



Aging and  
Retirement

# COVID-19 Impact on Long-Term Care Insurance Report

## 2021 Survey





## 2021 Survey

Report Prepared by Milliman, Inc.

<b>AUTHORS</b>	Mike Bergerson, FSA, MAAA Principal and Consulting Actuary
	Andrew Dalton, FSA, MAAA Principal and Consulting Actuary
	Andrew Duxbury, ASA, MAAA Associate Actuary
	Robert Eaton, FSA, MAAA Principal and Consulting Actuary
	James Stoltzfus, FSA, MAAA Principal and Consulting Actuary

The SOA would like to thank the Senior Health Care Oversight Trust for their financial support of this project.

**Give us your feedback!**  
Take a short survey on this report.

[Click Here](#)

**SOA Research INSTITUTE**

### Caveat and Disclaimer

This study is published by the Society of Actuaries Research Institute (SOA) and contains information from a variety of sources. It may or may not reflect the experience of any individual company. The study is for informational purposes only and should not be construed as professional or financial advice. The SOA does not recommend or endorse any particular use of the information provided in this study. The SOA makes no warranty, express or implied, or representation whatsoever and assumes no liability in connection with the use or misuse of this study.

Copyright © 2021 by the Society of Actuaries Research Institute. All rights reserved.

## CONTENTS

<b>Section 1: Introduction .....</b>	<b>4</b>
1.1 BACKGROUND.....	4
<b>Section 2: Executive Summary .....</b>	<b>6</b>
2.1 GENERAL .....	6
2.2 PERSISTENCY.....	6
2.2.1 Mortality.....	6
2.2.2 Voluntary Lapse.....	6
2.3 MORBIDITY.....	7
2.4 RESERVES .....	7
<b>Section 3: Survey Results .....</b>	<b>8</b>
<b>Section 4: Reliance and Limitations.....</b>	<b>24</b>
<b>Section 5: Acknowledgments .....</b>	<b>25</b>
<b>Section 6: List of Participating Companies.....</b>	<b>26</b>
<b>Appendix A: Survey Questions .....</b>	<b>27</b>
<b>About The Society of Actuaries Research Institute .....</b>	<b>39</b>

# COVID-19 Impact on Long-Term Care Insurance Report

## 2021 Survey

### Section 1: Introduction

The Society of Actuaries (SOA) retained Milliman, Inc. (Milliman) to conduct a follow-up survey on the impact of COVID-19 on long-term care (LTC) insurance mortality, voluntary lapse, and morbidity experience. The results of this survey, which was conducted from August through September of 2021, are presented in this report.

The survey studied the emerging impact of COVID-19 for the period from April 1, 2020, through March 31, 2021. This report does not fully reflect the impact of vaccine availability and rollout and it does not reflect the surge of COVID-19 Delta variant cases that occurred after March 2021; further survey work is necessary to assess the impact of these developments. It is unclear how persistent these short-term impacts will be and how they may influence future trends. Speculation on the longer-term impacts, if any, of COVID-19 on LTC insurance was beyond the scope of this survey and report.

The authors of this report are actuaries with Milliman. This report provides survey results regarding the impact of COVID-19 on LTC companies. The authors are members of the American Academy of Actuaries and meet the qualification standards of the American Academy of Actuaries for rendering this opinion.

#### 1.1 BACKGROUND

The SOA retained Milliman in 2020 to conduct a comprehensive survey on the impact of COVID-19 on LTC insurance. The survey focused on the emerging mortality, voluntary lapse, and morbidity experience for the period April 1, 2020, through September 30, 2020. The results of that research were published in March 2021.<sup>1</sup> The SOA retained Milliman to perform this follow-up survey to capture additional emerging experience on the impact of COVID-19 on long-term care insurance.

The survey was sent to companies with LTC blocks of insurance. There were 14 companies that participated in the survey, which represented approximately 35% of the insured lives in-force in 2019.<sup>2</sup> Eight of these companies participated in the prior survey, with six new companies responding to this survey. For the seven companies that participated in the prior survey that were not able to participate in this study, most cited lack of resources to complete the survey as the reason. Some companies only responded to a subset of the questions in the survey, so the total responses will not always equal 14.

The survey consisted of a series of questions about the potential impact of COVID-19 on LTC insurance. For some of the questions, participants were given the option to select multiple responses if more than one response was consistent with their experience. Also, for many questions, participants were prompted to provide a short

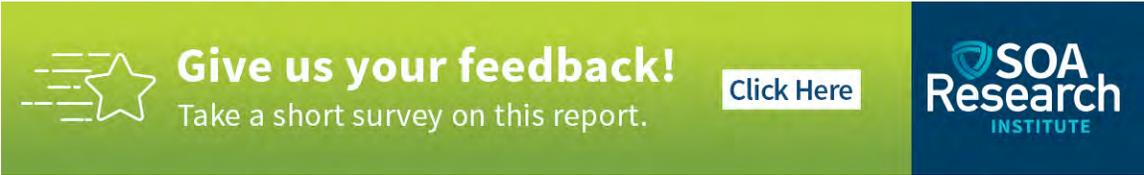
---

<sup>1</sup> Bergerson, M., Dalton, A., Eaton, R., and Stoltzfus, J. (March 2021). COVID-19 Impact on Long-Term Care Insurance. Society of Actuaries. Retrieved October 4, 2021, from <https://www.soa.org/globalassets/assets/files/resources/experience-studies/2021/covid-impact-ltc-2020-survey.pdf>.

<sup>2</sup> LTC insured lives in-force were collected from the year-end 2019 National Association of Insurance Commissioners (NAIC) Experience Reporting Forms.

explanation. This option allowed companies to communicate responses that best aligned with their experience or views. Companies were also asked to provide the event counts (deaths, claims, or voluntary lapses) that helped inform their responses. Many of the questions were the same or similar to the prior survey questions to facilitate comparisons between the results.

The survey focused on experience since the onset of COVID-19 with regard to mortality, voluntary lapse, morbidity, and reserves. The survey defined this as the period from April 1, 2020, through March 31, 2021. A full copy of the survey is provided in Appendix A of this report.



 **Give us your feedback!**  
Take a short survey on this report.

[Click Here](#)



## Section 2: Executive Summary

This section describes key observations from the detailed survey results presented in Section 3.

### 2.1 GENERAL

Overall, the survey results showed that COVID-19 has had an impact on emerging LTC insurance experience through higher mortality (for both active and disabled lives) and lower claim incidence. Results on voluntary lapse rates were mixed; however, premium grace period extensions due to COVID-19 have likely continued to contribute to differences in reporting. The survey results also indicated that, in many cases, the impact of COVID-19 had not been studied or there was not yet data available. This was especially true in relation to studying COVID-19's impact across various characteristics (gender, attained age, marital status, situs).

For questions that studied the impact of COVID-19 on specific assumptions, the effect was measured on a multiplicative basis compared to the expectation without COVID-19, except for voluntary lapse, which was measured on an additive basis. See examples in the full survey questions in Appendix A for additional detail.

### 2.2 PERSISTENCY

#### 2.2.1 MORTALITY

- Over half of the respondents reported observing an increase in active life mortality. Four companies indicated that this impact was not studied, that data was not yet available, or that there was no observable impact. A weighted average response was calculated as an average 6.4% increase in active life mortality.
- The majority of the respondents reported observing a significant increase (greater than 10%) in disabled life mortality. Four companies indicated that this impact was not studied, that data was not yet available, or that there was no observable impact. A weighted average response was calculated as an average 12.1% increase in disabled life mortality.
- Four companies observed a higher mortality impact on disabled life mortality than on active life mortality. No companies observed a smaller impact on disabled life mortality compared to active life mortality.
- The findings described in the preceding bullets were similar to the prior survey that included experience from April 1, 2020, to September 30, 2020, except responses indicated that mortality (both active and disabled) was higher between October 1, 2020, and March 31, 2021.
- A number of companies indicated that mortality levels increased during the study period but then started to regress toward pre-COVID-19 levels after March 2021.

#### 2.2.2 VOLUNTARY LAPSE

- Results on voluntary lapse rates were mixed, with five companies reporting a decrease in lapse rates and two companies reporting an increase in lapse rates. However, a number of companies indicated that they had not adjusted lapse rates for premium grace period extensions due to COVID-19, which may have contributed to the decrease in lapse rates.
- The findings described in the preceding bullet were similar to the prior survey.

### 2.3 MORBIDITY

- The biggest impact on morbidity observed by companies was related to claim incidence. A majority of respondents saw lower claim incidence, with five companies observing a large decrease (greater than 10%). A weighted average response was calculated as an average 11.3% decrease in claim incidence.
- Ten companies reported seeing a shift in claim situs toward a home healthcare setting. This was true for both existing claims and new claims but especially for new claims.
- The findings described in the preceding bullets were similar to the prior survey, except responses indicated that incidence was higher between October 1, 2020, and March 31, 2021 (but still below expected levels absent COVID-19).

### 2.4 RESERVES

- The majority of respondents indicated they had not changed their valuation liability assumptions due to COVID-19 and that, when ignoring interest rates, there was no impact on gross premium reserves (GPR), premium deficiency reserves (PDR), or asset adequacy reserves (AAR). When including the impact from interest rate changes, five companies reported an increase in GPR or PDR reserves due to changes in valuation assumptions.
- About half of the respondents indicated there was no impact to claim reserves as a result of COVID-19. The remaining companies were fairly evenly split between seeing an increase or decrease to claim reserves as a result of COVID-19.

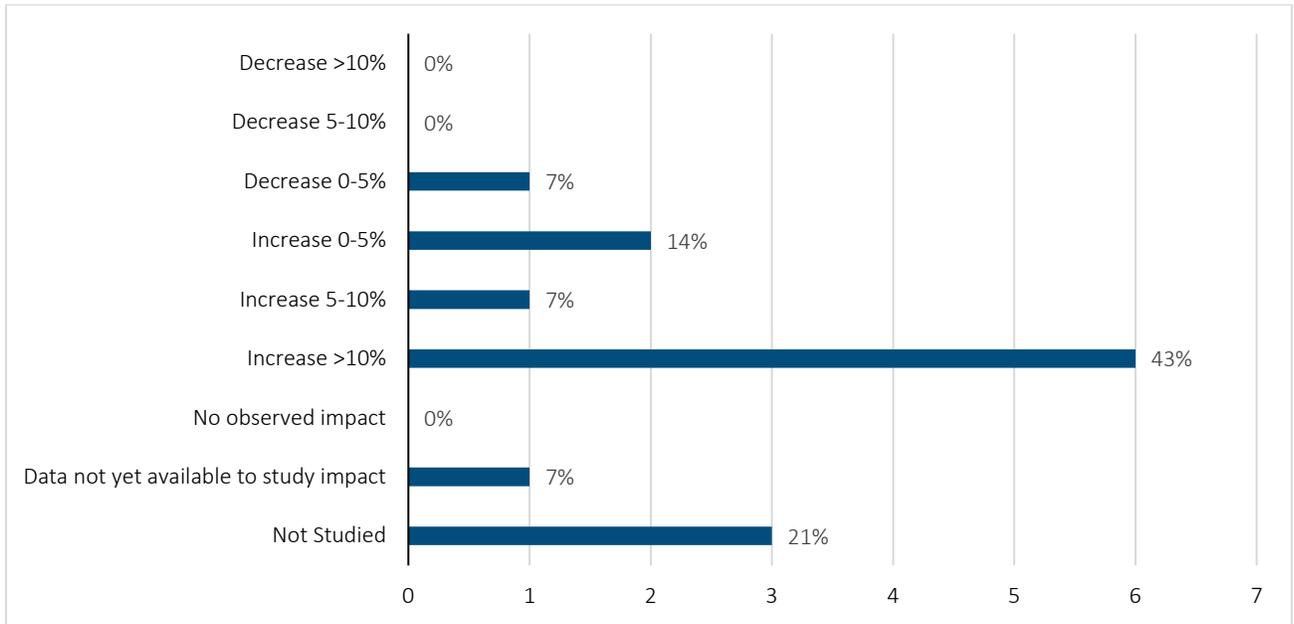
## Section 3: Survey Results

This section presents the survey responses for the 14 participating companies. Because some companies only responded to a subset of the questions in the survey, the total responses will not always equal 14. Each question is followed by graphical results, as well as commentary on the results. Where open response comments were provided by companies, the comments are presented with only slight edits for readability and to preserve company anonymity. For each question, unless noted otherwise, the survey asked for experience from April 1, 2020 (roughly the onset of COVID-19 in the United States) to March 31, 2021.

### 3.1 IN THE EMERGING LTC ACTIVE LIFE MORTALITY EXPERIENCE SINCE THE ONSET OF COVID-19, WHAT HAVE YOU OBSERVED RELATIVE TO YOUR EXPECTATION FOR THE BLOCK ABSENT COVID-19?

**Figure 1**

#### IMPACT ON AGGREGATE ACTIVE LIFE EXPERIENCE – NUMBER OF RESPONDING COMPANIES



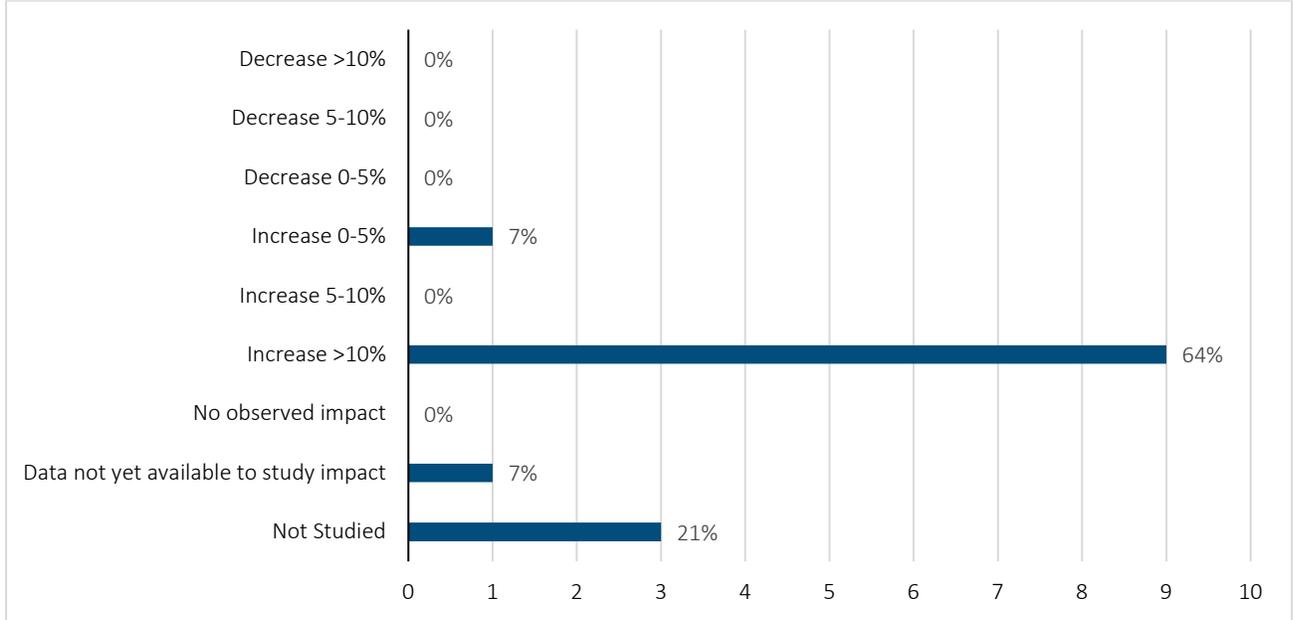
- Over half (64%) of the respondents reported observing an increase in active life mortality, with seven of the nine companies seeing an increase in excess of 5%.
- Only one (7%) respondent observed a decrease in active life mortality.
- Four (29%) respondents indicated that this impact was not studied or data was not yet available.
- Companies were also asked about variation in active life mortality experience by gender and attained age. Very little variation was observed by these characteristics, with only four (29%) companies reporting they studied the impact by these characteristics.
- The findings described in the preceding bullets were similar to the prior survey that asked the same question but only included experience from April 1, 2020, through September 30, 2020. Some observations of the comparisons between the current and prior survey are listed below.
  - This survey indicated a higher percentage of companies studied the impact on active life mortality.
  - This survey indicated a higher percentage of companies observed an increase in active life mortality experience.
- A weighted average response was calculated as an average 6.4% increase in active life mortality. The midpoints of the ranges were used to develop the weighted average with 12.5% used for companies reporting an increase in excess of 10%. Ten (71%) companies provided the deaths underlying their

response. The aggregate number of active life deaths across all companies providing the information was 31,026. Any one company's weighting was limited to 30% in this calculation.

### 3.2 IN THE EMERGING LTC DISABLED LIFE MORTALITY EXPERIENCE SINCE THE ONSET OF COVID-19, WHAT HAVE YOU OBSERVED RELATIVE TO YOUR EXPECTATION FOR THE BLOCK ABSENT COVID-19?

Figure 2

#### IMPACT ON AGGREGATE DISABLED LIFE EXPERIENCE – NUMBER OF RESPONDING COMPANIES

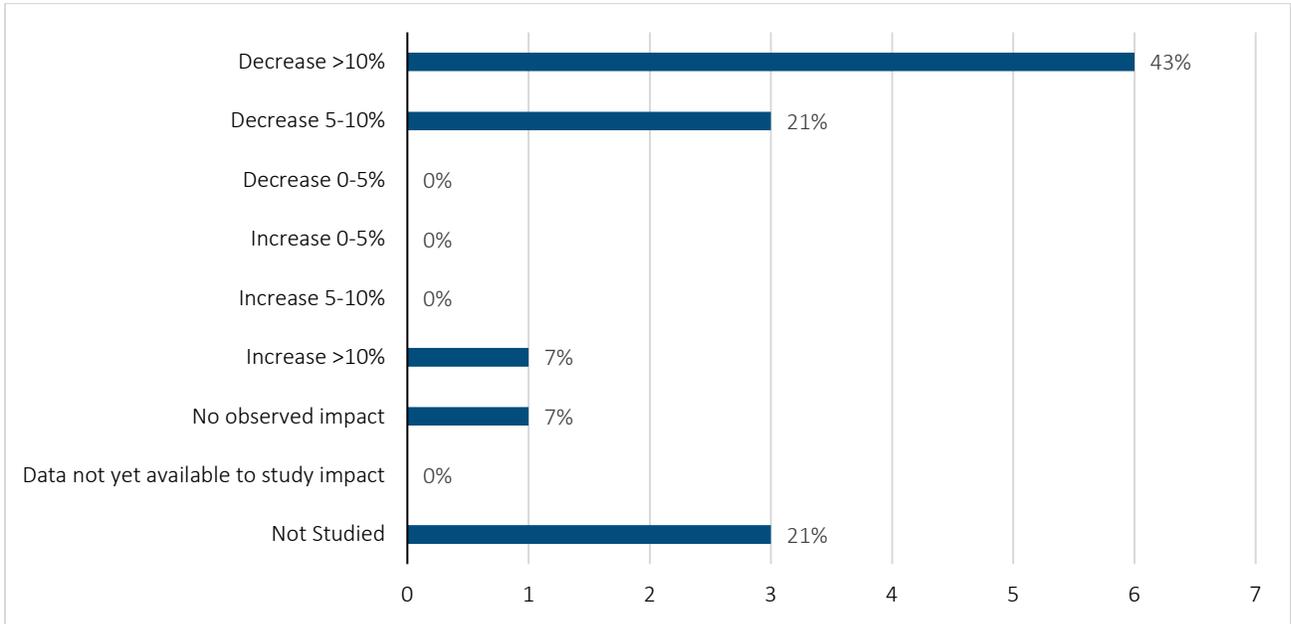


- The majority (71%) of respondents reported observing an increase in disabled life mortality. Nine of these 10 companies saw an increase in excess of 5%.
- No respondents observed a decrease in disabled life mortality.
- Four (29%) respondents indicated that this impact was not studied or data was not yet available.
- Four (29%) companies observed a higher mortality impact on disabled life mortality compared to their responses for active life mortality. No companies observed a smaller impact on disabled life mortality compared to active life mortality.
- Companies were also asked about variation in disabled life mortality experience by gender, attained age, and situs. No companies observed significant variation by these characteristics, with only four (29%) reporting they studied the impact by these characteristics.
- The findings described in the preceding bullets were similar to the prior survey that asked the same question but only included experience from April 1, 2020, through September 30, 2020, except a higher percentage of companies now reported an increase in disabled life mortality experience and there was a more significant impact reported.
- A weighted average response was calculated as an average 12.1% increase in disabled life mortality. The midpoints of the ranges were used to develop the weighted average, with 12.5% used for companies reporting an increase in excess of 10%. Eleven (79%) companies provided the deaths underlying their responses. The aggregate number of disabled life deaths across all companies providing the information was 30,420. Any one company's weighting was limited to 30% in this calculation.

**3.3 IN THE EMERGING CLAIM INCIDENCE EXPERIENCE SINCE THE ONSET OF COVID-19, WHAT HAVE YOU OBSERVED RELATIVE TO YOUR EXPECTATION FOR THE BLOCK ABSENT COVID-19?**

**Figure 3**

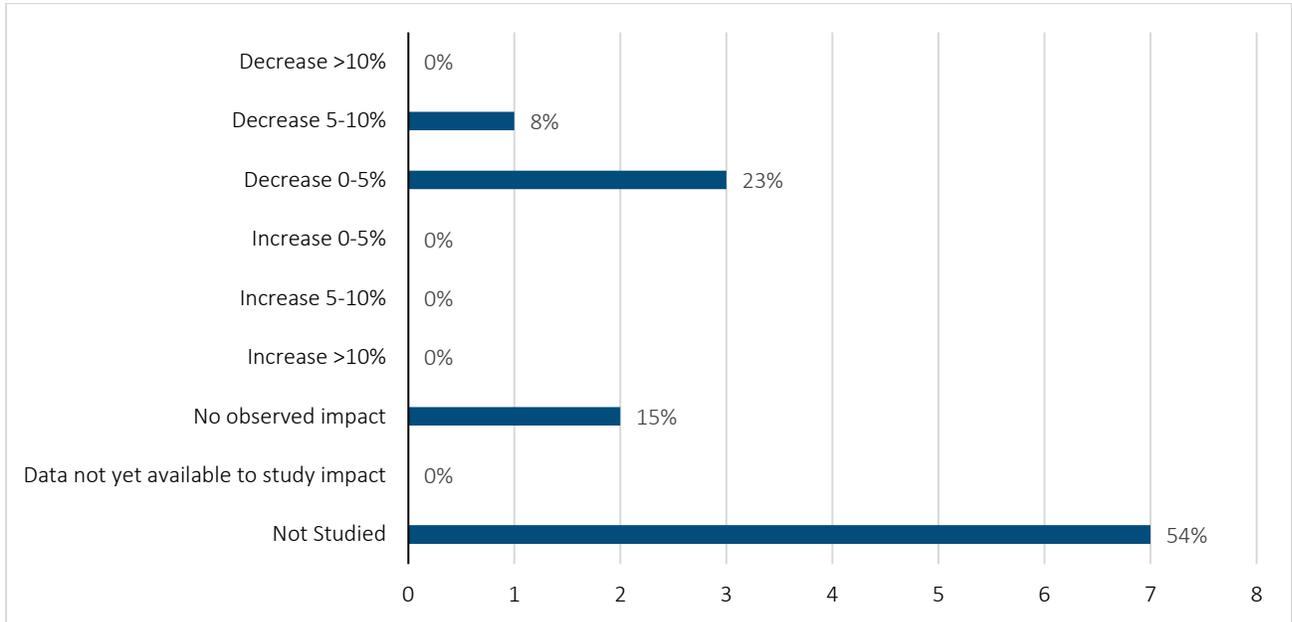
**IMPACT ON AGGREGATE CLAIM INCIDENCE EXPERIENCE – NUMBER OF RESPONDING COMPANIES**



- Over half (64%) of the respondents reported observing a decrease in claim incidence, with six of these nine companies observing a decrease in excess of 10%.
- One (7%) respondent observed an increase in claim incidence.
- Four (29%) respondents indicated that this impact was either not studied or there was no observable impact.
- Companies were also asked about variation in claim incidence experience by gender, marital status, attained age, and situs. Very little variation was observed by these characteristics, with only four (29%) companies reporting they studied the impact by these characteristics.
- The findings described in the preceding bullets were similar to the prior survey that asked the same question but only included experience from April 1, 2020, through September 30, 2020.
- A weighted average response was calculated as an average 11.3% decrease in claim incidence. The midpoints of the ranges were used to develop the weighted average, with 12.5% used for companies reporting a decrease in excess of 10%. Eleven (79%) companies provided the claim counts underlying their responses. The aggregate number of claim counts across all companies providing the information was 32,515. Any one company’s weighting was limited to 30% in this calculation.

**3.4 IN THE EMERGING CLAIM UTILIZATION EXPERIENCE SINCE THE ONSET OF COVID-19, WHAT HAVE YOU OBSERVED RELATIVE TO YOUR EXPECTATION FOR THE BLOCK ABSENT COVID-19?**

**Figure 4**  
**IMPACT ON AGGREGATE CLAIM UTILIZATION EXPERIENCE – NUMBER OF RESPONDING COMPANIES**

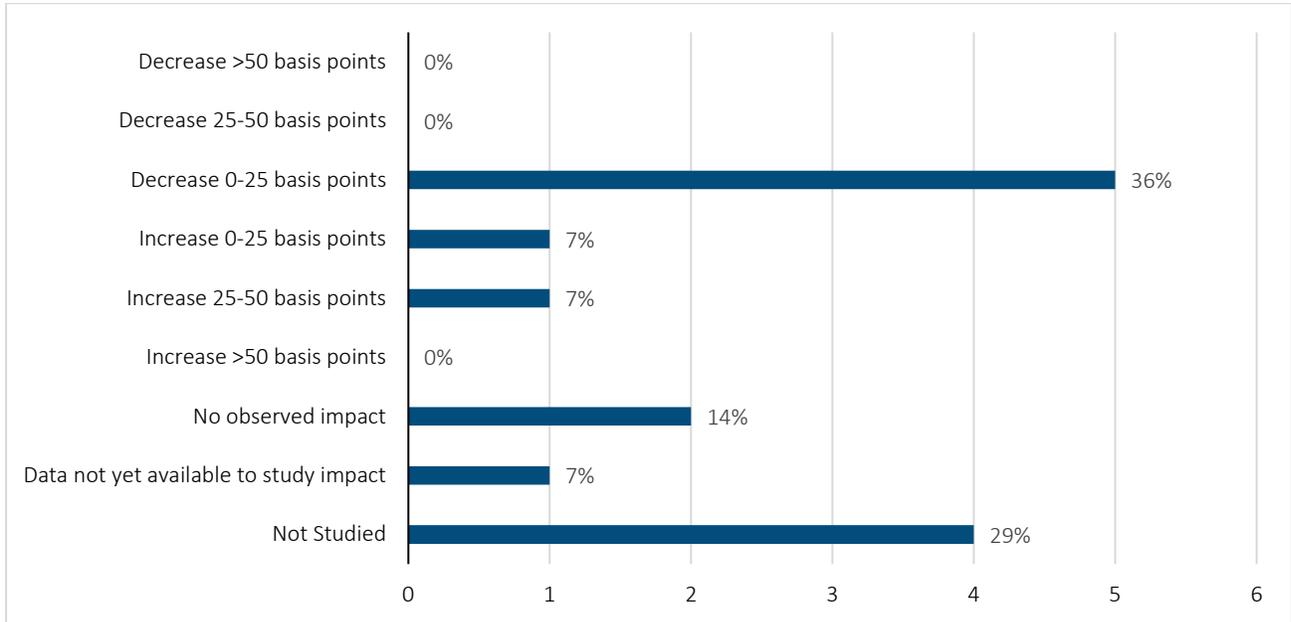


- Over half (69%) of the respondents indicated that this impact was either not studied or there was no observable impact.
- Four (31%) respondents observed a decrease in claim utilization.
- Companies were also asked about variation in claim utilization experience by gender, marital status, attained age, and situs. Very few companies observed variation by these characteristics, with only two (15%) reporting they studied the impact by these characteristics.
- The findings described in the preceding bullets were similar to the prior survey that asked the same question but only included experience from April 1, 2020, through September 30, 2020, except a slightly higher percentage of companies now reported a decrease to claim utilization.
- A weighted average response was calculated as an average 3.2% decrease in claim utilization. The midpoints of the ranges were used to develop the weighted average. Seven (54%) companies provided the claim counts underlying their responses. The aggregate number of claim counts across all companies providing the information was 115,378. Any one company’s weighting was limited to 30% in this calculation.

### 3.5 IN THE EMERGING VOLUNTARY LAPSE EXPERIENCE SINCE THE ONSET OF COVID-19, WHAT HAVE YOU OBSERVED RELATIVE TO YOUR EXPECTATION FOR THE BLOCK ABSENT COVID-19?

Figure 5

#### IMPACT ON VOLUNTARY LAPSE EXPERIENCE – NUMBER OF RESPONDING COMPANIES



- Prior questions asked about percentage of impact on a multiplicative basis, while this question asked about basis point impact on an additive basis.
- Five (36%) respondents reported observing a decrease in voluntary lapse experience, while two (14%) reported observing an increase in voluntary lapse experience.
- Half of the respondents indicated that this impact was not studied, data was not yet available, or there was no observable impact.
- A subsequent question discussed the impact of grace period extensions on voluntary lapse experience. Grace period extensions may have made it difficult for companies to evaluate voluntary lapse experience and led to an underreporting of voluntary lapses. See questions 3.10 and 3.11 below for additional details.
- Companies were also asked about variation in voluntary lapse experience by gender, marital status, and attained age. Very little variation was observed by these characteristics, with only four (29%) companies reporting they studied the impact by these characteristics.
- The findings described in the preceding bullets were similar to the prior survey that asked the same question but only included experience from April 1, 2020, through September 30, 2020.
- A weighted average response was calculated as an average 3 basis point decrease in voluntary lapse experience. The midpoints of the ranges were used to develop the weighted average. Nine (64%) companies provided the voluntary lapses underlying their responses. The aggregate number of voluntary lapses across all companies providing the information was 20,747. Any one company's weighting was limited to 30% in this calculation.

**3.6 HOW MUCH OF YOUR BUSINESS IS INDIVIDUAL VERSUS GROUP BUSINESS (BASED ON ANNUALIZED PREMIUM WITH TOTAL SUMMING TO 100%)? FOR PURPOSES OF THIS QUESTION AND QUESTION 7, GROUP BUSINESS MEANS EMPLOYER GROUP BUSINESS, AND NOT ASSOCIATION OR GROUP TRUST BUSINESS OR SIMILAR.**

**Table 1**  
**PERCENTAGE OF INDIVIDUAL AND GROUP BUSINESS BY RESPONDENT**

Respondent	Individual	Group
1	81%	19%
2	100%	0%
3	62%	38%
4	60%	40%
5	100%	0%
6	100%	0%
7	99.9%	0.01%
8	100%	0%
9	100%	0%
10	100%	0%
11	100%	0%
12	99%	1%
13	20%	80%
14	100%	0%

Most of the companies in this study had a majority of individual experience.

**3.7 PLEASE DESCRIBE ANY VARIATIONS BETWEEN INDIVIDUAL AND GROUP EXPERIENCE THAT YOUR COMPANY HAS OBSERVED AS IT RELATES TO THE COVID-19 PANDEMIC.**

Overall, the majority of answers to this question were not applicable as most of the respondents had only individual experience. One company indicated that there was a more notable impact on individual policies than group policies due to differences in block characteristics. Responses for companies are listed below with 'not applicable' responses removed (e.g., company did not have group business).

- *We didn't analyze the results at that level.*
- *More notable impact on individual policies than group due to differences in block characteristics.*
- *None observed.*
- *We aren't able to answer group questions since we don't have the appropriate experience reporting infrastructure to answer these questions directly.*
- *Not studied.*

**3.8 PLEASE DESCRIBE ANY VARIATIONS IN EXPERIENCE THAT YOUR COMPANY HAS OBSERVED IN EITHER MORTALITY OR CLAIM EXPERIENCE FROM THE FIRST 6 MONTHS OF THE EXPERIENCE PERIOD (4/1/2020 - 9/30/2020) COMPARED TO THE LAST 6 MONTHS OF THE EXPERIENCE PERIOD (10/1/2020 - 3/31/2021). PLEASE BE AS SPECIFIC AS POSSIBLE ABOUT TRENDS OBSERVED IN EXPERIENCE (E.G., INITIALLY CLAIMS WERE 10% LOWER BUT HAVE NOW MODERATED TO THE EXPECTED LEVEL).**

Overall, companies reported seeing higher mortality (active life and disabled life) and lower claim incidence in the first six-month period compared to expectations prior to COVID-19. Multiple companies reported seeing higher mortality and higher incidence in the second six-month period compared to the first six-month period. One company reported seeing a higher proportion of new home healthcare claims in the second six-month period compared to the first six-month period. Responses for individual companies are listed below.

- *For mortality, experience was close to normal through Q3 2020. In Q4, claimant mortality was 10% higher. In Q1 2021, claimant mortality was 30% higher. Active mortality was normal through Q4 2020. Q1 2021 active mortality was 40% higher than normal. For claim experience, it was approximately 90% of expected through November 2020 and was approximately 95% from December 2020 through March 2021.*
- *We have a very small old block of LTC. We don't track LTC much.*
- *Incidence was most depressed in Q2 2020, rebounded slightly in Q3/Q4 2020 and then dipped again but to a lesser extent in Q1 2021. Claim closures (primarily disabled mortality), healthy life mortality, and voluntary lapses were all extremely elevated in Q1 2021. Note we attribute elevated voluntary lapses primarily due to deaths that weren't reported.*
- *Not studied.*
- *Have not examined a specific period experience.*
- *These two 6-month periods typically exhibit very different experience due to normal seasonal patterns. When compared to seasonally adjusted levels, the first 6-month period showed higher mortality and lower incidence relative to the second period.*
- *Initially mortality was approximately 15% higher and then increased even higher in the final 6 months of the period though the data for the final 6 months is incomplete. Initially claim incidence was 25% lower and then moderated to close to 5% lower than expected levels in the final 6 months of the period.*
- *We observed a high closures spike for home health care during (4/1/2020 – 9/30/2020) associated with policyholder's reluctance to bring a provider into the house during the pandemic. Over (10/1/2020 – 3/31/2021), the proportion of home health care new submitted claims increased above expected level which brought back home health care open claims to normal level.*
- *Mortality and claim experience has been consistent from April 2020 - March 2021.*
- *Not Studied.*

**3.9 PLEASE DESCRIBE ANY CHANGES IN EXPERIENCE THAT YOUR COMPANY HAS OBSERVED AFTER MARCH 31, 2021.**

Most companies reported that the impact on mortality and claims began to regress toward pre-COVID-19 levels after March 31, 2021. It should be noted that the survey was sent to companies in July 2021 with responses due in early September so company responses here may not reflect the surge of COVID-19 Delta variant cases that occurred.

- *Mortality returned to normal in Q2 2021. Claim incidence has gradually increased to normal levels.*
- *We have a very small old block of LTC. We don't track LTC much.*
- *Pandemic impacts appear to be abating for new claims, claim terminations, and healthy mortality and returning closer to pre-COVID expectations.*

- *We excluded experience during most of 2020 from our latest experience study but we do see things approaching, but not yet there, at pre-COVID levels in q2 2022.*
- *Not studied.*
- *Claim experience has come back to more in line with pre-COVID experience.*
- *None.*
- *Policyholder experience and behavior since March 31, 2021 suggests that the impact of COVID-19 and concerns over infection have moderately abated.*
- *Mortality and lapses seem to have returned to expected levels after March 31, 2021. We have not observed lower mortality and lapses compared to expected since March 31, 2021. Claim incidence rates seem to have returned to expected levels with no increase due to pent-up demand.*
- *Decline in active life mortality attributable to COVID.*
- *Claims have started to pick up again.*
- *COVID recovery has been better than expected in terms of claim experience. We have experienced a rising trend in home health care claims.*
- *Not studied.*

### 3.10 IS YOUR COMPANY STILL OFFERING EXTENDED PREMIUM GRACE PERIODS DUE TO COVID-19?

Table 2

#### NUMBER OF RESPONDING COMPANIES OFFERING EXTENDED PREMIUM GRACE PERIODS

Response	Number of Responses	Percent of Responses
Yes, as required	7	50%
Yes, voluntarily	0	0%
No	7	50%

Half of the companies are still offering extended premium grace periods as required. No companies are voluntarily offering extended premium grace periods.

### 3.11 HOW DID YOU ACCOUNT FOR POLICIES THAT MAY BE PAST A NORMAL GRACE PERIOD BUT HAVE NOT BEEN LAPSED DUE TO REQUESTS OR REQUIREMENTS TO EXTEND GRACE PERIODS DUE TO COVID-19?

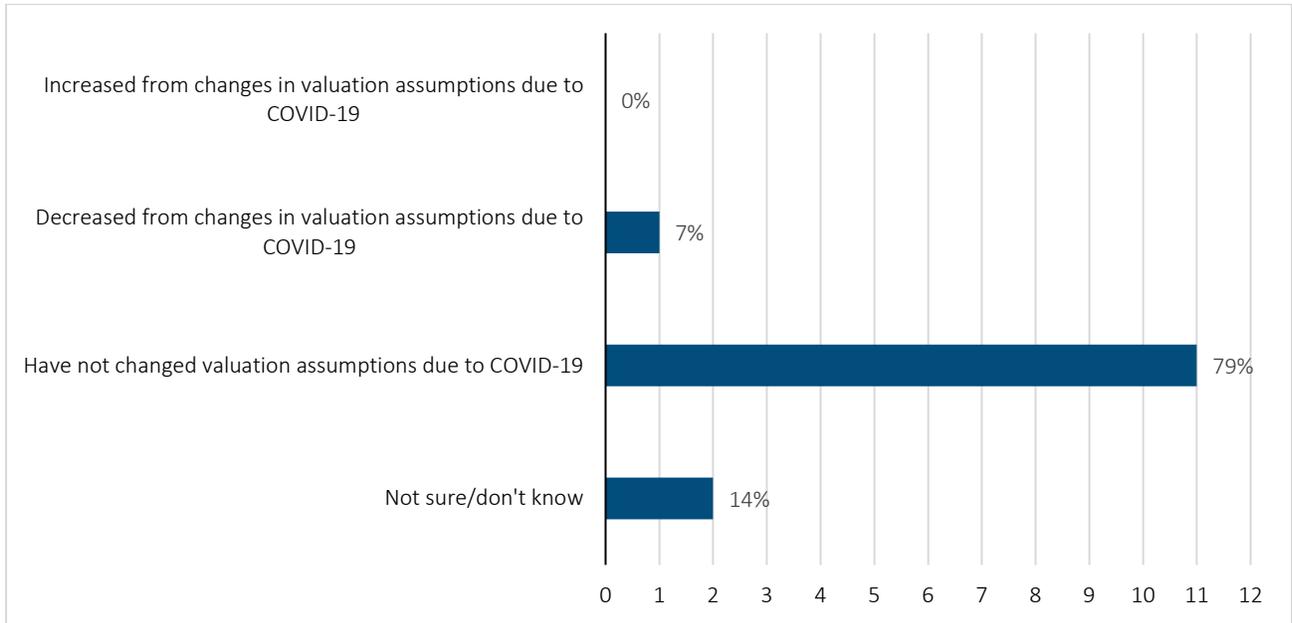
Most companies reported making no adjustment for extended grace periods, which may have led to an underreporting of voluntary lapses in the experience to date. Some companies did not respond or indicated that this had not yet been studied. Responses for individual companies are listed below.

- *Treated as active policies.*
- *We have a very small old block of LTC. We don't track LTC much.*
- *Policies given additional grace periods per state mandates are not included in lapse counts.*
- *We assumed they have not lapsed from our reserve calculations, but for future experience studies the actual lapse date will be retroactive.*
- *They were included in the counts.*
- *Not applicable.*
- *No adjustment was made to account for policies that were granted special accommodations.*
- *There was minimal utilization of grace periods beyond normal within our block of business so no adjustment was deemed necessary.*
- *Not considered a lapse.*

- *Unknown in our study data if request for extension was made. Treated all the same.*
- *No specific adjustment applied. We have not performed a comprehensive study yet.*
- *They would still be treated as active policies.*
- *They were not included in our counts.*

**3.12 IF YOU IGNORED ANY IMPACT FROM INTEREST RATE CHANGES, HOW HAVE YOUR GROSS PREMIUM RESERVES (GPR) OR PREMIUM DEFICIENCY RESERVES (PDR) BEEN IMPACTED AS A RESULT OF COVID-19?**

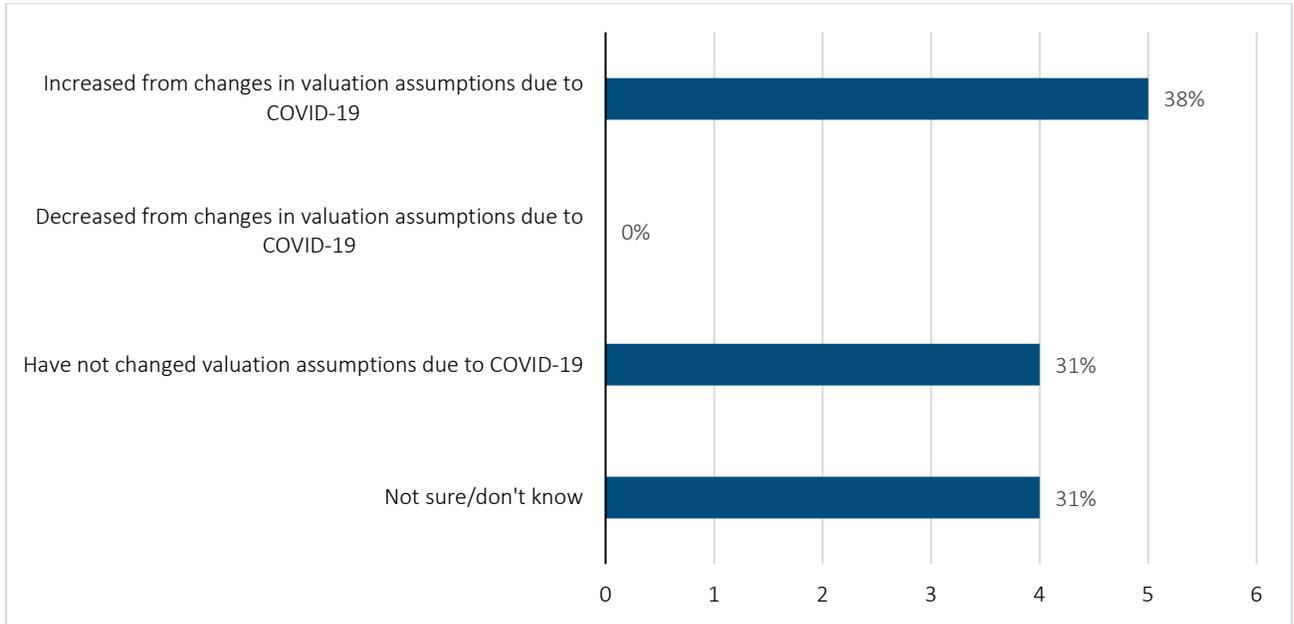
**Figure 6**  
**IMPACT ON GPR OR PDR – NUMBER OF RESPONDING COMPANIES**



- A majority (79%) of the respondents reported having not changed their valuation assumptions due to COVID-19 when ignoring the impact from interest rate changes.
- One (7%) respondent reported a decrease to its GPR or PDR.

**3.13 IF YOU INCLUDE THE IMPACT FROM INTEREST RATE CHANGES, HOW HAVE YOUR GROSS PREMIUM RESERVES (GPR) OR PREMIUM DEFICIENCY RESERVES (PDR) BEEN IMPACTED AS A RESULT OF COVID-19?**

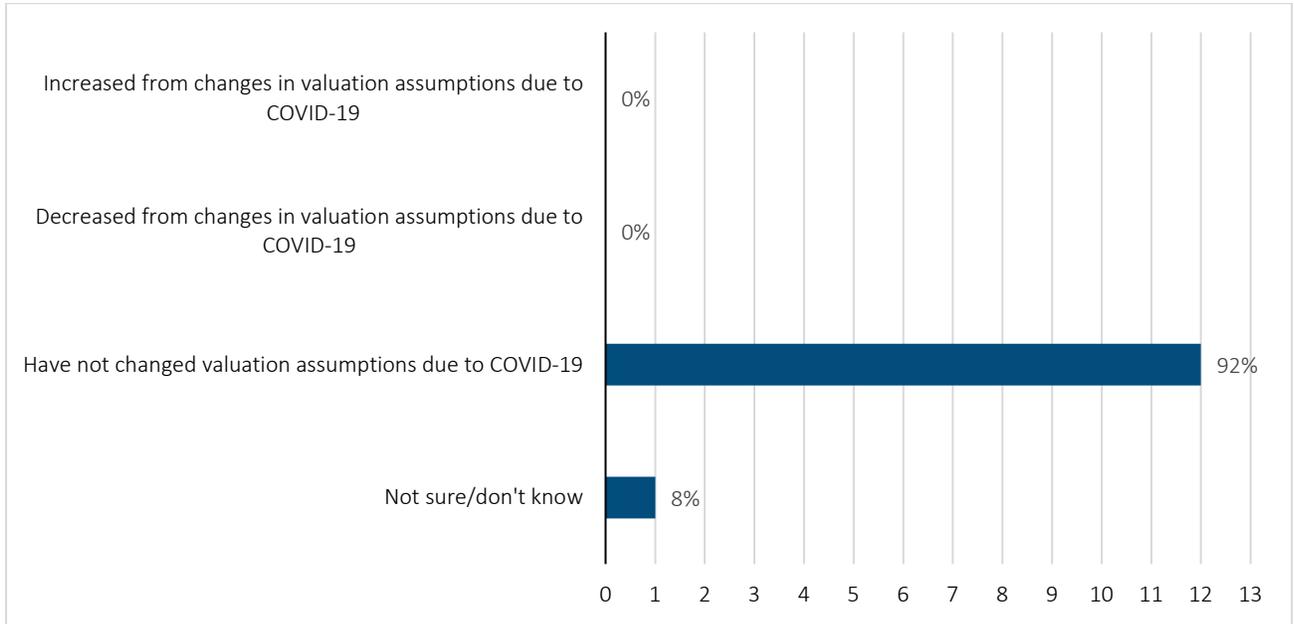
**Figure 7**  
**IMPACT ON GPR OR PDR – NUMBER OF RESPONDING COMPANIES**



- Five (38%) respondents reported an increase to their GPR or PDR from changes to valuation assumptions when including the impact from interest rate changes.
- Four (31%) of the respondents reported having not changed their valuation assumptions when including the impact from interest rate changes.

**3.14 IF YOU IGNORED ANY IMPACT FROM INTEREST RATE CHANGES, HOW HAVE YOUR ADDITIONAL ACTUARIAL RESERVES (AAR) BEEN IMPACTED AS A RESULT OF COVID-19?**

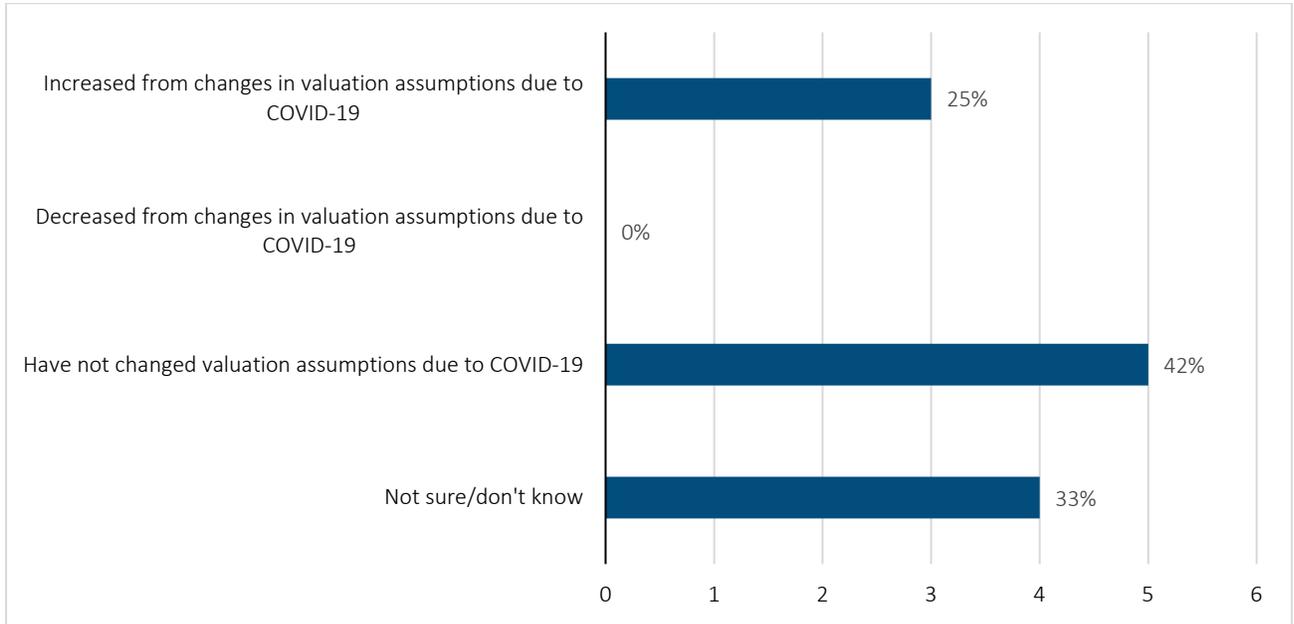
**Figure 8**  
**IMPACT ON AAR – NUMBER OF RESPONDING COMPANIES**



- All but one (92%) of the respondents reported having not changed their valuation assumptions due to COVID-19 when ignoring the impact from interest rate changes.

**3.15 IF YOU INCLUDE THE IMPACT FROM INTEREST RATE CHANGES, HOW HAVE YOUR ADDITIONAL ACTUARIAL RESERVES (AAR) BEEN IMPACTED AS A RESULT OF COVID-19?**

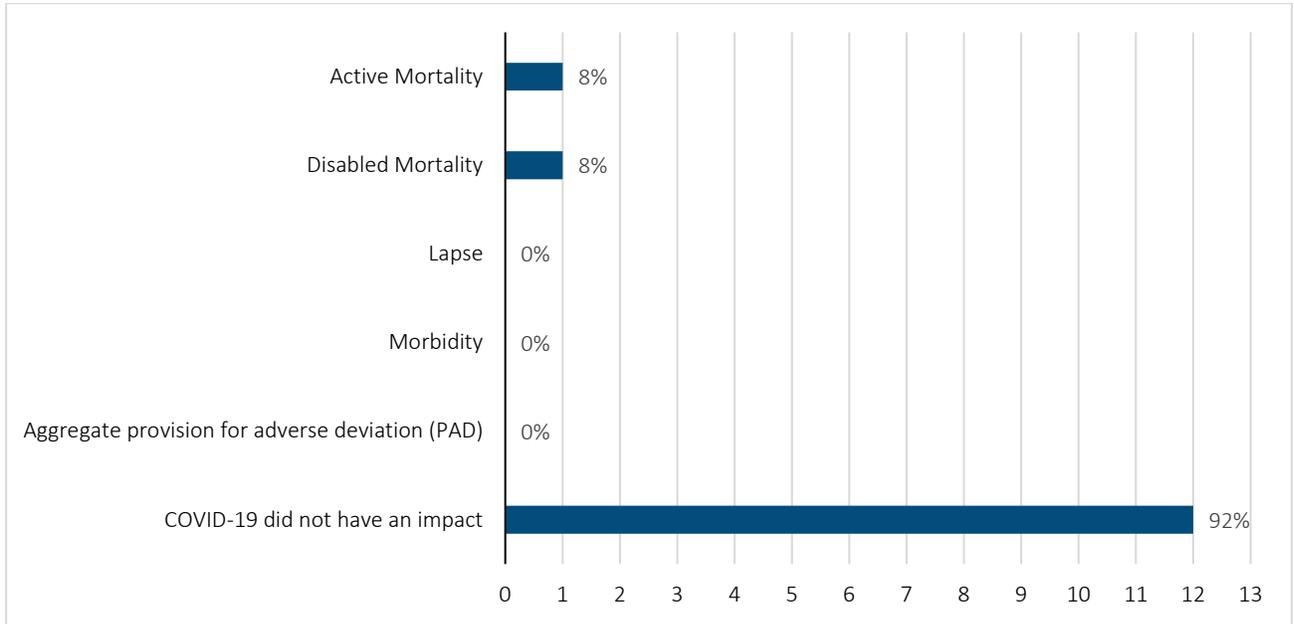
**Figure 9**  
**IMPACT ON AAR – NUMBER OF RESPONDING COMPANIES**



- Three (25%) of the respondents observed an increase in AAR from changes to valuation assumptions when including the impact from interest rate changes.
- Five (42%) of the respondents reported having not changed their valuation assumptions when including the impact from interest rate changes.

**3.16 IF COVID-19 IMPACTED GPR, PDR, OR AAR RESERVES, WHAT WAS THE CAUSE? (SELECT ALL THAT APPLY)**

**Figure 10**  
**CAUSES FOR IMPACTS ON GPR, PDR, OR AAR – NUMBER OF RESPONDING COMPANIES**



- A majority (92%) of the respondents reported COVID-19 did not have an impact on GPR, PDR, or AAR. This is consistent with the responses to questions 3.12 and 3.14 above.
- One (8%) respondent indicated active mortality and disabled mortality were the causes of changes to its GPR, PDR, or AAR. This company reported a decrease to GPR or PDR in question 3.12.

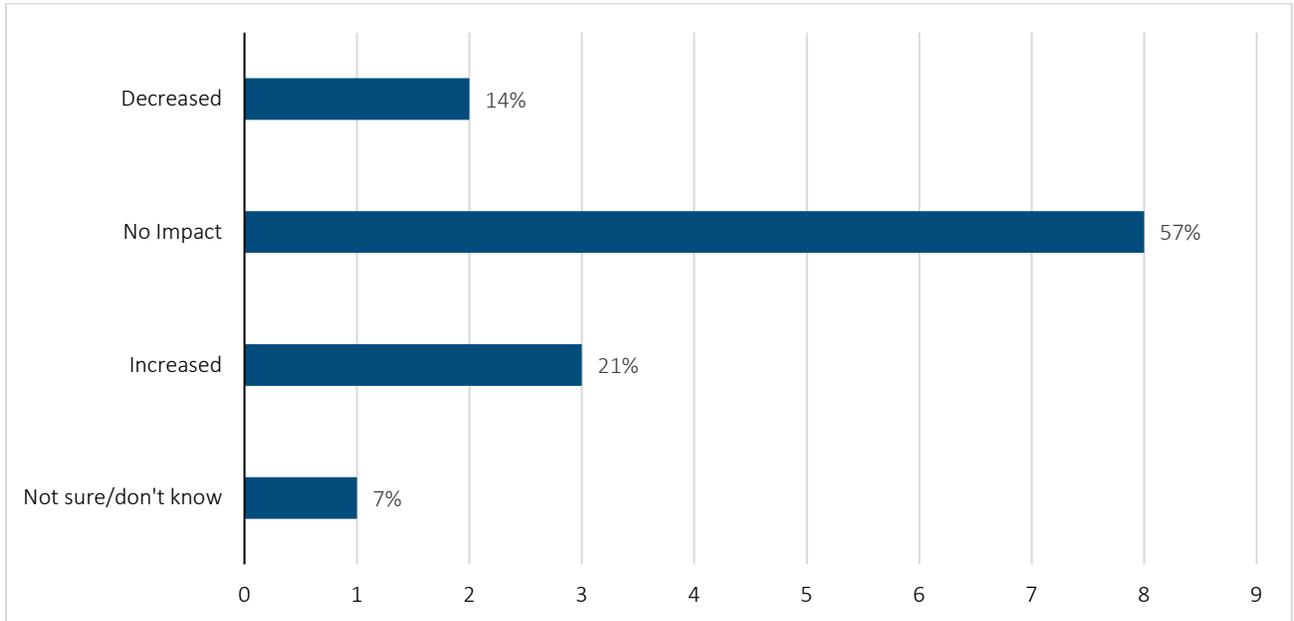
**3.17 IF THE GPR, PDR, OR AAR RESERVES WERE IMPACTED BY AN AGGREGATE PAD DUE TO COVID-19, WHAT WAS THE REASON FOR THE PAD?**

No companies responded to this question.

### 3.18 HOW HAVE YOUR CLAIM RESERVES BEEN IMPACTED BY COVID-19?

Figure 11

#### IMPACT ON CLAIM RESERVES – NUMBER OF RESPONDING COMPANIES

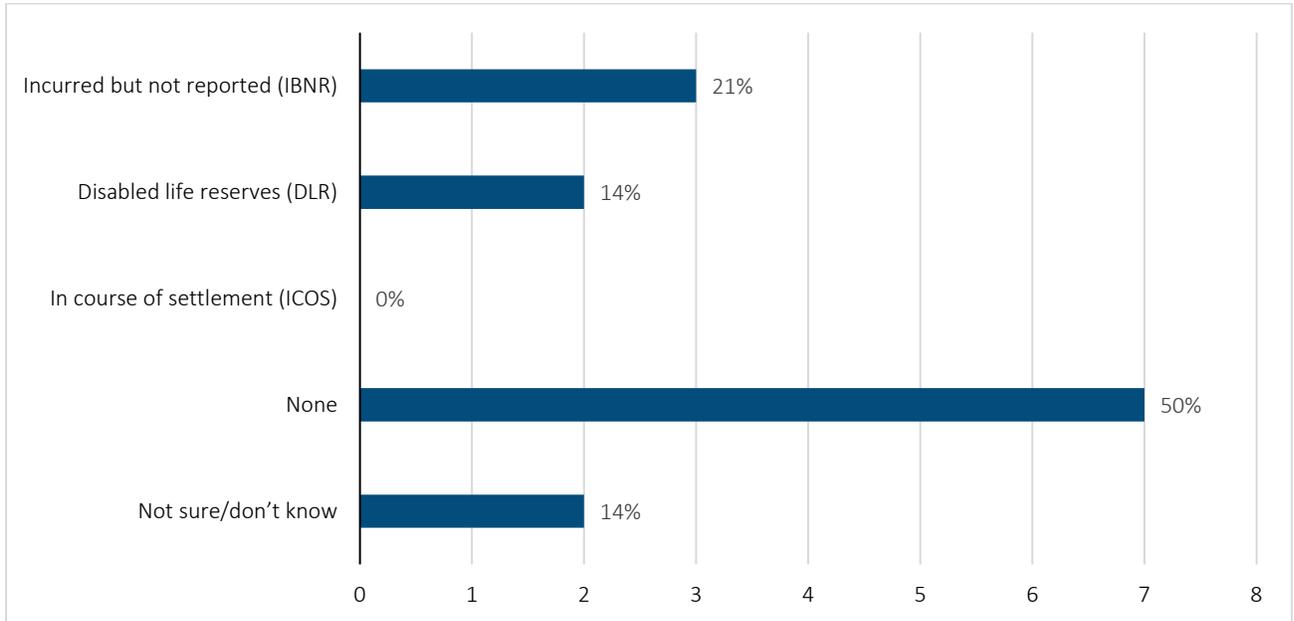


- A majority (57%) of the respondents reported no impact to claim reserves.
- Three (21%) respondents observed an increase in claim reserves and two (14%) observed a decrease in claim reserves.
- Responses indicated a higher percentage of respondents saw no impact to claim reserves compared to the prior survey that included experience from April 1, 2020, to September 30, 2020. In the prior survey, about half of the respondents reported observing a decrease in claim reserves, while only two companies observed no impact to claim reserves.

**3.19 WHICH CLAIM RESERVES, IF ANY, WERE IMPACTED BY COVID-19? (SELECT ALL THAT APPLY)**

**Figure 12**

**CLAIM RESERVES IMPACTED BY COVID-19 – NUMBER OF RESPONDING COMPANIES**



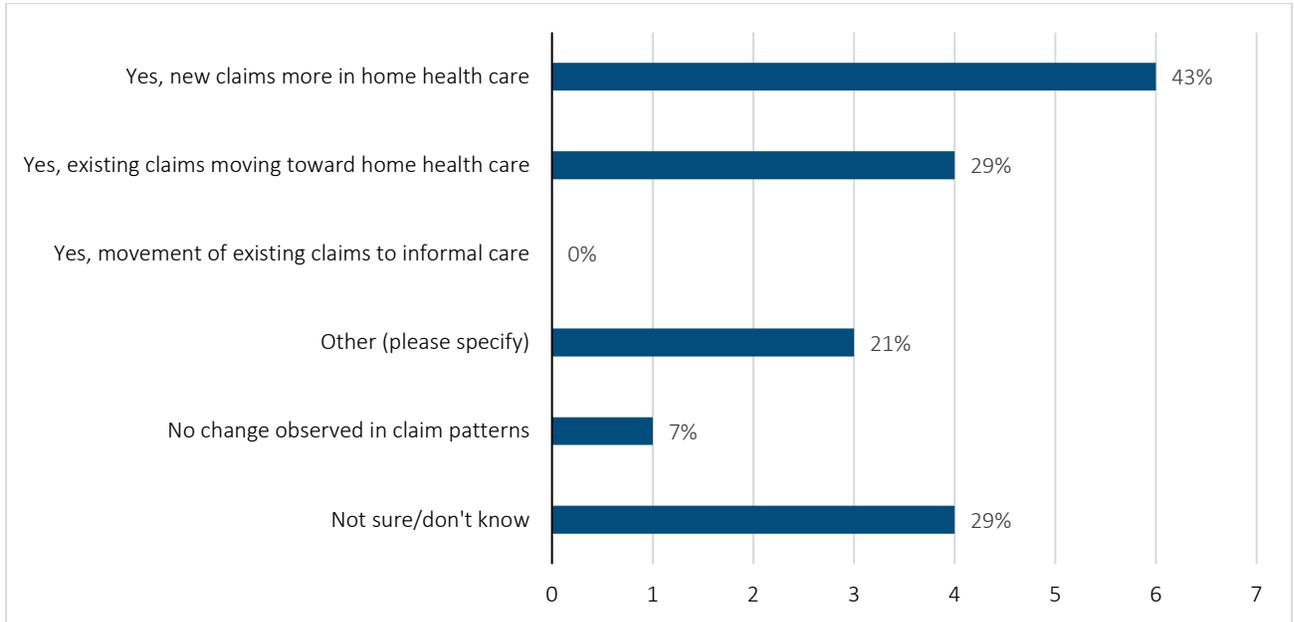
- Half of the respondents indicated that claim reserves were not impacted by COVID-19.
- For companies that observed an impact to claim reserves, the disabled life reserves and incurred but not reported reserves were generally affected, with no companies reporting an impact to in course of settlement reserves.

**3.20 PLEASE DESCRIBE ANY SPECIFIC DIAGNOSES THAT HAVE EXHIBITED A GREATER IMPACT WHICH YOU BELIEVE MAY BE ATTRIBUTED TO COVID-19. FOR EXAMPLE, COVID-19 RELATED CLAIM TERMINATION EXPERIENCE VARYING FOR MENTAL AND NON-MENTAL DIAGNOSES.**

One company indicated that new claims reflected a higher proportion of mental diagnoses. In general, the company believed that fears over transmission of COVID-19 led to new claims with higher severity diagnoses. This company also observed that as policyholders opted out of facility care the proportion of home care claims increased and home care benefit utilization rates increased as well. Most other companies that responded indicated that this had not been studied.

**3.21 HAVE YOU OBSERVED A CHANGE IN WHERE CLAIMS OCCUR (NURSING HOME VS. HOME CARE) WHICH YOU BELIEVE CAN BE ATTRIBUTED TO COVID-19? (SELECT ALL THAT APPLY)**

**Figure 13**  
**CHANGES IN WHERE CLAIMS OCCUR – NUMBER OF RESPONDING COMPANIES**



- Many respondents reported seeing a shift in claim situs toward a home healthcare setting. This was true for both existing claims and new claims. It is important to note that it is difficult in many cases for existing claims to transfer from a facility setting to a home care setting in a short period of time. Therefore, if policyholder preferences have changed and an aversion to a facility setting increases due to COVID-19, we may observe a continued, but gradual shift in situs mix toward home healthcare.
- The remaining companies reported not knowing whether there was a change in where claims occurred.
- One company that responded with “Other” reported seeing existing claims move away from the home healthcare setting in the second quarter of 2020.
- The findings described in the preceding bullets were similar to the prior survey that asked the same question but only included experience through September 30, 2020.

## Section 4: Reliance and Limitations

In conducting the COVID-19 survey and preparing this report, we relied upon the information provided by the contributors. To the extent that this data is incomplete or inaccurate, our results may be materially affected.

This report may not be published in any other form without written permission from the SOA and Milliman. Milliman does not intend to benefit any third-party recipient with its work product.

The information in this report is intended to be valid as of the date it was prepared. Its future validity depends on the further development of market events, regulations, and standards of practice. Given the substantial uncertainty regarding the impact of COVID-19, it is important that emerging experience continues to be monitored. In particular, this report does not fully reflect the impact of vaccine availability and rollout and it does not reflect the surge of COVID-19 Delta variant cases that took place after March 2021; further survey work would be necessary to assess the impact of these developments.

## Section 5: Acknowledgments

The SOA would like to thank the Senior Health Care Oversight Trust for its financial support of this project.

The authors would like to thank the SOA for giving us the opportunity to complete this survey. We would also like to thank the volunteer reviewers and others for their diligent work overseeing questionnaire development, analyzing and discussing respondent answers, and reviewing and editing this report for accuracy and relevance. Finally, we would like to thank the companies that participated in the survey effort for, without their responses, this survey would truly not have been possible.

### Volunteer reviewers:

Rhonda Kay Ahrens, FSA, MAAA

Paul F. Colasanto, ASA, MAAA

John Cutler

Kristy Dreyer

James M. Glickman, FSA, MAAA

Jan Graeber, ASA, MAAA

John Patrick Kinney III, FSA, MAAA

Barry M. Koklefsky, FSA, MAAA

Michael Jordan Krohn, FSA, CERA, MAAA

Sally Leimbach

Roger Loomis, FSA, MAAA

Nilesh Mehta, FSA, MAAA

Matthew Scott Parent, FSA, MAAA

Stephen Serfass

Maureen Ann Shaughnessy, FSA, MAAA

Nicholas M. Sheahon, ASA, MAAA

Eileen Tell

Brian D. Ulery, FSA, MAAA

Sisi Wu, FSA, MAAA

### At the Society of Actuaries:

Korrel Crawford

Cindy MacDonald, FSA, MAAA

Pete Miller, ASA, MAAA

## Section 6: List of Participating Companies

CNA

Continental General Insurance Company

Genworth Financial

Guardian Life Insurance Company

Knights of Columbus

MassMutual Life Insurance Company

MedAmerica

MetLife

National Life Group

New York Life Insurance Company

State Farm Mutual Automobile Insurance Company

Sun Life Financial

Thrivent

United Security Assurance Company of Pennsylvania



**Give us your feedback!**

Take a short survey on this report.

[Click Here](#)

 **SOA**  
Research  
INSTITUTE

## Appendix A: Survey Questions

1. In the emerging LTC **active life mortality** experience since the onset of COVID-19 (4/1/2020 – 3/31/2021), what have you observed relative to your expectation for the block absent COVID-19?

For example, actual active life mortality since COVID-19 of 90% of the expected active life mortality for the block is a 10% decrease (multiplicatively) in active life mortality experience.

Select the response that best describes your company’s experience in aggregate and for each characteristic. If experience has not been studied for a given characteristic, indicate Not Studied for that characteristic.

	Decrease greater than 10%	Decrease between 5% and 10%	Decrease between 0% and 5%	Increase between 0% and 5%	Increase between 5% and 10%	Increase greater than 10%	No observed impact	Data is not yet available to study impact	Not Studied
<b>Total/Aggregate</b>									
<b>Gender</b>									
Male									
Female									
<b>Attained Age</b>									
<60									
60-69									
70-79									
80-89									
90+									

2. In the emerging LTC **disabled life mortality** experience since the onset of COVID-19 (4/1/2020 – 3/31/2021), what have you observed relative to your expectation for the block absent COVID-19?

For example, actual disabled life mortality since COVID-19 of 90% of the expected disabled life mortality for the block is a 10% decrease (multiplicatively) in disabled life mortality experience.

Select the response that best describes your company’s experience in aggregate and for each characteristic. If experience has not been studied for a given characteristic, indicate Not Studied for that characteristic.

	Decrease greater than 10%	Decrease between 5% and 10%	Decrease between 0% and 5%	Increase between 0% and 5%	Increase between 5% and 10%	Increase greater than 10%	No observed impact	Data is not yet available to study impact	Not Studied
<b>Total/Aggregate</b>									
<b>Gender</b>									
Male									
Female									
<b>Attained Age</b>									
<70									
70-79									
80-89									
90+									
<b>Current Situs</b>									
NH									
ALF									
HHC									

3. In the emerging LTC **claim incidence** experience since the onset of COVID-19 (4/1/2020 – 3/31/2021), what have you observed relative to your expectation for the block absent COVID-19?

For example, actual claim incidence since COVID-19 of 85% of the expected claim incidence for the block is a 15% decrease (multiplicatively) in claim incidence experience.

Select the response that best describes your company’s experience in aggregate and for each characteristic. If experience has not been studied for a given characteristic, indicate Not Studied for that characteristic.

	Decrease greater than 10%	Decrease between 5% and 10%	Decrease between 0% and 5%	Increase between 0% and 5%	Increase between 5% and 10%	Increase greater than 10%	No observed impact	Data is not yet available to study impact	Not Studied
<b>Total/Aggregate</b>									
<b>Gender</b>									
Male									
Female									
<b>Current Marital Status</b>									
Married									
Single									
<b>Attained Age</b>									
<70									
70-79									
80-89									
90+									
<b>Current Situs</b>									
NH									
ALF									
HHC									

4. In the emerging LTC **claim utilization** experience since the onset of COVID-19 (4/1/2020 – 3/31/2021), what have you observed relative to your expectation for the block absent COVID-19?

For example, an actual claims utilization of 72% since COVID-19 compared to an expected claim utilization of 80% for the block is a 10% decrease (multiplicatively) in claim utilization experience.

Select the response that best describes your company’s experience in aggregate and for each characteristic. If experience has not been studied for a given characteristic, indicate Not Studied for that characteristic.

	Decrease greater than 10%	Decrease between 5% and 10%	Decrease between 0% and 5%	Increase between 0% and 5%	Increase between 5% and 10%	Increase greater than 10%	No observed impact	Data is not yet available to study impact	Not Studied
<b>Total/Aggregate</b>									
<b>Gender</b>									
Male									
Female									
<b>Current Marital Status</b>									
Married									
Single									
<b>Attained Age</b>									
<70									
70-79									
80-89									
90+									
<b>Current Situs</b>									
NH									
ALF									
HHC									

5. In the emerging LTC **voluntary lapse** experience since the onset of COVID-19 (4/1/2020 – 3/31/2021), what have you observed relative to your expectation for the block absent COVID-19? The expectation for the block should consider the impact of rate increases implemented.

For example, actual voluntary lapse rates since COVID-19 of 0.50% compared to an expected voluntary lapse rate of 0.60% for the block is a 10 basis point decrease in voluntary lapse experience.

Select the response that best describes your company’s experience in aggregate and for each characteristic. If experience has not been studied for a given characteristic, indicate Not Studied for that characteristic.

	Decrease greater than 50 basis points	Decrease between 25 and 50 basis points	Decrease between 0 and 25 basis points	Increase between 0 and 25 basis points	Increase between 25 and 50 basis points	Increase greater than 50 basis points	No observed impact	Data is not yet available to study impact	Not Studied
<b>Total/Aggregate</b>									
<b>Gender</b>									
Male									
Female									
<b>Current Marital Status</b>									
Married									
Single									
<b>Attained Age</b>									
<70									
70-79									
80-89									
90+									

6. Provide the number of deaths, number of claims, and number of voluntary lapses that informed your responses for questions 1 through 5. The number of events should be based on the same experience period as questions 1 through 5 (4/1/2020 through 3/31/2021). If possible, please provide the information for each breakdown (e.g., gender, attained age, situs of care, etc.) included in your responses to questions 1 through 5. The data provided to this question will only be used to provide context around the responses to questions 1 through 5, as needed. It will not be shared outside of the SOA and the contracted researcher for this survey.

a. LTC **active life mortality** experience

	<b>Deaths</b>
<b>Total/Aggregate</b>	
<b>Gender</b>	
Male	
Female	
<b>Attained Age</b>	
<60	
60-69	
70-79	
80-89	
90+	

## b. LTC Disabled life mortality experience

	Deaths
<b>Total/Aggregate</b>	
<b>Gender</b>	
Male	
Female	
<b>Attained Age</b>	
<70	
70-79	
80-89	
90+	
<b>Current Situs</b>	
NH	
ALF	
HHC	

c. LTC **claim incidence** experience

	Claim count
<b>Total/Aggregate</b>	
<b>Gender</b>	
Male	
Female	
<b>Current Marital Status</b>	
Married	
Single	
<b>Attained Age</b>	
<70	
70-79	
80-89	
90+	
<b>Current Situs</b>	
NH	
ALF	
HHC	

d. LTC **claim utilization** experience

	Claim count
<b>Total/Aggregate</b>	
<b>Gender</b>	
Male	
Female	
<b>Current Marital Status</b>	
Married	
Single	
<b>Attained Age</b>	
<70	
70-79	
80-89	
90+	
<b>Current Situs</b>	
NH	
ALF	
HHC	

e. LTC **voluntary lapse** experience

	Voluntary lapses
<b>Total/Aggregate</b>	
<b>Gender</b>	
Male	
Female	
<b>Current Marital Status</b>	
Married	
Single	
<b>Attained Age</b>	
<70	
70-79	
80-89	
90+	

7. How much of your business is individual versus group business (based on annualized premium with total summing to 100%)? For purposes of this question and question 8, “group business” means employer group business, and not association or group trust business or similar.
  - Individual
  - Group
8. Please describe any variations between individual and group experience that your company has observed as it relates to the COVID-19 pandemic.
9. Please describe any variations in experience that your company has observed in either mortality or claim experience from the first 6 months of the experience period (4/1/2020 – 9/30/2020) compared to the last 6 month of the experience period (10/1/2020 – 3/31/2021). Please be as specific as possible about trends observed in experience (e.g., initially claims were 10% lower but have now moderated to the expected level).
10. Please describe any changes in experience that your company has observed after March 31, 2021.
11. Is your company still offering extended premium grace periods due to COVID-19?
  - Yes, voluntarily
  - Yes, as required
  - No
12. For question 5, how did you account for policies that may be past a normal grace period but have not been lapsed due to requests or requirements to extend grace periods due to COVID-19?

13. If you ignored any impact from interest rate changes, how have your gross premium reserves (GPR) or premium deficiency reserves (PDR) been impacted as a result of COVID-19?
- Increased from changes in valuation assumptions due to COVID-19
  - Decreased from changes in valuation assumptions due to COVID-19
  - Have not changed valuation assumptions due to COVID-19
  - Not sure/don't know
14. If you include the impact from interest rate changes, how have your gross premium reserves (GPR) or premium deficiency reserves (PDR) been impacted as a result of COVID-19?
- Increased from changes in valuation assumptions due to COVID-19
  - Decreased from changes in valuation assumptions due to COVID-19
  - Have not changed valuation assumptions due to COVID-19
  - Not sure/don't know
15. If you ignored any impact from interest rate changes, how have your additional actuarial reserves (AAR) been impacted as a result of COVID-19?
- Increased from changes in valuation assumptions due to COVID-19
  - Decreased from changes in valuation assumptions due to COVID-19
  - Have not changed valuation assumptions due to COVID-19
  - Not sure/don't know
16. If you include the impact from interest rate changes, how have your additional actuarial reserves (AAR) been impacted as a result of COVID-19?
- Increased from changes in valuation assumptions due to COVID-19
  - Decreased from changes in valuation assumptions due to COVID-19
  - Have not changed valuation assumptions due to COVID-19
  - Not sure/don't know
17. If COVID-19 impacted GPR, PDR, or AAR reserves, what was the cause? (select all that apply)
- Active Mortality
  - Disabled Mortality
  - Lapse
  - Morbidity
  - Aggregate provision for adverse deviation (PAD)
  - COVID-19 did not have an impact
18. If the GPR, PDR, or AAR reserves were impacted by an aggregate PAD due to COVID-19, what was the reason for the PAD?
- COVID-19 related health factors (including mortality impacts)
  - COVID-19 triggered economic factors
  - Combination of health and economic factors

19. How have your claim reserves been impacted by assumption changes due to COVID-19?
- Increased
  - Decreased
  - No impact
  - Not sure/don't know
20. Which claim reserves, if any, were impacted by assumption changes due to COVID-19? (select all that apply)
- Incurred but not reported (IBNR)
  - Disabled life reserves (DLR)
  - In course of settlement (ICOS)
  - None
  - Not sure/don't know
21. Please describe any specific diagnoses that have exhibited a greater impact which you believe may be attributed to COVID-19. For example, COVID-19 related claim termination experience varying for mental and non-mental diagnoses.
22. Have you observed a change in where claims occur (facility vs. home care) which you believe can be attributed to COVID-19?  
(Select all that apply)
- Yes, new claims more in home health care
  - Yes, existing claims moving toward home health care
  - Yes, movement of existing claims to informal care
  - Other (please specify)
  - No change observed in claim patterns
  - Not sure/don't know

## About The Society of Actuaries Research Institute

Serving as the research arm of the Society of Actuaries (SOA), the SOA Research Institute provides objective, data-driven research bringing together tried and true practices and future-focused approaches to address societal challenges and your business needs. The Institute provides trusted knowledge, extensive experience and new technologies to help effectively identify, predict and manage risks.

Representing the thousands of actuaries who help conduct critical research, the SOA Research Institute provides clarity and solutions on risks and societal challenges. The Institute connects actuaries, academics, employers, the insurance industry, regulators, research partners, foundations and research institutions, sponsors and non-governmental organizations, building an effective network which provides support, knowledge and expertise regarding the management of risk to benefit the industry and the public.

Managed by experienced actuaries and research experts from a broad range of industries, the SOA Research Institute creates, funds, develops and distributes research to elevate actuaries as leaders in measuring and managing risk. These efforts include studies, essay collections, webcasts, research papers, survey reports, and original research on topics impacting society.

Harnessing its peer-reviewed research, leading-edge technologies, new data tools and innovative practices, the Institute seeks to understand the underlying causes of risk and the possible outcomes. The Institute develops objective research spanning a variety of topics with its [strategic research programs](#): aging and retirement; actuarial innovation and technology; mortality and longevity; diversity, equity and inclusion; health care cost trends; and catastrophe and climate risk. The Institute has a large volume of [topical research available](#), including an expanding collection of international and market-specific research, experience studies, models and timely research.

Society of Actuaries Research Institute  
475 N. Martingale Road, Suite 600  
Schaumburg, Illinois 60173  
[www.SOA.org](http://www.SOA.org)