The COVID-19 recession and healthcare coverage in the U.S.

How job and income losses from the pandemic will scramble enrollment and morbidity across private and public health insurance markets

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Fritz Busch, FSA, MAAA
Lindsy Kotecki, FSA, MAAA
Jeff Milton-Hall, FSA, MAAA

Milliman

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Navigating the economic wake of the coronavirus

The COVID-19 pandemic and the mitigating actions taken in response to it by citizens and governments alike have precipitated unprecedented economic disruption in the United States. The second quarter (Q2) of 2020, beginning in April, marked the largest single-quarter economic contraction in modern U.S. history, driving unemployment rates from historically low levels in February to peaks last seen during the Great Depression.[1,2]

Due to the tight coupling of economic status and healthcare coverage and eligibility in the United States, in which three-quarters of Americans receive healthcare linked to employment or income,[3] the unraveling and recovery of the U.S. economy have had and will continue to have a similarly disruptive influence on the enrollment in and composition of U.S. health insurance markets. These impacts will be felt throughout the health system, including in state Medicaid budgets and hospital, physician, and pharmaceutical margins, as well as in the financial performance of commercial and Medicaid health plans. To adequately forecast and prepare for their own expenditures, revenue, and resource requirements over the upcoming year, stakeholders must come to terms with these drivers and understand their potential outcomes.

To this end—in order to understand the interconnected nature of economic changes and health insurance coverage and to project impacts to U.S. health insurance markets—we built a powerful tool we refer to as the COVID-19 Advanced Population Shift (CAPS) model. This model combines detailed information on the economic status, health insurance coverage, and health status of each state's population prior to the COVID-19 pandemic (pre-COVID) with emerging information on the economic impact of the pandemic response. It allows us to forecast the resulting shifts in enrollment and population morbidity across healthcare markets, while providing insights into the key factors driving change. This paper summarizes our findings.

[1] Siegel, R. & Van Dam, A. (July 30, 2020). U.S. economy contracted at fastest quarterly rate on record from April to June as coronavirus walloped workers, businesses. Washington Post. Retrieved September 22, 2020, from https://www.washingtonpost.com/business/2020/07/30/gdp-q2-coronavirus/.

[2] Long, H. & Van Dam, A. (May 8, 2020). U.S. unemployment rate soars to 14.7 percent, the worst since the Depression era. Washington Post. Retrieved September 22, 2020, from https://www.washingtonpost.com/business/2020/05/08/april-2020-jobs-report/.

[3] Population counts by health coverage adapted from the 2018 American Community Survey (U.S. Census Bureau), with adjustments to reflect subsidized 2019 ACA enrollment published by the Centers for Medicaid and Medicare Services (CMS), Medicaid eligibility and enrollment levels from Medicaid.gov, and ESI enrollment from federal medical loss ratio (MLR) reports.

Executive Summary

Based on employment data through June 2020 and economic forecasts from the Federal Reserve and Congressional Budget Office (CBO) released in June 2020 and July 2020, respectively, we modeled calendar year (CY) 2021 national unemployment rate scenarios of between 6% and 14%, which translate to a net reduction in nationwide employment of between 5% and 13% when compared to the state of the economy prior to the first state lockdown measures.[4] Figure 1 summarizes the results of our analysis at the national level.

FIGURE 1: PROJECTED CY2021 IMPACTS OF COVID-19 RECESSION ON HEALTH COVERAGE IN THE UNITED STATES

HEALTH COVERAGE	PRE-COVID POPULATION (MILLIONS)	NET CHANGE IN ENROLLMENT [a]	NET CHANGE IN MORBIDITY [b]
Employer-Sponsored Insurance (ESI)	157.2	-7% to -3%	Approximately 0%
Individual ACA	11.8	-3% to +11%	-1% to +1%
Medicaid [c]	76.3	+3% to +9%	Not estimated [d]
Uninsured	30.0	+4% to +18%	-4% to -1%

Nationwide results based on 5% to 13% decline in employment.[5]
Results may vary significantly in magnitude and/or direction at the state level.

Notes:

[a] Projected nationwide change in enrollment or population size due solely to population shifts caused by the COVID-19 recession. Does not capture enrollment changes attributable to population growth, market trends, and program modifications unrelated to COVID-19.

[b] Projected change in population health status due solely to population shifts precipitated by the COVID-19 recession. Does not capture other sources of morbidity change, such as those due to COVID-19 infections, deferred care, nor other national or state-specific trends and program changes. The reported morbidity impacts control for demographics, such that they measure changes in health status above or below what would be expected based on changes in the average age and gender composition of each population.

[c] Includes CHIP and the Minnesota and New York Basic Health Plans (BHPs).

[d] The heterogeneous nature of state Medicaid programs, in which various subpopulations have substantial differences in benefits and expected costs, makes it challenging to meaningfully interpret an overall population morbidity factor or change thereto.

Using CAPS, we integrated data on the industries and employees most affected by the pandemic with information on each state's economy, health insurance markets, eligibility definitions for public health coverage programs—such as Medicaid and the state Children's Health insurance Program (CHIP)—and data and expectations regarding enrollment patterns among those newly uninsured or eligible for subsidized coverage. CAPS models transitions in health coverage using the following steps (outlined in Figure 2, on page 3):

1. **Pre-COVID population:** First, we start with a detailed profile of each state's population prior to economic disruption from COVID-19, encompassing individuals and households across various economic, demographic, and health coverage characteristics of interest.
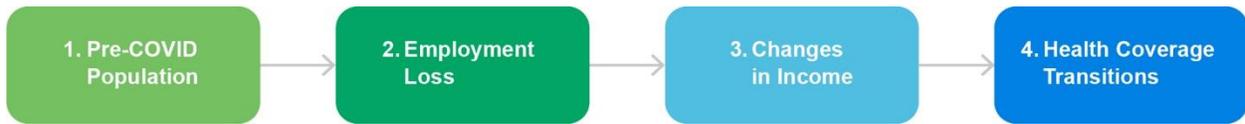
   Then we apply a series of state-specific changes in employment, income, and health insurance coverage to produce a corresponding projection of each state's post-COVID population:

2. **Employment loss:** From employed to temporarily or permanently out of work.

3. **Changes in income:** Changes in household income arising from job loss, reduced hours, and/or pay cuts, net of any federal and state unemployment benefits.

4. **Health coverage transitions:** Changes in individuals' sources of healthcare coverage (transitions) related to the above employment and income changes.

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[4] The net employment figures are inclusive of a projected 3% decline in the U.S. civilian labor force versus February 2020 levels, based on CBO forecasts.

[5] Ibid.

FIGURE 2: ANALYSIS STEPS

We varied the modeled adjustments at a level of detail inclusive of individual and household incomes, employer characteristics such as industry and employer size, individual health status and age, and the interaction of all of these characteristics with state-specific eligibility for the various sources of coverage and pre-COVID enrollment across health insurance markets. This granularity in our modeling enabled several key insights into the drivers of results and variation in enrollment and morbidity impacts across state markets:

- **Medicaid expansion:** Compared to states that elected not to expand Medicaid under the Patient Protection and Affordable Care Act (ACA), we expect states with Medicaid expansions to exhibit larger proportional increases in Medicaid enrollment and smaller increases—or even decreases—in individual ACA enrollment, due to the wider range of incomes eligible for Medicaid in these states. For the same reason, we expect a higher proportion of households with job or income loss in non-expansion states to lose their coverage and remain uninsured.

- **Health status and adverse selection:** Employer-sponsored health insurance (ESI) markets tend to enroll healthier populations on average than ACA individual marketplaces. As households transition to the individual market from the ESI market, states with wider gaps between ESI and individual market morbidities are likely to see modest improvements to individual market risk pools. However, we anticipate that adverse selection among those with job loss may mitigate some of the morbidity improvement we would otherwise expect from an influx of newly unemployed individuals and their dependents. In fact, some states with smaller gaps in health status may actually see a net deterioration of individual market risk pools.

- **Income, employment loss, and retention of ESI:** Individuals experiencing job loss during the COVID-19 recession are more likely to be low-income and less likely to have ESI than the average employee. As a result, we see a smaller loss of ESI overall, and a greater portion of coverage transitions to Medicaid than if job loss were uniform across income levels. Transitions out of the employer group market are limited further, as many households that experience job loss are able to retain ESI through furlough arrangements, spousal coverage, and/or COBRA, particularly those with higher pre-COVID incomes.

Background

From the perspective of the U.S. economy, arguably the most consequential actions taken in response to the COVID-19 pandemic began in mid-March 2020 with state-based "shelter-in-place" orders and the temporary closure of businesses that were deemed nonessential. While these policies and the associated physical distancing and avoidance of inessential travel by citizens likely helped to curb the initial exponential spread of COVID-19 infections, there was also significant economic fallout associated with the sudden drop in consumer spending, including business closures and layoffs, temporary and permanent loss of employment, and reduced household incomes.

States and the federal government took actions to mitigate this fallout, including state-based unemployment insurance and the Coronavirus Aid, Relief, and Economic Security (CARES) Act, which provided loans to small businesses, pandemic unemployment compensation offering an additional $600 per week to individuals experiencing job loss, and other economic support programs.[6] However, despite these measures, the U.S. economy experienced the most rapid single-quarter contraction in its history in Q2 2020, with gross domestic product (GDP) declining 9.5% (32.9% annualized) [7] and unemployment spiking from below 4% in February 2020 to nearly 15% in April, before recovering to above 8% as of August, for a net loss of 11 million jobs.[8]

Employer-sponsored insurance is the single largest source of health coverage for Americans, covering approximately half of the U.S. population in 2018,[9] and job losses due to the COVID-19 recession have led millions of Americans to lose ESI coverage. Depending on their circumstances and decisions, those who lose ESI may transition to free (or low-cost) coverage through Medicaid or subsidized coverage through ACA individual marketplaces, or experience a total loss of coverage (uninsured status). Furthermore, changes in household incomes from job loss, underemployment, and state and federal assistance programs have led to substantial shifts in who is eligible for means-tested Medicaid benefits and ACA subsidies, further changing the healthcare enrollment mix (see sidebar "Eligibility for Subsidized Health Coverage").

ELIGIBILITY FOR SUBSIDIZED HEALTH COVERAGE

Approximately half of Americans receive subsidized coverage through an employer as of 2018.[9] Individuals and family members under age 65 who do not have access to affordable employer-sponsored insurance may be eligible for means-tested coverage under Medicaid and CHIP or for subsidized individual marketplace coverage under the ACA. The Medicaid and CHIP programs cover those in the lowest income brackets, and subsidized ACA coverage usually, but not always, offers premium assistance for low-income households at the point where Medicaid eligibility ends.

In the 39 states (including D.C.) that have elected to expand Medicaid eligibility under the ACA, all adult U.S. citizens with monthly household incomes below 138% of the federal poverty level (FPL) are eligible for Medicaid. In the remaining "non-expansion" states, eligibility generally requires lower incomes and/or membership in special classes such as pregnant women. Low-income minors in all states are eligible for no-cost coverage through CHIP, with the cutoff generally varying between 200% FPL and 300% FPL, depending on the state.

ACA individual marketplace subsidies are available to individuals with annual household incomes between 100% FPL and 400% FPL who do not have access to affordable coverage through an employer, Medicare, Medicaid, or CHIP.

Adults who are U.S. citizens with incomes below 100% FPL in non-expansion states who do not meet Medicaid eligibility criteria fall into the so-called "coverage gap" whereby their income is too low to qualify for ACA subsidies and too high to qualify for Medicaid, leaving them without access to affordable comprehensive coverage.

[6] National Employment Law Project (March 27, 2020). Fact Sheet: Unemployment Insurance Provisions in the Coronavirus Aid, Relief, and Economic Security (CARES) Act. Retrieved September 22, 2020, from https://www.nelp.org/publication/unemployment-insurance-provisions-coronavirus-aid-relief-economic-security-cares-act/.

[7] Casselman, B. (July 30, 2020). A collapse that wiped out 5 years of growth, with no bounce in sight. New York Times. Retrieved September 22, 2020, from https://www.nytimes.com/2020/07/30/business/economy/q2-gdp-coronavirus-economy.html.

[8] For August numbers see: https://www.bls.gov/news.release/archives/empsit_09042020.htm.
For April numbers see: https://www.bls.gov/news.release/archives/empsit_05082020.htm.
For February numbers see: https://www.bls.gov/news.release/archives/empsit_03062020.htm.

[9] Kaiser Family Foundation (2018). Health Insurance Coverage of the Total Population. State Health Facts. Retrieved September 22, 2020, from https://www.kff.org/other/state-indicator/total-population/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D.

Results and discussion

Figure 3 summarizes our projections of health coverage transitions and the impact thereof on enrollment levels and demographic and morbidity composition by source of coverage, for a calendar year 2021 "midpoint" economic scenario in which the employment rate in 2021 is 7.4% lower on average than pre-COVID employment levels from February 2020.

FIGURE 3: PROJECTED CY2021 COVERAGE TRANSITIONS DUE TO COVID-19 RECESSION, MIDPOINT SCENARIO

FROM PRE-COVID COVERAGE / INSURANCE COVERAGE	PRE-COVID ENROLLMENT (MILLIONS) [a]	TO POST-COVID COVERAGE				
	328.2	ESI	INDIVIDUAL ACA	MEDICAID [b]	OTHER COVERAGE [c]	UNINSURED
Employer Sponsored Insurance (ESI)	157.2	151.0	0.9	2.4		2.9
Individual ACA	11.8		11.1	0.6		0.1
Medicaid [b]	76.3			76.3		
Other Coverage [c]	53.0		0.0	0.0	52.9	
Uninsured	30.0		0.1	0.7		29.2
Ending Enrollment (millions) [d]	**328.2**	151.0	12.1	79.9	52.9	32.3
% Change in Enrollment [d]		-4.0%	+2.5%	+5.0%	0%	+7.5%
% Change in Demographic Factor [e]		0%			0%	-0.5%
% Change in Morbidity [f]		0%	+0.5%	Not estimated [h]	0%	-2.0%
% Change in Composite Cost Factor [g]		0%			0%	-2.5%

Nationwide results based on 7.4% decline in employment. Results may vary significantly in magnitude and/or direction at the state level.
Population counts rounded to the nearest 0.1 million. Percentage changes rounded to the nearest 0.5%.

Notes:

[a] U.S. population counts in our analysis are fixed at mid-2019 levels.

[b] Includes CHIP and the Minnesota and New York Basic Health Plans (BHPs).

[c] Includes non-ACA-compliant individual, non-Dual-Eligible Medicare, Veterans Health Administration, TRICARE, and other coverage sources.

[d] Projected nationwide change in enrollment or population size that are due solely to population shifts from the COVID-19 recession. Does not capture enrollment changes attributable to population growth, national or state-specific trends, and program modifications unrelated to COVID-19.

[e] Projected change in average healthcare costs attributable solely to changes in average population demographic composition (age/sex) attributable to the COVID-19 recession.

[f] Projected change in population health status due solely to population shifts precipitated by the COVID-19 recession. Does not capture other sources of morbidity change, such as those due to COVID-19 infections, deferred care, or other national or state-specific trends and program changes. The reported morbidity impacts control for demographics, such that they measure changes in health status above or below what would be expected based on changes in the average age and gender composition of each population.

[g] Projected change in average healthcare costs that are due to changing demographic composition and health status, solely because of population shifts precipitated by the COVID-19 recession.
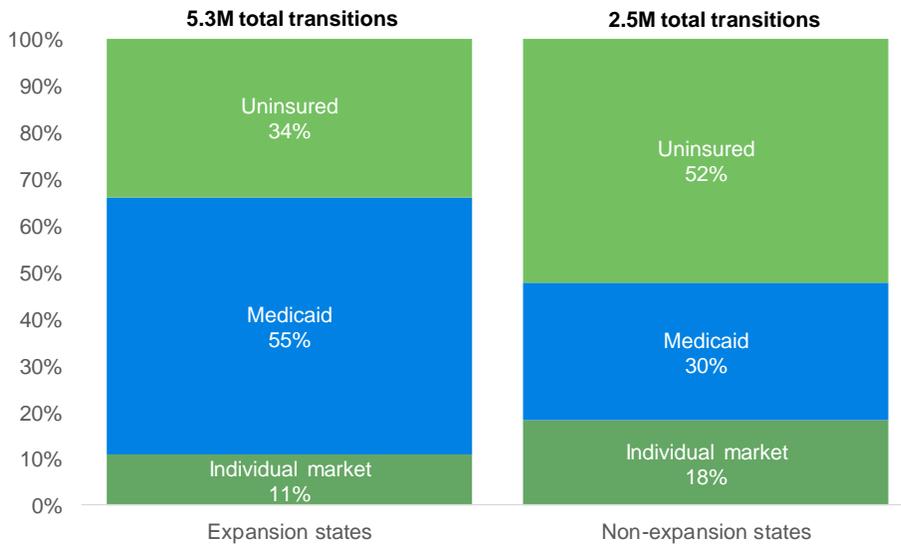
[h] The heterogeneous nature of state Medicaid programs, in which various subpopulations have substantial differences in benefits and expected costs, makes it challenging to meaningfully interpret an overall population morbidity factor or change thereto.

Enormous uncertainty remains regarding the trajectory of the U.S. economy. The changing composition of U.S. health insurance markets and actual outcomes will depend on numerous factors that are interconnected and not possible to precisely predict or control. CAPS helps us navigate this uncertainty by providing insight into the range of potential scenarios and the drivers of variations across states, scenarios, and subpopulations. In the following sections, we highlight several such drivers, including the critical role a state's Medicaid expansion status plays in determining market outcomes, why meaningful enrollment and morbidity projections cannot be produced without consideration of consumer behavior and adverse selection, how results relate to the pre-COVID profile of commercial markets and those most likely to lose employment, and how state and federal actions to supplement incomes and expand eligibility will dampen or amplify shifts in enrollment. A solid understanding of these considerations gives stakeholders the ability to plan and react strategically in a time of profound and rapid change.

MEDICAID EXPANSION

States that have expanded Medicaid generally have larger existing Medicaid populations, smaller individual market populations, and lower uninsured rates. CAPS results show that expansion states are likely to see higher proportions of transitions into Medicaid, lower net transitions into the individual market, and fewer transitions to uninsured status than in non-expansion states, after accounting for differences in state population sizes. Figure 4 shows the distribution of transitions in healthcare coverage in our midpoint CY2021 scenario. Transitions in Figure 4 are counted if an individual moves out of one market and into another (for example, out of ESI and into the individual market). It would not include individuals who transition within the same market (for example, individuals who lose ESI and become dependents on their spouses' ESI), or individuals who receive higher levels of subsidies than before (for example, someone enrolled in the individual market who receives a higher level of ACA subsidies due to employment or income loss).

FIGURE 4: DISTRIBUTIONS OF HEALTHCARE COVERAGE TRANSITIONS IN CY2021: MEDICAID EXPANSION STATES VS. NON-EXPANSION STATES

Note: Arkansas is included as an expansion state. The expansion population in Arkansas is enrolled in private coverage through the individual marketplace and is reflected in the individual market bucket.

Diving in deeper to specific transitions under our midpoint CY2021 scenario, we project that employment and income losses among low-income households with ACA coverage will lead to an average of 6.5% of the existing individual market transitioning into Medicaid in expansion states, compared to 2.5% in non-expansion states. The higher transition rate in expansion states is directly attributable to the wider Medicaid eligibility requirements. In addition, we project that 3% of pre-COVID individual market enrollees in non-expansion states will become uninsured due to income loss that drops them below 100% FPL, making them ineligible for ACA marketplace subsidies and driving them into the "coverage gap."

At the same time, we project that transitions from the employer group market and elsewhere to the individual market could add new enrollment equivalent to 9% of the size of the pre-COVID individual market in non-expansion states and 8% in expansion states. While individual markets represent a larger proportion of transitions in non-expansion states (see Figure 4), the growth rate in the individual market is similar in expansion and non-expansion states on a percentage basis because the individual market was larger in non-expansion states pre-COVID.

Taking all of these transitions into account, our midpoint CY2021 scenario projects a net change in individual market enrollment of approximately 1.5% in expansion states and 4% in non-expansion states.

Figure 4 also shows that transitions to uninsured are significantly higher in relation to total transitions in non-expansion states than in expansion states. This is again largely attributed to more restrictive Medicaid eligibility requirements in non-expansion states. However, the *percentage* increase in the number of uninsured people is likely to be higher in expansion states where the pre-COVID uninsured rates were generally lower.

Under our midpoint scenario, we project a slight improvement (i.e., decrease) in average individual market morbidity across expansion states and a slight deterioration (i.e., increase) across non-expansion states. However, the projected morbidity impacts at the state level vary in size and direction, as shown in Figure 5. The morbidity impact for any given state and scenario will depend on a number of characteristics beyond Medicaid expansion status, including but not limited to the likelihood of newly uninsured individuals to seek alternate coverage and the relative size and morbidity of the individual and employer group markets, as discussed below.

FIGURE 5: MARKET-SPECIFIC ENROLLMENT AND MORBIDITY CHANGES IN EXPANSION AND NON-EXPANSION STATES, CY2021

METRIC	EXPANSION STATES[2]	NON-EXPANSION STATES[2]	ALL STATES
Enrollment			
Change in individual ACA enrollment (weighted average)	-5% to +9%	-2% to +13%	-3% to +11%
Change in Medicaid enrollment (weighted average)	+3% to 10%	+2% to +7%	+3% to +9%
Change in uninsured population (weighted average)	+5% to +23%	+4% to +14%	+4% to +18%
Morbidity			
Change in individual ACA morbidity (weighted average)[1]	-1% to 0%	0% to +1%	-1% to +1%
Change in individual ACA morbidity (range across states)	-2.3% to 2.5%	-2.3% to 1.3%	-2.3% to 2.5%

1. Weighted average based on pre-COVID-19 individual market enrollment and net health status at the state level.

2. Arkansas is excluded from the expansion and non-expansion splits, but is included in the "All states" results. The expansion population in Arkansas is enrolled in private coverage through the individual marketplace.

CONSUMER BEHAVIOR

Consumers have a choice in their healthcare options. Their decisions will be influenced by a number of internal and external factors that should be considered when modeling transitions in coverage.

Adverse selection

Adverse selection (also referred to as "selection" or "anti-selection") is the tendency for people to choose coverage that serves their best interests based on what they know about their current financial situation and health status. For example, older individuals and those in poor health who expect to utilize their benefits heavily are more likely to enroll in individual market or Medicaid coverage than younger individuals and those in excellent health. Similarly, we anticipate higher enrollment rates when the cost of coverage is reduced through subsidies or Medicaid eligibility. Enrollment data predating the pandemic demonstrates that, even among those eligible for subsidies, participation rates in ACA coverage and Medicaid (to a lesser extent) tend to fall substantially below 100%, with less than half of subsidy-eligible adults without other forms of coverage enrolled in ACA individual markets pre-COVID.[10]

While the unprecedented and profound changes that have occurred in response to the pandemic may influence behavior in ways we haven't seen in recent history,[11] a comparison of job loss figures to emerging enrollment data in states that offered COVID-19-related individual ACA marketplace special enrollment periods suggests that ACA participation may still represent a minority of those with job loss and those eligible for subsidized coverage.[12]

Guaranteed issue and open enrollment periods

Guaranteed issue is a provision that prohibits insurers from denying health insurance coverage to individuals with preexisting medical conditions if they are otherwise eligible. The individual market under the ACA and the Medicaid program are both guaranteed issue. Open enrollment is the period of time during which an individual can enroll in coverage under a guaranteed issue provision—the individual market has predefined open enrollment periods, while Medicaid does not. A special open enrollment period is an additional open enrollment period for an individual who is eligible, typically triggered by a qualifying life event (such as the loss of employment) or regulatory action.

Twelve states implemented special enrollment periods during the early months of the pandemic,[13] some of which have been extended late into 2020.[14] While marketplace enrollment in the second quarter of 2020 is up from the same time in 2019, it is possible that enrollment during these special enrollment periods may have been suppressed by uncertainty and confusion regarding enrollment requirements and the determination of income for the purpose of ACA subsidies. Individuals are required to estimate annual household income when applying for ACA subsidies, and are required to pay back excess subsidies if they are later found to have underestimated their income for the year.

Heading into the 2021 open enrollment period, it is possible that take-up rates in the individual market will increase relative to 2020. As time passes and the economy begins to recover, individuals will be more informed about their employment outlooks and a larger proportion of unemployed individuals may be comfortable estimating their incomes and applying for ACA subsidies. In addition, the open enrollment period will provide an opportunity for individuals to reconsider their options and weigh the risks associated with forgoing coverage for an entire plan year.

On the Medicaid side, it is important to consider that not everyone who is eligible enrolls.[15] Without an open enrollment period, there is a reduced incentive to enroll unless there is an imminent need. This is also true of individuals who become newly eligible for Medicaid due to loss of employment or income.

[10] Kaiser Family Foundation (2018). Distribution of Eligibility for ACA Health Coverage Among those Remaining Uninsured as of 2018. State Health Facts. Retrieved September 22, 2020, from https://www.kff.org/health-reform/state-indicator/distribution-of-eligibility-for-aca-coverage-among-the-remaining-uninsured/.

[11] Bakhtiari, K. (May 18, 2020). How will the pandemic change consumer behavior. Forbes. Retrieved September 22, 2020, from https://www.forbes.com/sites/kianbakhtiari/2020/05/18/how-will-the-pandemic-change-consumer-behavior/#549adc8966f6.

[12] Schwab, R., Giovannelli, J., & Lucia, K. (May 19, 2020). During the COVID-19 crisis, state health insurance marketplaces are working to enroll the uninsured. Commonwealth Fund. Retrieved September 22, 2020, from https://www.commonwealthfund.org/blog/2020/during-covid-19-crisis-state-health-insurance-marketplaces-are-working-enroll-uninsured.

[13] Ibid.

[14] Nania, R. (September 17, 2020). Some states hold special ACA open enrollments due to the coronavirus. AARP. Retrieved September 22, 2020, from https://www.aarp.org/health/health-insurance/info-2020/coronavirus-aca-open-enrollment.html.

[15] Radnofsky, L. (January 31, 2016). Millions eligible for Medicaid go without it. Wall Street Journal. Retrieved September 22, 2020, from https://www.wsj.com/articles/millions-eligible-for-medicaid-go-without-it-1454277166.

Local outreach

Individuals who lose ESI coverage or experience income loss may be unfamiliar with the alternative healthcare coverage options available to them. State Medicaid agencies and health insurance marketplaces perform various levels of marketing and outreach to consumers.[16] These initiatives are likely to influence take-up rates at the regional level.
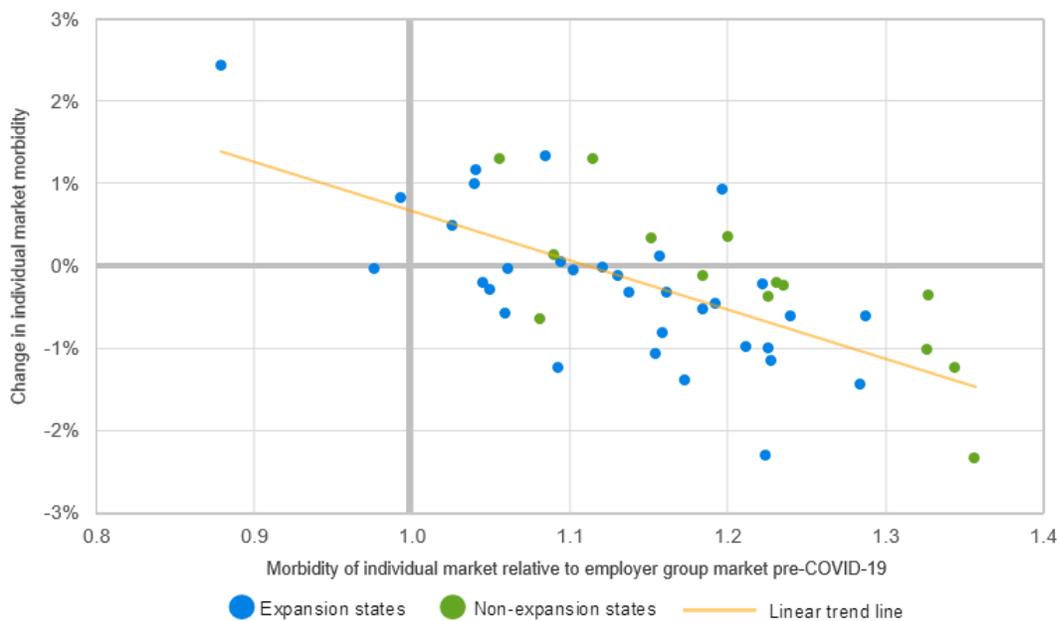
IMPACT OF TRANSITIONS ON MORBIDITY

The ESI market covers the vast majority of the non-Medicare population and is more than 10 times the size of the individual market. It is more stable and requires larger shifts in enrollment to meaningfully influence market morbidity. Our research indicates little to no net change in the average morbidity level of ESI markets in 2021.

In contrast, the individual market is more volatile, subject to greater levels of adverse selection (due to individual purchasing decisions), and prone to market disruptions, especially in states with persisting non-ACA-compliant transitional populations. ACA individual market populations also tend to have higher morbidity than the comparatively healthy populations covered by ESI.

Figure 6 illustrates how the change in individual market morbidity under our midpoint 2021 scenario relates to the relationship between the morbidity of the individual and group markets pre-COVID-19 at the state level. The trend line shows that improvements (decreases) in individual market morbidity are most likely in states where individual market morbidity is highest relative to ESI; deterioration (an increase) in individual market morbidity is more likely in states where individual market morbidity is similar or lower than ESI.

FIGURE 6: STATE CHANGES IN INDIVIDUAL MARKET MORBIDITY BY THE RELATIVE MORBIDITY OF THE INDIVIDUAL MARKET TO THE EMPLOYER GROUP MARKET, CY 2021

Notes: Individual and ESI market morbidity are estimated using ACA risk score relativities, controlling for plan type and demographics. States with individual market morbidity equal to or less than employer group include Montana, New York, and Rhode Island. Arkansas, Massachusetts, and Vermont have been omitted due to the unique structures of the individual ACA risk pools in those states.

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[16] Lueck, S. (February 6, 2020). Adopting a State-Based Health Insurance Marketplace Poses Risks and Challenges. Center on Budget and Policy Priorities. Retrieved September 22, 2020, from https://www.cbpp.org/research/health/adopting-a-state-based-health-insurance-marketplace-poses-risks-and-challenges.

Figure 6 also illustrates that the relative morbidity of the individual and group markets is not the only factor influencing changes in individual market morbidity. There are a number of other important factors to consider:

- The morbidity of the population transitioning out of the employer-sponsored insurance market and into the individual market may differ from the average employee's morbidity. Based on available data and our modeling of job losses and enrollment behavior, we expect the newly unemployed population enrolling in ACA coverage to exhibit lower income and higher morbidity on average than the ESI market as a whole.

- Adverse selection puts upward pressure on the morbidity of the population enrolling in the individual market, because healthier individuals are more likely to forgo coverage and remain uninsured.

- Larger changes in the morbidity of the individual market (in either direction) are more likely in states that have smaller individual market populations before the pandemic, and states with higher employment loss.

In reality, states have varying degrees of these conditions as well as other unique factors that drive ultimate results. We expect the average nationwide net change in individual market morbidity to be modest—between -1% and 1%.

UNEMPLOYMENT BENEFITS AND ECONOMIC STIMULUS

The CARES Act and subsequent bills passed by Congress have provided individuals and small businesses financial support in the form of economic impact payments, pandemic unemployment compensation (PUC), pandemic unemployment aid (PUA), pandemic emergency unemployment compensation (PEUC), small business loans, employee retention credits, and payroll support (see sidebar "Forms of Unemployment Compensation and Economic Stimulus").[17] Many states also relaxed unemployment requirements, enhanced unemployment benefits, and extended the period of unemployment eligibility. These mitigation measures are intended to preserve jobs and income for American workers.[18]

FORMS OF UNEMPLOYMENT COMPENSATION AND ECONOMIC STIMULUS

PROGRAM	COUNTED AS INCOME FOR:	
	ACA SUBSIDIES	MEDICAID ELIGIBILITY
State Unemployment Income Benefits (UI) Unemployment income, subject to state eligibility requirements	YES	YES
Economic impact payments On-time payment, subject to income limits and number of dependents	NO	NO
Pandemic Unemployment Assistance (PUA) Benefits for those who are not traditionally eligible for UI	YES	YES
Pandemic Unemployment Compensation (PUC) Additional $600 per week for all UI, PUA, and PEUC recipients through July 31, 2020[18]	YES	NO
Pandemic Emergency Unemployment Compensation (PEUC) Additional weeks of benefits for those who exhaust state unemployment benefits	YES	YES

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[17] The CARES Act includes numerous other provisions not discussed here. See https://home.treasury.gov/policy-issues/cares.

[18] Id.

These new sources of unemployment compensation have implications on eligibility for Medicaid and individual marketplace subsidies (see sidebar "Impact of Pandemic Unemployment Compensation on Medicaid and ACA Marketplace Subsidy Eligibility"). With the exception of economic impact payments and PUC payments, they are all considered income for both markets. Economic impact payments are not considered income for either market, and PUC payments are considered income for determining individual marketplace subsidies, but not for determining Medicaid eligibility. The treatment of these payments is accounted for in CAPS and any changes or extensions to these programs is an important consideration going forward. As of the writing of this paper, PUC payments have not been extended beyond July 31, 2020.[19] However, if they are extended into 2021, PUC payments will put downward pressure on federal marketplace subsidies, likely leading to fewer transitions into the individual market relative to the results presented in this paper, while at the same time leaving fewer low-income households in non-expansion states in the "coverage gap" without any access to affordable coverage

Any reduction or expiration of unemployment benefits and economic stimulus programs is likely to exacerbate income losses associated with the COVID-19 recession, driving more transitions into means-tested Medicaid and subsidized ACA coverage. This will in turn put further pressure on state and federal budgets for these programs, though the coverage transitions and associated expenditures may be dampened and begin to reverse over time as the economy recovers.[20]

MEDICAID CONTINUOUS ELIGIBILITY PROVISIONS

The Families First Coronavirus Response Act (FFCRA) requires state Medicaid agencies to maintain continuous eligibility for all Medicaid beneficiaries enrolled on or after mid-March 2020 in order to qualify for enhanced federal matching payments, until after the COVID-19 public health emergency (PHE) declaration ends, even when income changes would otherwise make a beneficiary ineligible for continued coverage.[21] This contrasts with regulations in place before the pandemic, which permitted states to reassess eligibility for adults throughout the year without penalty. This provision is likely to increase Medicaid enrollment further in 2020 than would otherwise be the case, as enrollment can only increase but not decrease as incomes change. The PHE is set to expire in January 2021 if not otherwise extended, and for the purpose of our 2021 projections we have assumed that states will be permitted to clear their Medicaid rolls of individuals whose incomes exceed eligibility thresholds during the CY 2021 benefit period.

IMPACT OF PANDEMIC UNEMPLOYMENT COMPENSATION ON MEDICAID AND ACA MARKETPLACE SUBSIDY ELIGIBILITY

Pandemic unemployment compensation (PUC) provides $600 per week in federal unemployment income, on top of other unemployment benefits an individual may be receiving. These payments are counted toward an individual's modified adjusted gross income[19] for purposes of determining eligibility for ACA individual marketplace subsidies, putting upward pressure on an individual's subsidized marketplace premium and downward pressure on total federal premium subsidy outlays. Income for Medicaid eligibility determination does not include PUC, making it easier for individuals to qualify for Medicaid, thereby putting further downward pressure on federal marketplace premium subsidies, particularly in states that have expanded Medicaid.

For example, in 2020, a single individual with unemployment income of $18,735 before PUC (150% FPL), would qualify for premium and cost-sharing reduction (CSR) subsidies through a state marketplace. The net monthly premium for this individual to enroll in the second-lowest silver (SLS) plan offered through the state marketplace would be $64 per month in 2020. If that person collects PUC payments for 12 weeks, his or her income would increase to $25,935 (approximately 208% FPL), and the net monthly premium for the SLS plan would increase to $146 per month (an increase of $82, or 127%). This individual's CSR subsidies would also be reduced.

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[19] However, President Trump has issued an executive order that extends a lesser payment for at least a few weeks further in 2020. See https://gop-waysandmeans.house.gov/how-it-works-paying-the-unemployed-through-president-trumps-executive-order/.

[20] Brooks, T. (January 30, 2015). Getting MAGI Right: A Primer on Differences that Apply to Medicaid and CHIP, Georgetown University Health Policy Institute. Retrieved September 22, 2020, from https://ccf.georgetown.edu/wp-content/uploads/2015/01/Getting-MAGI-Right_Jan-30-2015.pdf.

[21] Rudowitz, R., Corallo, B., & Artiga, S. (August 24, 2020). Analysis of Recent National Trends in Medicaid and CHIP Enrollment. Kaiser Family Foundation. Retrieved September 22, 2020, from https://www.kff.org/coronavirus-covid-19/issue-brief/analysis-of-recent-national-trends-in-medicaid-and-chip-enrollment/.

RETENTION OF ESI DURING UNEMPLOYMENT

There is not always a one-to-one correlation between job loss and the loss or retention of ESI. First, not everyone with a job has access to ESI. Second, there are a number of ways someone experiencing job loss (and their dependents) may retain some form of ESI:

- To date, the majority of job losses have been in the form of temporary furlough arrangements,[22] many of which have enabled employees and their dependents to retain their ESI while they are not working.
- Some who lose employment will have access to employer-sponsored coverage through a spouse or another family member.
- Individuals who lose employment may be eligible for COBRA continuation coverage through their employers, though they are likely to face higher premiums relative to when they were employed.

Retention of ESI during unemployment moderates transitions out of the employer group market, leading to fewer transitions than may otherwise be expected based on headline unemployment figures.

INCOME DISTRIBUTION OF THOSE LOSING EMPLOYMENT OR INCOME

The economic disruption from COVID-19 has had a disproportionate impact on lower-income individuals and households, with low-income employees more than three times as likely to lose employment than those with higher paying jobs.[23,24] Furthermore, both the existing coverage profile of and coverage options available to lower-income households differ from those of higher-income households, with important implications for transitions in health coverage.

Lower-income households are less likely than higher-income households to have existing ESI and more likely to be enrolled in Medicaid or the individual market. They are also more likely to *become* eligible for Medicaid or individual marketplace subsidies if they lose employment or income. As a result, we anticipate fewer transitions out of the employer group market and more transitions into Medicaid and (to a lesser extent) ACA individual marketplaces than would be the case if the impact of the COVID-19 recession was more evenly distributed across household income levels.

It is also important to consider that highly subsidized populations generally exhibit less adverse selection by age and health status in their enrollment decisions than do populations responsible for the full cost of coverage. Put another way, healthy individuals with relatively few perceived healthcare needs who would opt out of coverage in the absence of subsidies may be willing to enroll at low or no cost if eligible for generous ACA subsidies or Medicaid. For this reason, transitions to uninsured may be lower and transitions to Medicaid and the individual market may be higher in regions where the income distribution of the population is lower (outside of the coverage gap in non-expansion states), and the morbidity profile of those electing coverage may more closely resemble the overall pool of those experiencing job loss.

[22] Thomson-DeVeaux, A., Paine, N., & Wolfe, J. (September 4, 2020). The Easy Part of the Economic Recovery Might Be Over. FiveThirtyEight. Retrieved September 22, 2020, from https://fivethirtyeight.com/features/the-easy-part-of-the-economic-recovery-might-be-over/.

[23] Parker, K., Horowitz, J.M., & Brown, A. (April 21, 2020). About Half of Lower-Income Americans Report Household Job or Wage Loss Due to COVID-19. Pew Research Center. Retrieved September 22, 2020, from https://www.pewsocialtrends.org/2020/04/21/about-half-of-lower-income-americans-report-household-job-or-wage-loss-due-to-covid-19/.

[24] Federal Reserve (May 2020). Report on the Economic Well-Being of U.S. Households in 2019, Featuring Supplemental Data From April 2020. Retrieved September 22, 2020, from https://www.federalreserve.gov/publications/files/2019-report-economic-well-being-us-households-202005.pdf.

Methodology

PRE-COVID POPULATION

We began our analysis by developing a pre-COVID profile of each state's population inclusive of population counts, demographic characteristics such as age, individual and household employment, income, health insurance coverage, and self-reported health status. To develop these detailed state profiles, we used information from the 2018 American Community Survey (ACS) and detail from the 2016, 2017, and 2018 Current Population Survey (CPS) Annual Social and Economic Supplements, trended for population growth and calibrated to pre-COVID-19 market sizes and composition using additional data sources including data from Medicaid.gov, medical loss ratio reporting data, and ACA enrollment and risk adjustment reports. We assigned morbidity factors for each individual in the data set using demographic characteristics and self-reported health status, based on claims relativities from Milliman's Consolidated Health Cost Guidelines™ Sources database, further calibrated with data on the relative morbidity of each state ESI and ACA individual market pre-COVID.

EMPLOYMENT LOSS

We modeled employment loss based on data from the U.S. Bureau of Labor Statistics (BLS) and quarterly economic forecasts from the Congressional Budget Office (CBO). National employment projections are based on detailed quarterly labor force, employment, and unemployment figures from the CBO's "Interim Economic Projections for 2020 and 2021," [25] dated May 2020, with median unemployment figures adjusted to reflect updated U3 unemployment projections from the CBO's "Update to the Economic Outlook"[26] dated July 2020, and with the "low" and "high" estimates informed by the range around the median in June 2020 unemployment forecasts by the Federal Reserve.[27] We allocated job losses across states based on the proportion of net job losses by state between the February 2020 and May 2020 jobs reports published by the BLS, and varied employment loss within each state based on industry, employer size, and employee income. According to data from the Federal Reserve and BLS, COVID-19 job losses to date have been disproportionately borne by those with lower incomes[28] and in high-impact industries such as hospitality and travel.[29]

INCOME CHANGE

We modeled changes in household income based on changes in employment status of household members, federal and state unemployment assistance programs, and assumptions regarding underemployment and income loss for those who retain employment. We assumed that between one-ninth and one-third of households not subject to employment loss would still experience partial income loss due to reduced hours, salary, or other forms of underemployment.[30] We assumed that distribution of federal pandemic unemployment compensation would cease prior to January 2021.

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[25] CBO (May 19, 2020). Interim Economic Projections for 2020 and 2021. Retrieved September 22, 2020, from https://www.cbo.gov/publication/56351.

[26] CBO (July 2020). An Update to the Economic Outlook: 2020 to 2030. Retrieved September 22, 2020, from https://www.cbo.gov/publication/56465.

[27] Federal Reserve (June 10, 2020). Federal Open Market Committee Projections Materials, Accessible Version. Retrieved September 22, 2020, from https://www.federalreserve.gov/monetarypolicy/fomcprojtabl20200610.htm.

[28] Federal Reserve, Report on the Economic Well-Being, op cit.

[29] U.S. Bureau of Labor Statistics (May 8, 2020). Labor Force Statistics from the Current Population Survey – Household Data, Not Seasonally Adjusted, A-31: Unemployed persons by industry, class of worker, and sex. Retrieved May 15, 2020, from https://www.bls.gov/web/empsit/cpseea31.htm.

[30] Kirzinger, A., Hamel, L., Munana, C., et al. (April 24, 2020). KFF Health Tracking Poll, Late April 2020: Coronavirus, Social Distancing, and Contact Tracing. Kaiser Family Foundation. Retrieved September 22, 2020, from https://www.kff.org/report-section/kff-health-tracking-poll-late-april-2020-economic-and-mental-health-impacts-of-coronavirus/.

HEALTH COVERAGE TRANSITIONS

We modeled health insurance coverage transitions based on assumptions regarding loss of ESI associated with employment loss and based on changes in eligibility for Medicaid coverage and ACA individual market Advanced Premium Tax Credits (premium subsidies) associated with income loss. We assumed that some households with ESI and loss of employment will retain coverage through a furlough arrangement in which benefits are maintained, or by enrolling in extended coverage through COBRA. While the portion of job losses that are permanent has grown in recent months, as of July 2020 three-quarters of jobless workers were still on temporary layoff.[31]

Of those with ESI loss, we assumed that the majority of individuals eligible for Medicaid based on age and household income will elect to enroll, with some abstention (primarily among healthy young adults). Of those with incomes above the state-specific Medicaid cutoff, we assumed that less than half will elect to enroll in individual ACA coverage, with participation rates subject to adverse selection by age, health status, and subsidy eligibility. We also modeled transitions from individual ACA and non-ACA coverage to Medicaid, individual ACA, and uninsured status, and from uninsured status to individual ACA and Medicaid, for households experiencing income loss that are either newly eligible for subsidized coverage (or more generous subsidies) or newly in the "coverage gap" between ACA subsidy eligibility and Medicaid eligibility.

In all cases, we assumed the highest uptake rates among those eligible for Medicaid, those in poor health, those who are older, and (for ACA coverage) those whose household incomes qualify them for generous ACA subsidies.

Looking forward

The trajectory of the pandemic and the U.S. economy remains highly uncertain and is dependent on the future actions of states and the federal government, employers, and consumers, and on the lifecycle of the virus over time. The pandemic also marks uncharted territory for consumer enrollment behavior, for which data is still limited. In this fluid environment, information continues to emerge every week with the potential to alter or refine the assumptions embedded in our analysis and our assessment of the most likely outcomes for U.S. health coverage. Market stakeholders must keep a close eye on emerging developments, and Milliman's CAPS model provides one powerful way to continue to integrate this information into new forecasts and expectations.

We intend to maintain CAPS as part of Milliman's Pandemic Suite of COVID-19 modeling tools, leveraging it for our clients, consultants, and others that rely on Milliman's expertise and thought leadership. With this tool in hand, we have the ability to dive deeper beyond the results presented herein, considering alternate economic and enrollment scenarios, and drilling deeper into the health coverage characteristics and transitions of subpopulations, whether by income, geography, or any other characteristic of interest that can be mapped from data in the U.S. Census Bureau's American Community Survey and Current Population Survey. Those with an interest in a deeper exploration of results and scenarios may contact their Milliman consultant to begin leveraging CAPS and Milliman's deep expertise with respect to population shifts and market developments under COVID-19.

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[31] Paine, N., Thomson-DeVeaux, A., & Wolfe, J. (August 7, 2020). Yes, Unemployment Fell. But the Recovery Seems to Be Slowing Down. FiveThirtyEight. Retrieved September 22, 2020, from https://fivethirtyeight.com/features/yes-unemployment-fell-but-the-recovery-seems-to-be-slowing-down/.

Limitations and Qualifications Statement

This paper is intended to provide an educational overview of how economic conditions associated with the COVID-19 pandemic may impact enrollment and population mix across health insurance markets. The opinions expressed in this paper are attributable to the authors and not Milliman as a whole. The information herein is intended for educational purposes, and represents the authors' best estimates at the time of publication based on available information; actual results will vary. Emerging experience should be monitored and adjustments made as necessary. Milliman developed the COVID-19 Advanced Population Shift (CAPS) model to estimate the values included in this report. CAPS is premised on economic data and forecasts from the U.S. Bureau of Labor Statistics and Congressional Budget Office as well as health insurance enrollment data from the U.S. Department of Health and Human Services and various state agencies, along with information from other public and nonpublic sources. The projections herein are based on assumptions regarding changes in employment over time, changes to family and individual incomes, and corresponding impacts to health insurance coverage. Knowledge of future economic impacts related to COVID-19 shutdowns and potential state and federal regulatory actions to alleviate financial distress is incomplete. New information about state and federal regulatory actions, including length of "stay-at-home" orders and nonessential business closures, unemployment benefit extensions, and the creation of additional state and federal relief programs is still emerging and rapidly changing, as is data on emerging changes in health insurance coverage. Consequently, our model results will evolve as new information becomes available and new actions are taken by authorities and other stakeholders. Due to constantly developing data on COVID-19 and to economic outlooks for 2020 and 2021, as well as to the inherent difficulty of predicting individual and governmental actions far into the future, any analysis using the CAPS model is subject to a substantially greater-than-usual level of uncertainty. We have reviewed the model, including its 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). We developed CAPS to project a range of potential changes in health coverage enrollment, demographics, and morbidity stemming from economic changes associated with the COVID-19 pandemic. The model, including all input, calculations, and output may not be appropriate for any other purpose. Note that the CAPS model is *not* an economic forecasting model. Judgments about the economy and related unemployment are inputs to the model, not outputs. Fritz Busch, Lindsy Kotecki, and Jeff Milton-Hall are members of the American Academy of Actuaries, and meet its qualification standards to provide this analysis.

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milliman.com

CONTACT

Fritz Busch
fritz.busch@milliman.com

Lindsy Kotecki
lindsy.kotecki@milliman.com

Jeff Milton-Hall
jeff.milton-hall@milliman.com