3504 during the 2022 legislative session, and it became effective on November 1, 2022. HB 3504 expanded coverage for breast cancer screenings and removed related member cost sharing. It requires health plans to cover with no cost sharing one screening and one diagnostic exam every five years for females between ages 35-39 and one screening and diagnostic exam annually for females ages 40 and over. The full text of the law is available in Appendix A.

Although the law became effective in 2022, our approach is consistent with how we would have evaluated it when it was proposed in 2022. Figure 1 provides the projected impact of this legislation on health plan premiums and member cost sharing aggregated over all members in the individual health insurance market. Figure 2 shows the relative impact of the estimated rate increase due to the change in cost sharing compared to the increase in utilization. We consider impacts on other coverage types in the section titled Other Oklahoma Insurance Markets.

**Figure 1: Impact of Oklahoma HB 3504 on Individual Market (Oklahoma, 2025)**

Description	Without HB 3504	With HB 3504	Change (%)
<b>Number of enrollees in individual market</b>	<b>199,000 enrollees</b>	<b>199,000 enrollees</b>	<b>0 enrollees (0.0%)</b>
<b>Average insurance premium per member per month (PMPM)</b>	<b>\$680.02 PMPM</b>	<b>\$680.44 PMPM</b>	<b>\$0.42 PMPM (0.1%)</b>
<b>Number of females receiving</b>	<b>24,027</b>	<b>24,490</b>	<b>463 (1.9%)</b>
Screenings	18,627	18,998	371 (2.0%)
Diagnostic exams	5,400	5,492	92 (1.7%)
<b>Total breast cancer screenings / exams</b>	<b>84,833</b>	<b>86,478</b>	<b>1,645 (1.9%)</b>
Screenings	63,721	64,990	1,269 (2.0%)
Diagnostic exams	21,112	21,488	376 (1.8%)
<b>Cost per screening / exam (allowed)</b>	<b>\$143.75</b>	<b>\$143.74</b>	<b>-\$0.01 (0.0%)</b>
Screenings	\$133.55	\$133.55	\$0.00 (0.0%)
Diagnostic exams	\$174.53	\$174.57	\$0.03 (0.0%)
<b>Patient cost sharing per screening / exam</b>	<b>\$15.82</b>	<b>\$8.33</b>	<b>-\$7.49 (-47.3%)</b>
Screenings	\$1.26	\$0.01	-\$1.25 (-99.1%)
Diagnostic exams	\$59.76	\$33.50	-\$26.26 (-43.9%)
<b>Total expenditures</b>	<b>\$1,627,460,000</b>	<b>\$1,627,850,000</b>	<b>\$390,000 (0.0%)</b>
Total premiums	\$1,626,120,000	\$1,627,120,000	\$1,010,000 (0.1%)
Total patient responsibility (cost sharing)	\$1,340,000	\$720,000	-\$620,000 (-46.3%)

**Figure 2: Contributions of Cost Sharing and Utilization to Premium Increase**

### Financial impact on insurance premiums

As shown in Figure 1 and Figure 2, we anticipate that HB 3504 will raise insurance premiums by \$0.42 PMPM or 0.1% in the Oklahoma individual market. The increased premiums are due to two factors:

1. Decrease in cost sharing. A reduction in cost sharing will increase plan costs for two reasons. First, as the member pays less, the plan pays more. Second, lower cost sharing causes insured members to use more services than they would if cost sharing was present, regardless of their health status. Actuaries refer to this second item as induced utilization.
2. Increase in screenings and diagnostic exams. We anticipate an increase in the number of screenings and diagnostic exams because HB 3504 requires broader coverage of services than the status quo.

We have assumed a modest two percent increase in utilization due to the combination of induced utilization and the increase in health plan coverage requirements. Support for our assumption is provided in Figure 3 below.

Cost sharing is only one consideration for utilization. Other factors include physician practice patterns, clinical guidelines issued by professional medical societies, health care literacy, and access to services. Furthermore, using experience from the impact of cost sharing on well-baby exams or office visits may over or understate the impact on breast cancer screenings.

### Financial impact for patients

We anticipate that average member cost sharing for breast cancer screenings and exams would decrease from \$15.82 to \$8.33 (Figure 1). This is primarily driven by a decrease in cost sharing for females who had been receiving annual exams and/or were under the age of 40 where the preventive services rules of the ACA did not apply.<sup>1</sup> For females 40 and over, average cost sharing for diagnostic

<sup>1</sup> The ACA required insurers to cover screening mammograms for females over age 40 with no cost sharing.

exams will decrease from \$58.76 to \$29.38 (Appendix B) as the number of covered exams with no cost sharing increases to one annually.

We anticipate that average cost sharing for diagnostic exams overall would decrease from \$59.76 to \$33.50 (Figure 1). Based upon our understanding of HB 3504, cost sharing for some diagnostic exams would still apply. For example, while cost sharing would be waived for initial diagnostic exams, cost sharing would apply for females with high deductible plans and females receiving subsequent diagnostic exams during active treatment for cancer.

The impact on individual patients may vary widely. Prior to the enactment of HB 3504, some females paying cost sharing for screening mammograms and diagnostic exams may have had a fixed copay of \$25. Other females may have had deductibles and paid the total cost of the screening mammogram out-of-pocket (approximately \$100). The impact could be even higher for females receiving a diagnostic MRI subject to a deductible (approximately \$900).

## Modalities of Screening and Diagnostic Exams

Broadly speaking, types of breast cancer imaging can be organized by the purpose (screening vs. diagnostic) and modality (mammogram, digital breast tomosynthesis (DBT), MRI, and ultrasound). Because ultrasounds and MRIs are only used to collect additional information on abnormalities, they are not considered screenings. That leaves six different combinations of purpose and modality. The list below provides details and is roughly ordered from least to most resource intensive.

**Screening Mammograms** are X-ray examinations of the breasts used to detect breast cancer in females who have no signs or symptoms of the disease.

**Screening Digital Breast Tomosynthesis (DBT)** creates a three-dimensional picture of the breast using X-rays. It is used similarly to traditional mammograms for early detection of breast cancer and often called 3D mammography. It is more commonly used in females with dense breast tissue.

**Diagnostic Mammograms** are used to investigate suspicious breast changes such as lumps, pain, nipple discharge, or abnormalities found during a screening mammogram. This type of mammogram involves more detailed X-ray images from multiple angles to provide a comprehensive view of the area of concern.

**Diagnostic Digital Breast Tomosynthesis (DBT)** involves taking multiple X-ray images to create a 3D image of the breast, but it is specifically used when there is a suspected abnormality.

**Diagnostic Ultrasounds** use high-frequency sound waves to create images of the inside of the breast. They are typically used to further evaluate abnormalities found during a mammogram or physical exam.

**Diagnostic MRI** uses magnetic fields and radio waves to produce detailed images of the breast tissue. It is used when mammograms and ultrasounds are inconclusive or for high-risk patients. MRIs are highly sensitive and can detect abnormalities that other imaging methods might miss.

Each of these screenings and diagnostic exams has specific uses. Furthermore, they are often used in combination to provide a comprehensive assessment of breast health. The list of corresponding Common Procedure Terminology (CPT) codes is available in Figure 5.

## Discussion of Policy Context

The Affordable Care Act requires that non-grandfathered individual and group health insurance plans cover certain preventive services without cost sharing. This includes services identified by the United States Preventive Services Task Force (USPSTF) as “A” or “B” grades which are highly recommended.

Over the past two decades, the incidence of breast cancer has slowly increased amongst younger females.<sup>2</sup> The American College of Radiology recommends annual mammograms for average risk females.<sup>3</sup> As of November 2024, 34 states have laws pertaining to enhanced coverage of breast cancer screenings and/or diagnostic exams.<sup>4</sup> Notably, Tennessee passed legislation similar to HB 3504 in May of 2023.<sup>5</sup>

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<sup>2</sup> (Xu S, 2024)

<sup>3</sup> (Monticciolo, 2017)

<sup>4</sup> (DenseBreast-info, Inc., 2024)

<sup>5</sup> (Herner, 2023)

As of February 2025, the USPSTF recommends screening mammograms every other year for females aged 40 to 74. The USPSTF develops their recommendations to “evidence of both the benefits and harms of the service and an assessment of the balance.”<sup>6</sup> Therefore, in the absence of HB 3504, health plans in Oklahoma are required to cover a mammogram every two years with no cost sharing for females aged 40 to 74.

The USPSTF does not consider follow-up diagnostic exams in its recommendation, and therefore mammograms, DBTs, ultrasounds, and MRIs that are diagnostic in nature may have cost sharing in the absence of HB 3504. As such, the potential difference in cost sharing between a screening mammogram and a diagnostic exam using mammogram or ultrasound may create confusion in patients. For example, a physician may recommend both a screening mammogram and a diagnostic ultrasound. The screening mammogram would have no cost sharing. The diagnostic ultrasound could have cost sharing ranging from a fixed copay to the entire amount of \$200 or more for a plan with a deductible. This dynamic can create confusion in patients and may also create financial barriers for medically necessary treatment, even discouraging routine preventive care visits.

The focus of our analysis is the impact of the legislation on health insurance premiums. There are also impacts on patients and providers. Here are some items where HB 3504 may impact patients and providers.

- Oklahomans will see reduced cost sharing.
- Patients may no longer experience the confusion caused by different cost sharing amounts for similar services. This may also reduce the burden on health plans and health care providers for explaining differences in coverage and cost sharing.
- It is possible that increased screenings will result in a reduction in mortality associated with breast cancer. Increased screenings may provide enhanced psychological safety and peace of mind. Early detection may also reduce the resources necessary to treat cancer, thereby leading to a better patient experience and improved prognosis. More frequent screenings can also improve detection for screenings which are able to detect changes in breast tissue over time.
- On the other hand, it is possible that increased screenings may result in harms from false positives. False positives may result in unnecessary stress and anxiety. Harms may also include follow-up diagnostic procedures, unnecessary invasive procedures such as biopsies, and the resources expended by additional services.
- Females aged 35 and over may experience increased exposure to radiation – both low-dose from screenings and higher-dose from follow-up diagnostic exams.
- Increased screenings may also result in additional follow-up office visits, which increases health insurance premiums.

## Other Oklahoma Insurance Markets

Our numerical analysis focused on the individual health insurance market in Oklahoma. Since HB 3504 also impacts other market segments, we have included a non-quantitative discussion of how other insurance markets in Oklahoma may be impacted by this legislation.

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<sup>6</sup> (USPSTF, 2024)

About half (1.7 million individuals or 48.2%) of Oklahoma's population has employer-sponsored insurance.<sup>7</sup> We would expect an analysis of the employer-sponsored market to be generally similar to this analysis of the Oklahoma individual market, with some exceptions.

- HB 3504 (like most insurance mandates passed by state legislatures) only applies to fully-insured health plans regulated by the State of Oklahoma. The mandate does not apply to self-funded health plans governed by Federal law under ERISA.<sup>8</sup>
- The overall impact would be influenced by the frequency of breast cancer screenings and diagnostic exams for patients with fully-insured employer-sponsored insurance. It would also be influenced by differences in the proportion of females in these age ranges in the employer-sponsored market compared to the individual market.

Similar to self-funded ERISA plans, HB 3504 would not apply to health coverage through VA, TRICARE, and Indian Health Services sources of coverage. These programs typically have lower copays than many plans on the individual market. Furthermore, each of these markets has unique requirements relating to preventative services, and our analysis presented in this report would not generally be applicable.

About one quarter (900,000 individuals or 22.7%) of Oklahoma's population has a Medicaid plan (SoonerCare).<sup>9</sup> The impact of HB 3504 on these individuals would be far different than for a commercial population.

- Cost sharing (i.e. copays) for SoonerCare is generally very low or zero. Therefore, the typical reduction in cost sharing is likely to be quite low as well, if any.
- The overall impact would be influenced by the frequency of breast cancer screenings and diagnostic exams for patients with SoonerCare. SoonerCare has a higher proportion of children than other populations; therefore, the frequency of breast cancer screenings is likely lower and therefore the impact on program costs is likely to be lower as well.
- Allowed charges for Medicaid health plans are typically lower than for individual or commercial health plans. Therefore, the impact of increased utilization on program costs is likely to be lower as well.

Medicare is generally regulated by the federal government and may take the form of traditional fee-for-service (FFS) coverage or managed Medicare Advantage plans. The mandate in HB 3504 does not apply to Medicare health plans due to federal preemption, as these plans are governed by CMS.<sup>10</sup>

Patients who are completely uninsured would not benefit from HB 3504.

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<sup>7</sup> (Kaiser Family Foundation, 2023)

<sup>8</sup> (National Conference of State Legislatures, 2024)

<sup>9</sup> (Kaiser Family Foundation, 2023)

<sup>10</sup> (CMS, 2011)

## Data Sources

### MILLIMAN HEALTH COST GUIDELINES

The Milliman Health Cost Guidelines (HCGs) are a health care pricing tool used by actuaries in many of the major health plans in the United States. The guidelines provide a flexible but consistent basis for estimating health care costs for a wide variety of commercial health insurance plans. It is likely that these organizations use the HCGs, among other tools, to determine the initial premium impact of any new mandate. Thus, in addition to producing accurate estimates of the costs of a mandate, we believe the HCG-based values are also good estimates of the premium impact as estimated by the HMOs and health plans.

### CONSOLIDATED HEALTH COST GUIDELINES DATABASE

Milliman's proprietary health research databases allow for the tracking of de-identified patients across multiple years. The most recent available underlying databases contain more than 900 million member years of data dating from 2010 to 2024. This data source is a combination of Milliman's Consolidated Health Cost Guidelines Sources Database (CHSD) and Merative's MarketScan. The database contains annual enrollment and paid medical and pharmacy claims for over 80 million commercially insured individuals covered by the benefit plans of large employers, health plans, and governmental and public organizations nationwide.

## Methodology

To help our audience understand the full impact of this mandate, we have assumed that the HB 3504 mandate is phased in completely with immediate effect. We recognize that in practice, most changes to policy do not result in instantaneous implementation in insurance markets. Our assumptions regarding changes in behavior for patients and carriers are described below and represent immediate implementation on the effective date of the legislation.

### Figure 3: Core Assumptions

FEATURE	ASSUMPTION	COMMENTS
<b>Increase in screenings and diagnostic exams for females aged 35-39 and 40+</b>	2%	<p>We assumed that screenings and diagnostic exams would increase slightly due to a combination of induced utilization and a well defined coverage frequency. There is conflicting evidence for whether this type of mandate is expected to impact utilization. A study in California implies a 4% increase in utilization. A retrospective study on the ACA shows a 0% impact to utilization.<sup>11</sup> We used 2% in consideration of this conflicting evidence.</p> <p>We assume that increases in diagnostic exams are proportional to increases in screenings.</p>

<sup>11</sup> In a peer-reviewed research report on how zero-dollar cost sharing for preventive services influenced utilization after implementation of the Affordable Care Act, the authors of the study concluded "Removal of cost sharing under the ACA did not improve [increase] mammography or pap test rates." (Alharbi, 2019)



FEATURE	ASSUMPTION	COMMENTS
<b>Reduction in cost sharing for screenings for females aged 35-39 and 40+</b>	100%	We assume that cost sharing for screenings would be completely eliminated for these groups as required by HB 3504.  HB 3504 eliminates cost sharing for the <i>first</i> diagnostic exam for females aged 35-39 and 40+. Our data analysis indicated that approximately 50% of all diagnostic exams were for the first diagnostic exam, so this proportion would be reduced by the bill. Note that cost sharing for subsequent exams would not be eliminated for females with ongoing treatment. Also, cost sharing applies for females in HSA-qualified plans; these are not common in the individual market.
<b>Reduction in cost sharing for diagnostic exams for females aged 35-39 and 40+</b>	50%	

Our basic approach to measure the impact of HB 3504 consisted of the following three steps, which we further explain below.

1. Identify 2021 mammogram experience.
2. Apply the above assumptions to adjust the claims experience.
3. Project the original and adjusted experience to the 2025 calendar year.

### 1. Identify 2021 mammogram experience

Milliman maintains a comprehensive nationwide database of claims experience described in the Data Sources section. From this database, we were able to identify a representative sample of utilization and allowed amounts for 2021 breast cancer screening procedures in Oklahoma using information from commercial and individual markets.

We assumed that the distribution of screenings for the individual market would be similar to historical commercial experience in Oklahoma.

A detailed summary of utilization and costs is in Appendix B.

### 2. Apply the assumptions to adjust the claims experience.

We modeled an increase in screenings and diagnostic exams from HB 3504 due to the increase in health plan coverage requirements:

1. Increase plan requirement to cover screenings for females 40 and over from biannual to annual, and
2. Increase plan requirement to cover screenings for females between 35 and 39 years old.

We did not model an increase in screenings and diagnostic exams solely due to the decrease in cost sharing. As discussed above, literature suggests that mammography did not increase materially following the ACA which had a similar impact on coverage. Figure 4 shows the impact of utilization on the overall premium increase.

We also assumed cost sharing would be completely eliminated for all screenings and would be reduced by 50% for diagnostic exams.

### Figure 4: Effect of Utilization on Premiums

Increase in utilization	Increase in overall monthly premium
0%	\$0.31 PMPM (0.05%)
2%	\$0.42 PMPM (0.06%)
4%	\$0.53 PMPM (0.08%)

### 3. Project the original and adjusted experience to the 2025 calendar year.

To measure the impact on the 2025 calendar year premiums, we used the 2024 Unified Rate Review Template (URRT) available on the CMS website.<sup>12</sup> We applied the claims trend to the 2024 individual market claims experience in the URRT to determine the projected 2025 claims and used the assumed medical loss ratio to determine the 2025 estimated premiums. Applying the adjustments described in the second step, we determined the estimated premium with HB 3504 (Average Insurance Premium row of Figure 1).

## Revenue and Procedure Codes Analyzed

The following procedure codes were used in our analysis:

**Figure 5: Procedure Codes**

Modality	Purpose	CPT List
DBT	Diagnostic	76376, 76377, 77061, 77062
DBT	Screening	77063, G9899, G9900
Mammogram	Diagnostic	0422T, 77051, 77065, 77066, G0204, G0206, S8075, S8080
Mammogram	Screening	3014F, 76092, 77052, 77055, 77056, 77057, 77067, G0202, S0613
MRI	Diagnostic	0159T, 76391, 77046, 77047, 77048, 77049, 77059, C8905, C8906, C8908, C8937
Ultrasound	Diagnostic	76641, 76642, 76645

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The following revenue codes were used in our analysis:

**Figure 6: Revenue Codes**

Purpose	Revenue Codes
Diagnostic	0401
Screening	0403

<sup>12</sup> <https://www.cms.gov/files/zip/py20204-puf-20231031.zip>

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## Limitations

Milliman does not intend to benefit any third-party recipient of its work product, even if Milliman consents to the release of its work product to such a third party.

Differences between our projections and actual amounts depend on the extent to which future experience conforms to the assumptions made for this analysis. Actual experience is unlikely to conform exactly to the assumptions used in this analysis. Therefore, actual amounts will almost certainly differ from projected amounts. Milliman has developed certain models to estimate the values included in this report. The intent of the models was to estimate the impact of HB 3504 in 2025. We have reviewed the models, including their inputs, calculations, and outputs, for consistency, reasonableness, and appropriateness to the intended purpose and in compliance with generally accepted actuarial practice and relevant actuarial standards of practice (ASOP).

The models rely on data and information as input to the models. We have relied upon certain data and information provided discussed above for this purpose and accepted it without audit. To the extent that the data and information provided is not accurate, or is not complete, the values provided in this report may likewise be inaccurate or incomplete. Milliman's data and information reliance includes:

- Enrollment data provided by various sources
- Medical claims data provided by various sources
- Unified Rate Review Template (URRT) data provided by CMS

The models, including all input, calculations, and output, may not be appropriate for any other purpose.

We performed a limited review of the data used directly in our analysis for reasonableness and consistency and have not found material defects in the data. If there are material defects in the data, it is possible that they would be uncovered by a detailed, systematic review and comparison of the data to search for data values that are questionable or for relationships that are materially inconsistent. Such a review was beyond the scope of our assignment.

The authors of this report are not health insurance compliance experts and are not qualified to give legal opinions. It is strongly recommended that readers seek advice from qualified legal counsel and compliance experts.

Guidelines issued by the American Academy of Actuaries require actuaries to include their professional qualifications in all actuarial communications. John Rogers and Barb Dewey are members of the American Academy of Actuaries and meet the qualification standards for performing the analyses in this report.

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Appendix A: Text of HB 3504, An Act Relating to Health Insurance;  
Amending 36 O.S. 2021, Section 6060, which relates to  
Mammography Screenings

**An Act**

ENROLLED HOUSE

BILL NO. 3504

By: Provenzano, Bush, Miller,  
Ranson, Waldron,  
Manger,  
Luttrell, Baker,  
Fugate,  
Munson, Blancett,  
West  
(Tammy), Roe, Virgin,  
Dills, Townley,  
Roberts  
(Sean), Nollan, Bell,  
Crosswhite Hader,  
Pittman,  
Brewer, Stark,  
Hasenbeck,  
Goodwin, Conley,  
McEntire,  
Culver, Lawson, Lowe  
(Dick), Patzkowsky,  
Bashore, and Sneed of  
the  
House

and

Stanley, Taylor,  
Garvin,  
Pederson, Kirt,  
Floyd,  
Hicks, Kidd, Daniels,  
Boren, David, and  
Dossett  
(J.A.) of the Senate

An Act relating to health insurance; amending 36 O.S. 2021, Section 6060, which relates to mammography screenings; defining terms; specifying insurance coverage of certain mammograms; providing for contingent effect of provisions based on impact to health savings accounts pursuant to Section 223 of the Internal Revenue Code; providing for applicability of provisions related to preventive care; and providing an effective date.

SUBJECT: Health insurance

BE IT ENACTED BY THE PEOPLE OF THE STATE OF OKLAHOMA:

SECTION 1. AMENDATORY 36 O.S. 2021, Section 6060, is amended to read as follows:

Section 6060. A. For the purposes of this section:

1. "Breast magnetic resonance imaging" means a diagnostic tool used to produce detailed pictures of the structure of the breast;

2. "Breast ultrasound" means a noninvasive, diagnostic imaging technique that uses high-frequency sound waves to produce detailed images of the breast;

3. "Diagnostic examination for breast cancer" means a medically necessary and clinically appropriate examination, as defined by current guidelines and as determined by a clinician who is evaluating the individual for breast cancer, to evaluate the abnormality in the breast that is:

a. seen or suspected from a screening examination for breast cancer,

- b. detected by another means of examination, or
- c. suspected based on the medical history or family medical history of the individual.

This examination may include, but is not limited to, a diagnostic mammogram, breast magnetic resonance imaging, or a breast ultrasound;

- 4. "Diagnostic mammography" means a diagnostic tool that:
  - a. uses X-ray, and
  - b. is designed to evaluate abnormality in a breast;
- 5. "Health benefit plan" means any plan or arrangement as defined in subsection C of Section 6060.4 of this title;
- 6. "Low-dose mammography" means:
  - a. the X-ray examination of the breast using equipment specifically dedicated for such purpose, with an average radiation exposure delivery of less than one rad mid-breast and with two views for each breast,
  - b. digital mammography, or
  - c. breast tomosynthesis;
- 7. "Breast tomosynthesis" means a radiologic mammography procedure involving the acquisition of projection images over a stationary breast to produce cross-sectional digital three dimensional images of the breast from which breast cancer screening diagnoses may be made; and
- 8. "Screening mammography" means a radiologic procedure provided to a woman, who has no signs or symptoms of breast cancer, for the purpose of early detection of breast cancer, including breast tomosynthesis.

B. All health benefit plans shall include the coverage specified by this section for a low-dose mammography screening



for the presence of occult breast cancer and a diagnostic examination for breast cancer. Such coverage shall not:

1. Be subject to the policy deductible, co-payments and coinsurance limits of the plan; or
2. Require that a female undergo a mammography screening at a specified time as a condition of payment.

C. 1. Any female thirty-five (35) through thirty-nine (39) years of age shall be entitled pursuant to the provisions of this section to coverage for a low-dose mammography screening once every five (5) years.

2. Any female forty (40) years of age or older shall be entitled pursuant to the provisions of this section to coverage for an annual low-dose mammography screening.

D. If application of this act would result in health savings account ineligibility under Section 223 of the federal Internal Revenue Code, as amended, the provisions of this section shall only apply to health savings accounts with qualified high deductible health plans with respect to the deductible of such a plan after the enrollee has satisfied the minimum deductible. Provided, however, the provisions of this section shall apply to items of services that are preventive care pursuant to Section 223(c)(2)(c) of the federal Internal Revenue Code, as amended, regardless of whether the minimum deductible has been satisfied.

SECTION 2. This act shall become effective November 1, 2022.

## Appendix B: Actuarial Cost Model

Figure 7: Cost models with and without HB 3504 (Oklahoma Individual Market, 2025)

	Per 1,000 member years	Per claim			Per member per month		
		Screenings / Exams	Allowed	Patient Responsibility (Cost Sharing)	Plan Paid	Allowed	Patient Responsibility (Cost Sharing)
<b>Without HB 3504</b>							
<b>Total</b>	<b>425.7</b>	<b>\$143.75</b>	<b>\$15.82</b>	<b>\$127.93</b>	<b>\$5.10</b>	<b>\$0.56</b>	<b>\$4.54</b>
1. Female, 40+   Screening	312.9	\$133.45	\$1.26	\$132.19	\$3.48	\$0.03	\$3.45
2. Female, 35-39   Screening	5.6	\$136.42	\$1.02	\$135.39	\$0.06	\$0.00	\$0.06
3. Other   Screening	1.3	\$146.41	\$2.98	\$143.43	\$0.02	\$0.00	\$0.01
1. Female, 40+   Diagnostic	84.8	\$174.05	\$58.76	\$115.30	\$1.23	\$0.42	\$0.81
2. Female, 35-39   Diagnostic	9.5	\$196.29	\$59.53	\$136.76	\$0.16	\$0.05	\$0.11
3. Other   Diagnostic	11.6	\$160.24	\$67.30	\$92.94	\$0.16	\$0.07	\$0.09
<b>With HB 3504</b>							
<b>Total</b>	<b>434.0</b>	<b>\$143.74</b>	<b>\$8.33</b>	<b>\$135.41</b>	<b>\$5.20</b>	<b>\$0.30</b>	<b>\$4.90</b>
1. Female, 40+   Screening	319.2	\$133.45	\$0.00	\$133.45	\$3.55	\$0.00	\$3.55
2. Female, 35-39   Screening	5.7	\$136.42	\$0.00	\$136.42	\$0.07	\$0.00	\$0.07
3. Other   Screening	1.3	\$146.41	\$2.98	\$143.43	\$0.02	\$0.00	\$0.01
1. Female, 40+   Diagnostic	86.5	\$174.05	\$29.38	\$144.68	\$1.25	\$0.21	\$1.04
2. Female, 35-39   Diagnostic	9.7	\$196.29	\$29.77	\$166.53	\$0.16	\$0.02	\$0.13
3. Other   Diagnostic	11.6	\$160.24	\$67.30	\$92.94	\$0.16	\$0.07	\$0.09

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