

State: Virginia **Filing Company:** Primerica Life Insurance Company
TOI/Sub-TOI: LTC Annual Rate Report/LTCIPRS
Product Name: Primerica VA Annual Rate Report
Project Name/Number: Primerica 2017 VA Annual Rate Report/

Filing at a Glance

Company: Primerica Life Insurance Company
Product Name: Primerica VA Annual Rate Report
State: Virginia
TOI: LTC Annual Rate Report
Sub-TOI: LTCIPRS
Filing Type: LTC Annual Rate Report
Date Submitted: 06/28/2018
SERFF Tr Num: SHPT-131563253
SERFF Status: Closed-Filed
State Tr Num: SHPT-131563253
State Status: Filed
Co Tr Num: 2017VA-PLIRATEREPORT

Implementation: On Approval
Date Requested:
Author(s): Kim Helsley, Lorian Bates, Lisa Norman, Megan Bittner, Shauna Hopkins
Reviewer(s): Colleen Moore (primary), Bill Dismore
Disposition Date: 03/29/2019
Disposition Status: Filed
Implementation Date:

State: Virginia
TOI/Sub-TOI: LTC Annual Rate Report/LTCIPRS
Product Name: Primerica VA Annual Rate Report
Project Name/Number: Primerica 2017 VA Annual Rate Report/

Filing Company: Primerica Life Insurance Company

General Information

Project Name: Primerica 2017 VA Annual Rate Report
Project Number:
Requested Filing Mode: File & Use
Explanation for Combination/Other:
Submission Type: New Submission
Filing Status Changed: 03/29/2019
State Status Changed: 03/29/2019
Created By: Lorian Bates
Corresponding Filing Tracking Number:
State TOI: LTC Annual Rate Report 2018

Status of Filing in Domicile: Not Filed
Date Approved in Domicile:
Domicile Status Comments: Not Applicable
Market Type:
Overall Rate Impact:
Deemer Date: 07/28/2018
Submitted By: Lorian Bates
State Sub-TOI: LTCIPRS

Filing Description:

Annual Rate Report for Primerica's LTC Insurance Policies
Issued Prior to 10/1/13
Pre Rate Stability
Reporting Period: 2017

Primerica is included within Senior Health Insurance Company of Pennsylvania's projection results. Please reference the Actuarial Memorandum under Supporting Documentation for additional details.

Company and Contact

Filing Contact Information

Lisa Norman,
550 Congressional Blvd, Suite 200
Carmel, IN 46032

Inorman@fuzionanalytics.com
317-566-7597 [Phone]

Filing Company Information

Primerica Life Insurance Company
550 Congressional Blvd.
Suite 200
Carmel, IN 46032
(317) 566-7527 ext. [Phone]

CoCode: 65919
Group Code: 4750
Group Name:
FEIN Number: 04-1590590

State of Domicile: Indiana
Company Type: Long Term
Care
State ID Number:

Filing Fees

Fee Required? No
Retaliatory? No
Fee Explanation:

State: Virginia
TOI/Sub-TOI: LTC Annual Rate Report/LTCIPRS
Product Name: Primerica VA Annual Rate Report
Project Name/Number: Primerica 2017 VA Annual Rate Report/

Filing Company: Primerica Life Insurance Company

Correspondence Summary

Dispositions

Status	Created By	Created On	Date Submitted
Filed	Bill Dismore	03/29/2019	03/29/2019

Objection Letters and Response Letters

Objection Letters

Status	Created By	Created On	Date Submitted
Info has been requested from company	Bill Dismore	03/15/2019	03/15/2019
Info has been requested from company	Bill Dismore	02/21/2019	02/21/2019
Info has been requested from company	Bill Dismore	09/20/2018	09/20/2018

Response Letters

Responded By	Created On	Date Submitted
Lisa Norman	03/29/2019	03/29/2019
Lisa Norman	03/14/2019	03/14/2019
Lisa Norman	02/06/2019	02/20/2019

Amendments

Schedule	Schedule Item Name	Created By	Created On	Date Submitted
Supporting Document	Actuarial Memorandum	Lisa Norman	02/21/2019	03/14/2019

Filing Notes

Subject	Note Type	Created By	Created On	Date Submitted
Extension Grated	Note To Filer	Bill Dismore	02/21/2019	02/21/2019
Extension request for response to 2/21/19 objection	Note To Reviewer	Lisa Norman	02/21/2019	02/21/2019
Objection Responses Due	Note To Filer	Bill Dismore	02/06/2019	02/06/2019

SERFF Tracking #:

SHPT-131563253

State Tracking #:

SHPT-131563253

Company Tracking #:

2017VA-PLIRATEREPORT

State: Virginia
 TOI/Sub-TOI: LTC Annual Rate Report/LTCIPRS
 Product Name: Primerica VA Annual Rate Report
 Project Name/Number: Primerica 2017 VA Annual Rate Report/

Filing Company: Primerica Life Insurance Company

Disposition

Disposition Date: 03/29/2019

Implementation Date:

Status: Filed

Comment:

Company Name:	Overall % Indicated Change:	Overall % Rate Impact:	Written Premium Change for this Program:	Number of Policy Holders Affected for this Program:	Written Premium for this Program:	Maximum % Change (where req'd):	Minimum % Change (where req'd):
Primerica Life Insurance Company	0.000%	0.000%	\$0	5	\$2,573	0.000%	0.000%

Schedule	Schedule Item	Schedule Item Status	Public Access
Supporting Document (revised)	Actuarial Memorandum	Received & Acknowledged	Yes
Supporting Document	Actuarial Memorandum	Withdrawn	No
Supporting Document	Product Checklist	Received & Acknowledged	Yes
Supporting Document	LTC Annual Report Instructions	Received & Acknowledged	Yes
Supporting Document	Response to 3-15-19 objection	Received & Acknowledged	Yes
Rate (revised)	LTCIPRS 1-1-17 to 12-31-17	Filed	Yes
Rate	LTCIPRS	Withdrawn	No

State: Virginia **Filing Company:** Primerica Life Insurance Company
TOI/Sub-TOI: LTC Annual Rate Report/LTCIPRS
Product Name: Primerica VA Annual Rate Report
Project Name/Number: Primerica 2017 VA Annual Rate Report/

Objection Letter

Objection Letter Status Info has been requested from company
Objection Letter Date 03/15/2019
Submitted Date 03/15/2019
Respond By Date 03/29/2019

Dear Lisa Norman,

Introduction:

During our review, we noted the following inconsistencies and/or need additional information to continue. Please note, any revisions, modifications, or changes of any type to a filing not specifically requested by us must be brought to our attention upon resubmission and explained in detail.

Objection 1

- Actuarial Memorandum (Supporting Document)
Comments: Section 2. PROJECTION ASSUMPTIONS

Please provide an explanation for the use of SHIP's 2016 cash flow testing for the Primerica Life Insurance Company's Long Term Care block. Explain how this block of business related to the Primerica Long-Term Care insurance form 900 filed under this annual report. Primerica's form 900 does not appear in the data submitted in "1_Assumptions Details Descriptions 12311.pdf".

Objection 2

- Actuarial Memorandum (Supporting Document)
Comments: Actuarial Memorandum Supporting Documentation

1) Please provide updated exhibits through December 31, 2017 for the 2018 annual report.

2) Provide an explanation why the data is used from Senior Health Insurance Company of Pennsylvania (SHIP) instead of Primerica Life Insurance Company.

Objection 3

- Actuarial Memorandum (Supporting Document)
Comments: Please provide the historical, projected and lifetime experience for Primerica form 900 for both nationwide and Virginia. The data currently provided is for Senior Health Insurance Company of Pennsylvania (SHIP).

Objection 4

- Actuarial Memorandum (Supporting Document)
Comments: As this is a mature block and there are 5 remaining policyholders in Virginia, will the Company consider certifying, through an officer of Primerica Life Insurance Company, to no future rate increases, in lieu of filing future annual reports for this block.

Conclusion:

We shall be glad to reconsider this submission upon receipt of the requested information to address the objections noted above. Should you need clarification of any of the information contained in this letter, please contact the undersigned.

A response to this objection (or request for information if more applicable) is expected within 30 days. After 30 days, the filing will be DISAPPROVED unless a 30-day extension is requested.

Once a submission has been closed, a new SERFF submission will be required. To expedite the review, the new submission should

State: Virginia **Filing Company:** Primerica Life Insurance Company
TOI/Sub-TOI: LTC Annual Rate Report/LTCIPRS
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reference the SERFF tracking number of the prior submission and verify that all outstanding issues have been addressed.

Should you wish to discuss any of the objections or provide additional information related to any of the objections, this should be done prior to making a new SERFF submission.

Thank you for your courtesy and consideration in this matter.

*Sincerely,
Bill Dismore*

State: Virginia **Filing Company:** Primerica Life Insurance Company
TOI/Sub-TOI: LTC Annual Rate Report/LTCIPRS
Product Name: Primerica VA Annual Rate Report
Project Name/Number: Primerica 2017 VA Annual Rate Report/

Objection Letter

Objection Letter Status	Info has been requested from company
Objection Letter Date	02/21/2019
Submitted Date	02/21/2019
Respond By Date	03/14/2019

Dear Lisa Norman,

Introduction:

During our review, we noted the following inconsistencies and/or need additional information to continue. Please note, any revisions, modifications, or changes of any type to a filing not specifically requested by us must be brought to our attention upon resubmission and explained in detail.

Objection 1

- Actuarial Memorandum (Supporting Document)

Comments: 1) The second paragraph of the Actuarial Memorandum states that it supports the annual rate report submitted June 30, 2017. This is incorrect as this Annual Report was submitted June 29, 2018. Please submit a current Actuarial Memorandum. The actuarial memorandum must be updated from the previous year. Please review the requirements under 14VAC5-200-125. Annual rate reports.

2) Explain why the Company has combined three different insurance company annual reports into one report. Senior Health Insurance Company and Transamerica Life Insurance Company have a different NAIC identification number than Primerica.

3) Provide a detailed description and source of current assumptions and a comparison of current assumptions with the assumptions in the original filing to support the statement, "The premium rate schedule(s) are not sufficient to cover anticipated costs under best estimate assumptions and the premium rate schedule(s) may not be reasonable expected to be sustainable over the life of the policies with no future premium increases anticipated.

4) Provide a description of the credibility of the experience data.

5) Describe the Company's plan of action to correct the premium insufficiency for the Transamerica block. Review 14VAC5-200-150. Note that a plan of action must be submitted within 60 days of the Actuarial Certification.

Objection 2

- Actuarial Memorandum (Supporting Document)

Comments: 1 Assumptions Details Descriptions 123116.pdf

This supporting documentation appears to be related to Senior Health Insurance Company of Pennsylvania (SHIP) rather than Primerica. Please revise and submit for Primerica only.

Objection 3

- Actuarial Memorandum (Supporting Document)

Comments: 2 Attach2_Orig_Lapse_Morb_Mort.pdf

This supporting documentation appears to be related to Senior Health Insurance Company of Pennsylvania (SHIP) rather than Primerica. Please revise and submit for Primerica only.

State: Virginia
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Project Name/Number: Primerica 2017 VA Annual Rate Report/

Filing Company: Primerica Life Insurance Company

Conclusion:

We shall be glad to reconsider this submission upon receipt of the revised forms to address the objections noted above. Should you need clarification of any of the information contained in this letter, please contact the undersigned.

A response to this objection (or request for information if more applicable) is expected within 30 days. After 30 days, the filing will be DISAPPROVED unless a 30-day extension is requested.

Once a submission has been closed, a new SERFF submission will be required. To expedite the review, the new submission should reference the SERFF tracking number of the prior submission and verify that all outstanding issues have been addressed.

Should you wish to discuss any of the objections or provide additional information related to any of the objections, this should be done prior to making a new SERFF submission.

Thank you for your courtesy and consideration in this matter.

Sincerely,
Bill Dismore

State: Virginia
TOI/Sub-TOI: LTC Annual Rate Report/LTCIPRS
Product Name: Primerica VA Annual Rate Report
Project Name/Number: Primerica 2017 VA Annual Rate Report/
Filing Company: Primerica Life Insurance Company

Objection Letter

Objection Letter Status	Info has been requested from company
Objection Letter Date	09/20/2018
Submitted Date	09/20/2018
Respond By Date	02/20/2019

Dear Lisa Norman,

Introduction:

During our review, we noted the following inconsistencies and/or need additional information to continue. Please note, any revisions, modifications, or changes of any type to a filing not specifically requested by us must be brought to our attention upon resubmission and explained in detail.

Objection 1

- LTCIPRS, [900] (Rate)

Comments: 1) Please revise the Reporting Period to read, "1/01/2017 - 12/31/2017".

2) Rate/Rule Schedule - Please provide the following:

a) "Number of Policy Holders Affected for this Program:"

b) "Written Premium for this Program:"

Objection 2

- Actuarial Memorandum (Supporting Document)

Comments: 1) Please explain why this filing is filed under the Primerica Life Insurance Company but also includes filings for Senior Health Insurance Company of Pennsylvania (SHIP) and Transamerica Life Insurance Company.

2) Please provide a list of the Primerica Life Insurance Company LTC forms associated with this filing. Please remove all forms and experience associated with any entity other than Primerica Life Insurance Company.

3) Please revise the exhibits to include the trend, factors and experience associated only with the Primerica Life Insurance Company forms.

4) Please advise when the Company will submit a plan of action, including a timeframe for the reestablishment of adequate margins for moderately adverse experience.

Conclusion:

We shall be glad to continue our review of this submission upon receipt of the requested information or resolution of the issues noted above. Should you need clarification, please contact me. Thank you.

Sincerely,
Bill Dismore

State: Virginia
TOI/Sub-TOI: LTC Annual Rate Report/LTCIPRS
Product Name: Primerica VA Annual Rate Report
Project Name/Number: Primerica 2017 VA Annual Rate Report/

Filing Company: Primerica Life Insurance Company

Response Letter

Response Letter Status	Submitted to State
Response Letter Date	03/29/2019
Submitted Date	03/29/2019

Dear Colleen Moore,

Introduction:

Thank you for your correspondence.

Response 1

Comments:

Please see the attached documents under Supporting Documents.

Related Objection 1

Applies To:

- Actuarial Memorandum (Supporting Document)

Comments: Section 2. PROJECTION ASSUMPTIONS

Please provide an explanation for the use of SHIP's 2016 cash flow testing for the Primerica Life Insurance Company's Long Term Care block. Explain how this block of business related to the Primerica Long-Term Care insurance form 900 filed under this annual report. Primerica's form 900 does not appear in the data submitted in "1_Assumptions Details Descriptions 12311.pdf".

Changed Items:

Supporting Document Schedule Item Changes	
Satisfied - Item:	Response to 3-15-19 objection
Comments:	
Attachment(s):	Act Memo - Primerica - Annual Filing.pdf Assumptions Details Descriptions 123117.pdf

No Form Schedule items changed.

No Rate/Rule Schedule items changed.

Response 2

Comments:

State: Virginia
TOI/Sub-TOI: LTC Annual Rate Report/LTCIPRS
Product Name: Primerica VA Annual Rate Report
Project Name/Number: Primerica 2017 VA Annual Rate Report/

Filing Company: Primerica Life Insurance Company

Primerica policies are included with the rest of the SHIP business and assumptions were developed together. As of 12/31/2017, there were 5 Primerica policies in force in Virginia, and 68 in the nation. This experience is not credible, so the companies were combined to bolster credibility.

Related Objection 2

Applies To:

- Actuarial Memorandum (Supporting Document)

Comments: Actuarial Memorandum Supporting Documentation

1) Please provide updated exhibits through December 31, 2017 for the 2018 annual report.

2) Provide an explanation why the data is used from Senior Health Insurance Company of Pennsylvania (SHIP) instead of Primerica Life Insurance Company.

Changed Items:

No Supporting Documents changed.

No Form Schedule items changed.

No Rate/Rule Schedule items changed.

Response 3

Comments:

Please see the attached documents in our response to your 3-15-19 objection.

Related Objection 3

Applies To:

- Actuarial Memorandum (Supporting Document)

Comments: Please provide the historical, projected and lifetime experience for Primerica form 900 for both nationwide and Virginia. The data currently provided is for Senior Health Insurance Company of Pennsylvania (SHIP).

Changed Items:

No Supporting Documents changed.

No Form Schedule items changed.

No Rate/Rule Schedule items changed.

Response 4

SERFF Tracking #:

SHPT-131563253

State Tracking #:

SHPT-131563253

Company Tracking #:

2017VA-PLIRATEREPORT

State:

Virginia

Filing Company:

Primerica Life Insurance Company

TOI/Sub-TOI:

LTC Annual Rate Report/LTCIPRS

Product Name:

Primerica VA Annual Rate Report

Project Name/Number:

Primerica 2017 VA Annual Rate Report/

Comments:

Thank you for your offer and we will take this under consideration.

Related Objection 4

Applies To:

- Actuarial Memorandum (Supporting Document)

Comments: As this is a mature block and there are 5 remaining policyholders in Virginia, will the Company consider certifying, through an officer of Primerica Life Insurance Company, to no future rate increases, in lieu of filing future annual reports for this block.

Changed Items:

No Supporting Documents changed.

No Form Schedule items changed.

No Rate/Rule Schedule items changed.

Conclusion:

We look forward to your continued review and approval of our filing.

Sincerely,

Lisa Norman

State: Virginia **Filing Company:** Primerica Life Insurance Company
TOI/Sub-TOI: LTC Annual Rate Report/LTCIPRS
Product Name: Primerica VA Annual Rate Report
Project Name/Number: Primerica 2017 VA Annual Rate Report/

Response Letter

Response Letter Status Submitted to State
Response Letter Date 03/14/2019
Submitted Date 03/14/2019

Dear Colleen Moore,

Introduction:

Thank you for your correspondence.

Response 1

Comments:

Please refer to our actuarial memorandum.

Related Objection 1

Applies To:

- Actuarial Memorandum (Supporting Document)

Comments: 1) The second paragraph of the Actuarial Memorandum states that it supports the annual rate report submitted June 30, 2017. This is incorrect as this Annual Report was submitted June 29, 2018. Please submit a current Actuarial Memorandum. The actuarial memorandum must be updated from the previous year. Please review the requirements under 14VAC5-200-125. Annual rate reports.

2) Explain why the Company has combined three different insurance company annual reports into one report. Senior Health Insurance Company and Transamerica Life Insurance Company have a different NAIC identification number than Primerica.

3) Provide a detailed description and source of current assumptions and a comparison of current assumptions with the assumptions in the original filing to support the statement, "The premium rate schedule(s) are not sufficient to cover anticipated costs under best estimate assumptions and the premium rate schedule(s) may not be reasonable expected to be sustainable over the life of the policies with no future premium increases anticipated.

4) Provide a description of the credibility of the experience data.

5) Describe the Company's plan of action to correct the premium insufficiency for the Transamerica block. Review 14VAC5-200-150. Note that a plan of action must be submitted within 60 days of the Actuarial Certification.

Changed Items:

No Supporting Documents changed.

No Form Schedule items changed.

No Rate/Rule Schedule items changed.

Response 2

Comments:

We are submitting a revised memorandum for Primerica only.

Related Objection 2

Applies To:

- Actuarial Memorandum (Supporting Document)

State: Virginia
TOI/Sub-TOI: LTC Annual Rate Report/LTCIPRS
Product Name: Primerica VA Annual Rate Report
Project Name/Number: Primerica 2017 VA Annual Rate Report/
Filing Company: Primerica Life Insurance Company

Comments: 1 Assumptions Details Descriptions 123116.pdf

This supporting documentation appears to be related to Senior Health Insurance Company of Pennsylvania (SHIP) rather than Primerica. Please revise and submit for Primerica only.

Changed Items:

No Supporting Documents changed.

No Form Schedule items changed.

No Rate/Rule Schedule items changed.

Response 3

Comments:

We are submitting the actuarial memorandum for Primerica only.

Related Objection 3

Applies To:

- Actuarial Memorandum (Supporting Document)

Comments: 2 Attach2_Orig_Lapse_Morb_Mort.pdf

This supporting documentation appears to be related to Senior Health Insurance Company of Pennsylvania (SHIP) rather than Primerica. Please revise and submit for Primerica only.

Changed Items:

No Supporting Documents changed.

No Form Schedule items changed.

No Rate/Rule Schedule items changed.

Conclusion:

Thank you.

Sincerely,

Lisa Norman

State: Virginia
TOI/Sub-TOI: LTC Annual Rate Report/LTCIPRS
Product Name: Primerica VA Annual Rate Report
Project Name/Number: Primerica 2017 VA Annual Rate Report/

Filing Company: Primerica Life Insurance Company

Response Letter

Response Letter Status Submitted to State
Response Letter Date 02/06/2019
Submitted Date 02/20/2019

Dear Colleen Moore,

Introduction:

Thank you for your correspondence.

Response 1

Comments:

We have provided the Number of Policy Holders Affected for this Program and the Written Premium for this Program in the Rate/Rule Schedule. This is a closed block of business.

Related Objection 1

Applies To:

- LTCIPRS, [900] (Rate)

Comments: 1)Please revise the Reporting Period to read, "1/01/2017 - 12/31/2017".

2)Rate/Rule Schedule - Please provide the following:

a) "Number of Policy Holders Affected for this Program:"

b) "Written Premium for this Program:"

Changed Items:

No Supporting Documents changed.

No Form Schedule items changed.

No Rate/Rule Schedule items changed.

Response 2

Comments:

State:	Virginia	Filing Company:	Primerica Life Insurance Company
TOI/Sub-TOI:	LTC Annual Rate Report/LTCIPRS		
Product Name:	Primerica VA Annual Rate Report		
Project Name/Number:	Primerica 2017 VA Annual Rate Report/		

In the Rate/Rule tab, only the Primerica form 900 is listed in the attached Annual Rate Report.

Reference attached Actuarial Memorandum and attachments. Senior Health Insurance Company of Pennsylvania has assumed the Primerica LTC block since 1995 under a 100% reinsurance agreement. While it is a separate NAIC code, the actuarial assumptions, reserving, and projections are applied at a block level consistent with how experience is evaluated. Primerica consists of 70 active policies while SHIP consists of 64,726 (or .11%) as of 12/31/2016. The small number of active policies for Primerica makes it difficult to be able to develop actuarial best-estimate assumptions for Primerica alone. As a result we provided the Senior Health Insurance Company of Pennsylvania best-estimate assumptions which are also inclusive / applied to Primerica.

Related Objection 2

Applies To:

- Actuarial Memorandum (Supporting Document)

Comments: 1) Please explain why this filing is filed under the Primerica Life Insurance Company but also includes filings for Senior Health Insurance Company of Pennsylvania (SHIP) and Transamerica Life Insurance Company.

2) Please provide a list of the Primerica Life Insurance Company LTC forms associated with this filing. Please remove all forms and experience associated with any entity other than Primerica Life Insurance Company.

3) Please revise the exhibits to include the trend, factors and experience associated only with the Primerica Life Insurance Company forms.

4) Please advise when the Company will submit a plan of action, including a timeframe for the reestablishment of adequate margins for moderately adverse experience.

Changed Items:

No Supporting Documents changed.

No Form Schedule items changed.

SERFF Tracking #:

SHPT-131563253

State Tracking #:

SHPT-131563253

Company Tracking #:

2017VA-PLIRATEREPORT

State: Virginia
 TOI/Sub-TOI: LTC Annual Rate Report/LTCIPRS
 Product Name: Primerica VA Annual Rate Report
 Project Name/Number: Primerica 2017 VA Annual Rate Report/

Filing Company: Primerica Life Insurance Company

Rate/Rule Schedule Item Changes

Item No.	Document Name	Affected Form Numbers (Separated with commas)	Rate Action	Rate Action Information	Attachments	Date Submitted
1	LTCIPRS 1-1-17 to 12-31-17	900	Other	Previous State Filing Number: SHPT-131102786 Rate Action Other Explanation: VA Annual Rate Report	Primerica - Pre-Rate Stability Issued prior to 10 1 03 ltciprs.pdf,	02/20/2019 By: Lisa Norman
<i>Previous Version</i>						
1	LTCIPRS	900	Other	Previous State Filing Number: SHPT-131102786 Rate Action Other Explanation: VA Annual Rate Report	Primerica - Pre-Rate Stability Issued prior to 10 1 03 ltciprs.pdf,	06/28/2018 By: Lorian Bates

Conclusion:

We look forward to your continued review of our filing.

Sincerely,

Lisa Norman

State: Virginia
TOI/Sub-TOI: LTC Annual Rate Report/LTCIPRS
Product Name: Primerica VA Annual Rate Report
Project Name/Number: Primerica 2017 VA Annual Rate Report/

Filing Company: Primerica Life Insurance Company

Amendment Letter

Submitted Date: 03/14/2019

Comments:

Please see the attached Primerica Actuarial memorandum.

Changed Items:

No Form Schedule Items Changed.

No Rate Schedule Items Changed.

Supporting Document Schedule Item Changes	
Satisfied - Item:	Actuarial Memorandum
Comments:	
Attachment(s):	1_Assumptions Details Descriptions 123116.pdf 2_Attach2_Orig_Lapse_Morb_Mort.pdf Primerica - Pre-Rate Stability Issued prior to 10 1 03 ltciprs.pdf Act Memo - Primerica - Annual Filing.pdf
<i>Previous Version</i>	
Satisfied - Item:	Actuarial Memorandum
Comments:	<i>Reference attached Actuarial Memorandum and attachments. Senior Health Insurance Company of Pennsylvania has assumed the Primerica LTC block since 1995 under a 100% reinsurance agreement. While it is a separate NAIC code, the actuarial assumptions, reserving, and projections are applied at a block level consistent with how experience is evaluated. Primerica consists of 70 active policies while SHIP consists of 64,726 (or .11%) as of 12/31/2016. The small number of active policies for Primerica makes it difficult to be able to develop actuarial best-estimate assumptions for Primerica alone. As a result we provided the Senior Health Insurance Company of Pennsylvania best-estimate assumptions which are also inclusive / applied to Primerica.</i>
Attachment(s):	1_Assumptions Details Descriptions 123116.pdf 2_Attach2_Orig_Lapse_Morb_Mort.pdf Act Memo - SHIP,Primerica,Transamerica - Annual Filing_Final.pdf

State: Virginia

Filing Company: Primerica Life Insurance Company

TOI/Sub-TOI: LTC Annual Rate Report/LTCIPRS

Product Name: Primerica VA Annual Rate Report

Project Name/Number: Primerica 2017 VA Annual Rate Report/

Note To Filer

Created By:

Bill Dismore on 02/21/2019 02:57 PM

Last Edited By:

Bill Dismore

Submitted On:

02/21/2019 02:57 PM

Subject:

Extension Gratned

Comments:

Extension to 3/14/19 granted.

State: Virginia
TOI/Sub-TOI: LTC Annual Rate Report/LTCIPRS
Product Name: Primerica VA Annual Rate Report
Project Name/Number: Primerica 2017 VA Annual Rate Report/

Filing Company: Primerica Life Insurance Company

Note To Reviewer

Created By:

Lisa Norman on 02/21/2019 09:40 AM

Last Edited By:

Lisa Norman

Submitted On:

02/21/2019 09:40 AM

Subject:

Extension request for response to 2/21/19 objection

Comments:

Due to the extensive actuarial objections and the request for a new Actuarial Memorandum, we are requesting a two week extension to 3/14/19. Thank you.

State: Virginia

Filing Company: Primerica Life Insurance Company

TOI/Sub-TOI: LTC Annual Rate Report/LTCIPRS

Product Name: Primerica VA Annual Rate Report

Project Name/Number: Primerica 2017 VA Annual Rate Report/

Note To Filer

Created By:

Bill Dismore on 02/06/2019 09:43 AM

Last Edited By:

Bill Dismore

Submitted On:

02/06/2019 09:43 AM

Subject:

Objection Responses Due

Comments:

Please respond to the outstanding objections by 2/20/2019.

State: Virginia **Filing Company:** Primerica Life Insurance Company
TOI/Sub-TOI: LTC Annual Rate Report/LTCIPRS
Product Name: Primerica VA Annual Rate Report
Project Name/Number: Primerica 2017 VA Annual Rate Report/

Post Submission Update Request Processed On 02/21/2019

Status: Allowed
Created By: Lisa Norman
Processed By: Bill Dismore
Comments:

General Information:

Field Name	Requested Change	Prior Value
Requested Filing Mode	File & Use	

Company Rate Information:

Company Name:Primerica Life Insurance Company

Field Name	Requested Change	Prior Value
Number of Policy Holders Affected for this Program	5	0
Written Premium for this Program	\$2573	\$0

SERFF Tracking #:

SHPT-131563253

State Tracking #:

SHPT-131563253

Company Tracking #:

2017VA-PLIRATEREPORT

State: Virginia
 TOI/Sub-TOI: LTC Annual Rate Report/LTCIPRS
 Product Name: Primerica VA Annual Rate Report
 Project Name/Number: Primerica 2017 VA Annual Rate Report/

Filing Company: Primerica Life Insurance Company

Rate Information

Rate data applies to filing.

Filing Method:

Rate Change Type: %

Overall Percentage of Last Rate Revision: %

Effective Date of Last Rate Revision:

Filing Method of Last Filing:

SERFF Tracking Number of Last Filing:

Company Rate Information

Company Name:	Overall % Indicated Change:	Overall % Rate Impact:	Written Premium Change for this Program:	Number of Policy Holders Affected for this Program:	Written Premium for this Program:	Maximum % Change (where req'd):	Minimum % Change (where req'd):
Primerica Life Insurance Company	0.000%	0.000%	\$0	5	\$2,573	0.000%	0.000%

SERFF Tracking #:

SHPT-131563253

State Tracking #:

SHPT-131563253

Company Tracking #:

2017VA-PLIRATEREPORT

State:

Virginia

Filing Company:

Primerica Life Insurance Company

TOI/Sub-TOI:

LTC Annual Rate Report/LTCIPRS

Product Name:

Primerica VA Annual Rate Report

Project Name/Number:

Primerica 2017 VA Annual Rate Report/

Rate/Rule Schedule

Item No.	Schedule Item Status	Document Name	Affected Form Numbers (Separated with commas)	Rate Action	Rate Action Information	Attachments
1		LTCIPRS 1-1-17 to 12-31-17	900	Other	Previous State Filing Number: SHPT-131102786 Rate Action Other Explanation: VA Annual Rate Report	Primerica - Pre-Rate Stability Issued prior to 10 1 03 ltciprs.pdf,

**Annual Rate Report for Long-Term Care Insurance Policies
Issued Prior to October 1, 2003
Pre Rate Stability**

	Reporting Period	2017
Company Name	Primerica Life Insurance Company	
Company NAIC Number	65919	
Form Number(s)	900	
Issue Dates	900 - 1989:1990	
SERFF Filing Number	SHPT-131563253	
Prior SERFF Filing Number(s)	SHPT-131102786	

I, Juliet M. Spector, am a member of the American Academy of Actuaries. I meet the Academy's qualification standards for rendering this opinion and am familiar with the requirements for filing and reviewing long-term care insurance premiums.

In my opinion: The premium rate schedule(s) are not sufficient to cover anticipated costs under best estimate assumptions and the premium rate schedule(s) may not be reasonably expected to be sustainable over the life of the policies with no future premium increases anticipated. Based on my review of recent experience of the policies involved, in my opinion, a rate action is necessary at this time as a result of this analysis, and a rate increase filing will be submitted in the future.

In forming my opinion, I have used actuarial assumptions and actuarial methods and such tests of the actuarial calculations as I considered necessary. An actuarial memorandum that provides the historical experience and the expected future and lifetime loss ratios based on the current best-estimate assumptions; and a detailed description and actuarial support for each assumption used in the projections will be provided along with the action plan.

Juliet M. Spector

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June 25, 2018

LTCIPRS

SERFF Tracking #:

SHPT-131563253

State Tracking #:

SHPT-131563253

Company Tracking #:

2017VA-PLIRATEREPORT

State: Virginia
 TOI/Sub-TOI: LTC Annual Rate Report/LTCIPRS
 Product Name: Primerica VA Annual Rate Report
 Project Name/Number: Primerica 2017 VA Annual Rate Report/

Filing Company: Primerica Life Insurance Company

Supporting Document Schedules

Satisfied - Item:	Actuarial Memorandum
Comments:	
Attachment(s):	1_Assumptions Details Descriptions 123116.pdf 2_Attach2_Orig_Lapse_Morb_Mort.pdf Primerica - Pre-Rate Stability Issued prior to 10 1 03 ltciprs.pdf Act Memo - Primerica - Annual Filing.pdf
Item Status:	Received & Acknowledged
Status Date:	03/29/2019
Bypassed - Item:	Product Checklist
Bypass Reason:	Not Applicable
Attachment(s):	
Item Status:	Received & Acknowledged
Status Date:	03/29/2019
Satisfied - Item:	LTC Annual Report Instructions
Comments:	Files attached as required under the Rate/Rule Schedule tab.
Attachment(s):	
Item Status:	Received & Acknowledged
Status Date:	03/29/2019
Satisfied - Item:	Response to 3-15-19 objection
Comments:	
Attachment(s):	Act Memo - Primerica - Annual Filing.pdf Assumptions Details Descriptions 123117.pdf
Item Status:	Received & Acknowledged
Status Date:	03/29/2019

Senior Health Insurance Company of Pennsylvania Long Term Care Insurance Rate Increase Filings

SUPPLEMENTAL INFORMATION – KEY ASSUMPTIONS

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Senior Health Insurance Company of Pennsylvania (SHIP) is seeking rate increases on its Long Term Care Insurance (LTC) products because current estimates of lifetime loss ratios are in excess of expected.

We are now projecting lifetime loss ratios far in excess of what was assumed when the product was priced. Below describes how the key assumptions were derived.

MODEL

The projections of future experience were modeled using Milliman's modeling software, MG-ALFA. The assumptions, methodology, and distribution of business are listed in the Actuarial Memorandum supporting the rate increase filing and described in further detail in this document. The model used the inforce policies as of 12/31/2016.

LAPSE STUDY DETAILS

For 2016 cash flow testing, Milliman created a lapse study that derived lapse rates, using 85% of the '83 GAM as the assumed mortality table, by calendar year, by policy duration, by form grouping, and by a number of other variables. NFO and lifetime waiver spouse policies were included in both the numerator and the denominator of the calculation of the lapse rate for the year in which the person went onto paid up status (i.e., they were not counted as a lapse), and were excluded from both the numerator and denominator for years after the change to NFO or lifetime waiver status (i.e., so their 100% persistency after that point did not affect the future lapse calculation).

An additional lapse increasing by attained age, starting at attained age 80 at zero and increasing to 5% at age 100 is also included. This change was driven by older attained age lapse experience exhibited on the block.

Table 1 below shows the voluntary lapse rates used in this model.

We have developed lapse rates and mortality rates for the 2016 cash flow testing and projection based on experience year 2015. Due to the total termination model, a more recent experience year of 2015, is best at accounting for the impact of benefit exhaust and total terminations. We observe in prior lapse and mortality studies that the lapse rate and mortality rate are typically incomplete for the last year of the study; therefore we used 2015 experience year for the assumption.

**Senior Health Insurance Company of Pennsylvania
Long Term Care Insurance Rate Increase Filings**

SUPPLEMENTAL INFORMATION – KEY ASSUMPTIONS

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**Table 1
Senior Health Insurance Company of Pennsylvania
Ultimate Voluntary Lapse Rates by Age – Used for 2016CFT*
Issue Age Band**

Form	<55	55-59	60-64	65-69	70-74	75-79	80+	All Issue Ages
LTC-89	2.4%	2.4%	2.4%	9.7%	9.7%	9.7%	9.7%	5.2%
LTC-1	2.1%	2.1%	2.2%	4.0%	7.6%	7.6%	7.6%	3.7%
LTC-3	0.5%	0.5%	1.6%	3.1%	3.1%	3.1%	3.1%	1.8%
LTC-6	1.1%	1.3%	1.0%	1.6%	6.2%	12.9%	12.9%	2.0%
HHC-FL	2.6%	2.6%	2.6%	2.1%	4.2%	5.2%	5.2%	3.0%
HHC-non-FL	0.5%	0.5%	2.9%	3.2%	7.1%	10.9%	10.9%	4.3%
FQ	1.5%	0.7%	0.5%	1.7%	3.7%	7.1%	7.1%	1.9%
B Series	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
JC Penney	0.5%	0.5%	1.2%	5.1%	13.6%	13.6%	13.6%	2.9%
Miscellaneous	0.8%	0.8%	1.6%	10.8%	10.8%	10.8%	10.8%	4.1%
UGLI	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Transport	1.4%	0.6%	3.1%	3.9%	10.4%	10.4%	10.4%	2.9%

**2016CFT assumes 85% of the '83 GAM.*

Transport lapse rates were reduced in the first three calendar years, by 1.5%, 1% and 0.5%, respectively, so that the early projection years tie more closely to actual terminations by attained age. See further discussion on the attained age total termination study below.

Detailed results of SHIP's internal lapse study are provided in the Attachments at the end of this memo:

- Attachment A-1: Ultimate Voluntary Lapse Rates by Policy Form and Issue Age
- Attachment A-2: Lapse Study for 2016, FQ Series
- Attachment A-3: Lapse Study for 2016, LTC-89
- Attachment A-4: Lapse Study for 2016, LTC-1
- Attachment A-5: Lapse Study for 2016, LTC-3
- Attachment A-6: Lapse Study for 2016, LTC-6
- Attachment A-7: Lapse Study for 2016, HHC nonFL
- Attachment A-8: Lapse Study for 2016, LTC-Misc
- Attachment A-9: Lapse Study for 2016, LTC-UGLI
- Attachment A-10: Lapse Study for 2016, B series
- Attachment A-11: Lapse Study for 2016, Transport
- Attachment A-12: Lapse Study for 2016, Aggregate ATL Lapses by Attained Age and Year
- Attachment A-13: Lapse Study for 2016, Aggregate Transport Lapses by Attained Age and Year
- Attachment A-14: Lapse Study for 2016, Termination Rates By Attained Age and Year (ATL)
- Attachment A-15: Lapse Study for 2016, Termination Rates By Attained Age and Year (TRN)

**Senior Health Insurance Company of Pennsylvania
Long Term Care Insurance Rate Increase Filings**

SUPPLEMENTAL INFORMATION – KEY ASSUMPTIONS

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MORTALITY STUDY DETAILS

A mortality study was conducted by SHIP, by comparing the Social Security number and insured name on policies terminating to the Social Security death master file. The past few years, the death master file has been supplemented with information from the Pension Benefit Institute. Data was pulled for 2003 through 2016. Actual to expected mortality studies were performed by comparing the actual number of deaths, by policy form grouping, policy duration, age and calendar year, to the expected number of deaths derived from applying the '83 GAM to exposure. The A to E's varied by a number of these factors, but generally were increasing and were around 86% of the '83 GAM in 2015 (the most recent "complete" year).

For the 2016CFT, 85% of the '83 GAM was graded up to 100% of the '83 GAM over 10 years. On top of this, a 0.6% per year mortality improvement assumption was used for 15 years from the beginning of the projection period. This assumption is consistent with the rate increase projection.

Detailed results of SHIP's internal mortality study are provided in the Tables 2, 3, and 4 below.

Table 2 Senior Health Insurance Company of Pennsylvania Experience Through 12/31/2016 Mortality Study for 2016 By Experience Year			
Experience Year	Actual # of Deaths	Mortality A:E	A:E with 0.6% Annual Improvement
2004	7,686	68%	64%
2005	7,643	70%	65%
2006	7,244	68%	64%
2007	7,399	70%	67%
2008	7,256	70%	67%
2009	7,993	80%	77%
2010	8,291	87%	84%
2011	7,944	86%	84%
2012	7,571	85%	83%
2013	7,371	87%	85%
2014	6,789	84%	83%
2015	6,584	86%	86%

**Senior Health Insurance Company of Pennsylvania
Long Term Care Insurance Rate Increase Filings**

SUPPLEMENTAL INFORMATION – KEY ASSUMPTIONS

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**Table 3
Senior Health Insurance Company of
Pennsylvania
Experience Year 2015
Mortality Study for 2016
By Policy Duration**

Duration	Actual Number of Deaths	Mortality A:E
12	16	67%
13	70	77%
14	105	69%
15	247	76%
16	388	88%
17	413	82%
18	663	86%
19	837	89%
20	545	78%
21+	3,300	89%
Total	6,584	86%

**Table 4
Senior Health Insurance Company of
Pennsylvania
Experience Year 2015
Mortality Study for 2016
By Policy Form Group**

Group	Actual Number of Deaths	Mortality A:E
A_Bser	114	75%
A_FQSe	721	81%
A_HHC	1,063	84%
A_JCP0	387	91%
A_LT89	257	93%
A_LTC1	900	90%
A_LTC3	360	86%
A_LTC6	1,006	86%
A_MISC	162	92%
A_UGLI	5	123%
Transport	1,609	86%
Total	6,584	86%

**Senior Health Insurance Company of Pennsylvania
Long Term Care Insurance Rate Increase Filings**

SUPPLEMENTAL INFORMATION – KEY ASSUMPTIONS

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**Table 5
Senior Health Insurance Company of
Pennsylvania
Experience Year 2015
Mortality Study for 2016
By Issue Age Group**

Group	Actual Number of Deaths	Mortality A:E
<55	69	76%
55-59	347	72%
60-64	1,700	83%
65-69	2,207	86%
70-74	1,488	93%
75-79	621	89%
80+	152	89%
Total	6,584	86%

TOTAL TERMINATION RATES

In the past, lapse rates were developed that varied by policy form and issue age band. An additional lapse is included, that increases by attained age, starting at age 80 at 0% and increasing to 5% at age 100, consistent with last year. This was reviewed in light of recent experience observed by other LTC carriers, a new SOA / LIMRA persistency study released in 2016, as well as a review of SHIP’s data. We note that part of the driver for the assumption is implicit benefit exhaustion that is not explicitly modeled in the projection. Benefit exhaustion is likely to increase further in the future as a greater percentage of members go on claim.

The persistency assumptions used for 2016 CFT include multiple components. The projection impact is ultimately driven by the combination of these components, so it is important to examine the overall persistency level relative to historical experience. Please see Attachment C for an analysis of termination rates contained in the projection relative to historical experience. The analysis compares actual and projected termination rates by attained age for several sample attained ages at the start of the projection. This analysis demonstrates that the final policy termination assumptions are generally at or below actual observed terminations by attained age.

MORBIDITY STUDY DETAILS

A claim experience analysis was performed on all of the Company’s LTC business in order to develop appropriate morbidity assumptions for the loss ratio projections.

For ATL and Transport, the morbidity expected claim cost assumptions are based on a Consec 2006 claim cost study, with claim costs by attained age, sex, marital status, coverage type (i.e., NH, Comprehensive, and HHC); issued in Florida or other than Florida, policy duration, benefit period and elimination period. We developed actual to expected adjustment factors, where appropriate, and applied them to these expected claim costs. The 2006 Consec claim costs were developed on a total lives basis and thus the MG-ALFA model is a total lives model.

**Senior Health Insurance Company of Pennsylvania
Long Term Care Insurance Rate Increase Filings**

SUPPLEMENTAL INFORMATION – KEY ASSUMPTIONS

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Actual to expected adjustment factors have been applied in our models by policy plan, by issue age grouping, by benefit period, by inflation type and by calendar year duration. Overall, ultimate morbidity actual to expected adjustment factors were increased from last year due to some more complete data on historic NFOs. In addition, the adjustment factors were developed to adjust for correlations between policy plans, issue age groups, benefit periods and inflation types. As a result the factors are different than in prior years.

The experience period for the actual to expected adjustment factors was 2006-2015, for both ATL and Transport. Consistent with 2015CFT, we then backed out an estimated 10% “woodwork effect” for what we deemed the relevant adverse selection years due to the rate increases (2010, 2011 and 2012 for ATL and 2011, 2012, and 2013 for Transport). Detailed results of SHIP’s internal morbidity study are provided in Attachment B at the end of this memo. These studies use experience from January 1, 2000, through December 31, 2016, are shown by experience year, and are shown separately for each policy form grouping within ATL and Transport.

The following Tables 6 and 7 show the A:E’s that were chosen for the 2016 CFT, by form grouping and by duration, respectively. Tables 8, 9, and 10 show the A:E’s chosen by issue age, by benefit period, and by inflation option.

The actual to expected factors are global, i.e., applied to all claim costs in all durations with the exception of those in NFO status. The NFO policies were adjusted by calendar year period from the start of the projection with an adjustment factor of 0.625 in calendar year 2015, grading to an ultimate of 0.825 in 2023 and thereafter. Table 6 provides the global adjustments by policy form groupings used in the model.

Table 6 Senior Health Insurance Company of Pennsylvania Actual to Expected Adjustments by Policy Form Grouping	
Form Grouping	2016CFT
LTC-89	0.929
LTC-1	1.046
LTC-3	1.028
LTC-6	1.079
HHC-1	1.232
HHC-2	0.645
HHC-3	1.197
HHC-4	1.318
FQ Series	1.477
B Series	0.884
JC Penney	0.954
ATL Misc	0.962
UGLI	0.686
T10770	0.844
T10853	0.982
T10955	1.259
T11001	1.048
TRN MISC	0.973
NFO	0.625 grading up 2.5% per year for 9 calendar years to 0.825

**Senior Health Insurance Company of Pennsylvania
Long Term Care Insurance Rate Increase Filings**

SUPPLEMENTAL INFORMATION – KEY ASSUMPTIONS

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Table 7 below shows calendar year adjustment factors that were applied to smooth out actual incurred claims from recent years to expected incurred claims in the future projection years.

Table 7 Senior Health Insurance Company of Pennsylvania Actual to Expected Durational Adjustments 2016 Cash Flow Testing Plan		
Calendar		
Year	ATL	Transport
2017	1.01	1.10
2018	1.00	1.05
2019	0.98	1.01
2020+	0.98	0.98

In addition to looking at A:E's by experience year and by form grouping, we looked at A:E's by issue age and duration. This showed A:E's for the older issue ages that are much higher than A:E's for the younger issue ages. This difference in morbidity by issue age does not appear to wear-off as the issue age group ages. In other words, those who are issued at a younger age have better morbidity at the higher attained ages than those who were issued at the higher ages.

The following table shows the A:E factors by issue age that were applied in the projection.

Table 8 Senior Health Insurance Company of Pennsylvania Actual to Expected Adjustments by Issue Age Grouping (Normalized)		
	2016CFT	
Issue Age	ATL	Transport
52	0.802	1.068
57	0.910	0.893
62	0.958	0.970
67	0.978	1.039
72	1.058	1.143
77	1.038	1.173
82	1.217	1.717
87	1.259	N/A

Actual to expected factors that varied by benefit period were also applied. The factors used are shown in Tables 9a and 9b.

**Senior Health Insurance Company of Pennsylvania
Long Term Care Insurance Rate Increase Filings**

SUPPLEMENTAL INFORMATION – KEY ASSUMPTIONS

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**Table 9a
Senior Health Insurance Company of Pennsylvania
ATL – Long Term Care
Actual to Expected Adjustments by Benefit Period (Normalized)
ATL- 2016CFT**

Benefit Period	B Series & FQ Series	JC Penney	LTC-6	LTC-89, LTC-1, LTC-3, ATL Misc & UGLI	HHC
1 year	0.805	1.838	0.787	0.951	1.000
2 years	0.903	1.022	0.769	0.857	1.000
3 years	0.934	2.993	0.883	0.943	1.000
4 years (J)	1.121	1.126	0.983	1.059	1.000
4 years (U)	N/A	0.568	N/A	N/A	1.000
5 years	0.970	1.142	1.031	0.968	1.000
6 years	N/A	0.716	N/A	N/A	1.000
Lifetime (T)	1.065	1.340	1.127	1.120	1.000
Lifetime (W)	N/A	0.611	N/A	N/A	1.000

**Table 9b
Senior Health Insurance Company of Pennsylvania
Transport – Long Term Care
Actual to Expected Adjustments by Benefit Period (Normalized)
TRN – 2016CFT**

Benefit Period	T_Misc	T10770	T10853	T10955	T11001
1 Year	0.582	1.026	0.836	0.694	0.952
2 Year	0.423	0.943	0.844	0.863	0.890
3 Year	0.660	0.828	0.954	0.809	0.922
4 Year (J)	1.087	0.762	1.010	0.876	0.933
5 Year	1.437	1.414	1.256	1.045	1.035
Lifetime (T)	0.423	0.943	0.844	0.863	0.890

Lastly, actual to expected factors were applied by inflation option, based on the factors shown in Table 10.

**Table 10
Senior Health Insurance Company of Pennsylvania
Actual to Expected Adjustments by Inflation Type
(Normalized)**

2016CFT		
Inflation Type	ATL	Transport
None	0.99	0.98
Compound	1.03	1.01
Simple	1.03	0.97

**Senior Health Insurance Company of Pennsylvania
Long Term Care Insurance Rate Increase Filings**

SUPPLEMENTAL INFORMATION – KEY ASSUMPTIONS

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In the 2016CFT, claims paid from the existing claim liability run-outs were increased by 10% in 2017 and 4.5% in 2018 for ATL. For Transport, 2017 and 2018 existing paid claims were increase 6% and 3%, respectively. Morbidity was assumed to improve by 1.6% per year for 15 years.

In addition, some utilization improvement is assumed on compound inflation reimbursement policies (4% inflation for NH and 2% for HHC). This is a small adjustment as the majority of compound inflation policies are indemnity policies and this adjustment only applied to the small percentage of policies that were reimbursement.

The actual to expected ratios shown above were calculated assuming no historic morbidity improvement. If the same 1.6% per year morbidity improvement assumption had been built into the past expected claim costs, the expected claims would have increased, and the actual to expected ratios would be lower.

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Attachment A-1
Senior Health Insurance Company of Pennsylvania
Ultimate Voluntary Lapse Rates by Policy Form and Issue Age
Used for 2016 CFT / 2017 Plan

Form	Issue Age Band							All Issue Ages
	<55	55-59	60-64	65-69	70-74	75-79	80+	
LTC-89	2.4%	2.4%	2.4%	9.7%	9.7%	9.7%	9.7%	5.2%
LTC-1	2.1%	2.1%	2.2%	4.0%	7.6%	7.6%	7.6%	3.7%
LTC-3	0.5%	0.5%	1.6%	3.1%	3.1%	3.1%	3.1%	1.8%
LTC-6	1.1%	1.3%	1.0%	1.6%	6.2%	12.9%	12.9%	2.0%
HHC-FL	2.6%	2.6%	2.6%	2.1%	4.2%	5.2%	5.2%	3.0%
HHC-non-FL	0.5%	0.5%	2.9%	3.2%	7.1%	10.9%	10.9%	4.3%
FQ	1.5%	0.7%	0.5%	1.7%	3.7%	7.1%	7.1%	1.9%
B Series	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
JC Penney	0.5%	0.5%	1.2%	5.1%	13.6%	13.6%	13.6%	2.9%
Miscellaneous	0.8%	0.8%	1.6%	10.8%	10.8%	10.8%	10.8%	4.1%
UGLI	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Transport	1.4%	0.6%	3.1%	3.9%	10.4%	10.4%	10.4%	2.9%

Attachment A-2
Senior Health Insurance Company of Pennsylvania
Lapse Study for 2016
Experience Years 2004-2015 (ie 12/31/2003-12/31/2015)
FQ Series

Experience Year	Lapse Rates by Issue Age Band and Experience Year Based on 85% of the 1983 GAM								Experience Year	Member Count Excludes NFO and Lifetime Spousal WOP Renewal Policies							
	All Ages	<50	55-59	60-64	65-69	70-74	75-79	80+		All Ages	<50	55-59	60-64	65-69	70-74	75-79	80-84
2004	3.2%	5.0%	4.1%	2.8%	3.0%	3.0%	2.7%	3.7%	2004	28,894	1,721	2,719	4,955	6,562	6,306	4,213	2,418
2005	5.2%	6.0%	4.1%	4.2%	5.0%	5.0%	5.5%	8.3%	2005	27,114	1,629	2,590	4,763	6,236	5,910	3,873	2,113
2006	3.4%	4.1%	3.4%	2.4%	2.4%	2.7%	4.3%	9.0%	2006	24,874	1,525	2,467	4,505	5,791	5,402	3,440	1,744
2007	4.2%	3.3%	3.1%	3.3%	3.6%	3.8%	5.6%	10.5%	2007	23,196	1,457	2,366	4,333	5,510	5,036	3,078	1,416
2008	4.9%	5.4%	4.4%	4.2%	4.4%	4.1%	7.0%	8.8%	2008	21,405	1,403	2,273	4,121	5,165	4,620	2,701	1,122
2009	5.3%	6.5%	5.3%	4.9%	3.6%	4.8%	7.6%	10.1%	2009	19,558	1,321	2,152	3,877	4,785	4,205	2,320	898
2010	3.9%	3.3%	2.3%	2.2%	2.7%	4.0%	8.7%	12.3%	2010	17,759	1,229	2,016	3,613	4,452	3,782	1,966	701
2011	2.5%	2.1%	1.0%	1.3%	2.1%	2.3%	6.4%	10.9%	2011	16,287	1,182	1,945	3,455	4,157	3,404	1,624	520
2012	2.3%	1.5%	0.8%	1.0%	1.8%	2.6%	6.9%	9.4%	2012	15,019	1,149	1,898	3,304	3,880	3,068	1,342	378
2013	2.7%	2.1%	1.0%	1.5%	1.8%	3.7%	7.3%	15.3%	2013	13,758	1,118	1,853	3,162	3,585	2,721	1,065	254
2014	2.0%	0.7%	0.4%	0.4%	1.4%	4.5%	6.6%	6.6%	2014	12,663	1,085	1,801	3,016	3,334	2,394	861	172
2015	1.9%	1.5%	0.7%	0.2%	1.7%	3.7%	7.1%	7.1%	2015	11,715	1,067	1,759	2,895	3,095	2,082	701	116

Notes:

The Lapse study does not consider transfer to LWPS (Lifetime Spousal WOP) or NFO a termination.

The Lapse study excludes LWPS (Lifetime Spousal WOP) and NFO 'renewals' from the study.

Mortality rate is calculated assuming actual deaths=expected deaths (i.e. 85% of the 1983 GAM)

Lapse Rates= 1-(1-total termination rates)/(1-mort).

Attachment A-3
 Senior Health Insurance Company of Pennsylvania
 Lapse Study for 2016
 Experience Years 2004-2015 (ie 12/31/2003-12/31/2015)
 LTC-89

Experience Year	Lapse Rates by Issue Age Band and Experience Year Based on 85% of the 1983 GAM								Experience Year	Member Count Excludes NFO and Lifetime Spousal WOP Renewal Policies							
	All Ages	<50	55-59	60-64	65-69	70-74	75-79	80+		All Ages	<50	55-59	60-64	65-69	70-74	75-79	80-84
2004	7.9%	4.1%	4.1%	4.1%	7.3%	9.3%	15.1%	15.1%	2004	9,770	86	379	2,470	3,309	2,147	1,125	254
2005	6.3%	5.1%	5.1%	4.3%	5.7%	7.8%	10.5%	10.5%	2005	8,489	75	358	2,298	2,923	1,812	858	165
2006	5.2%	2.1%	2.1%	3.3%	5.2%	6.6%	9.8%	9.8%	2006	7,402	70	334	2,128	2,613	1,502	652	103
2007	5.6%	4.2%	4.2%	3.1%	4.1%	8.6%	13.8%	13.8%	2007	6,543	67	321	1,981	2,334	1,267	508	65
2008	6.1%	5.4%	5.4%	3.5%	5.4%	8.6%	15.1%	15.1%	2008	5,782	63	301	1,842	2,099	1,053	381	43
2009	6.3%	3.6%	3.6%	2.2%	6.1%	13.2%	13.4%	13.4%	2009	4,973	57	278	1,675	1,816	843	278	26
2010	7.9%	2.9%	2.9%	3.6%	7.7%	17.7%	17.7%	17.7%	2010	4,275	55	261	1,545	1,547	652	200	15
2011	6.7%	4.1%	4.1%	4.1%	7.2%	12.7%	12.7%	12.7%	2011	3,606	52	240	1,401	1,311	476	123	3
2012	6.3%	3.5%	3.5%	3.5%	7.3%	14.4%	14.4%	14.4%	2012	3,037	50	226	1,251	1,092	351	67	-
2013	5.4%	4.1%	4.1%	4.1%	6.2%	9.2%	9.2%	9.2%	2013	2,580	46	212	1,125	910	251	36	-
2014	3.7%	2.9%	2.9%	2.9%	4.6%	4.6%	4.6%	4.6%	2014	2,223	43	197	1,003	766	192	22	-
2015	5.4%	2.4%	2.4%	2.4%	9.7%	9.7%	9.7%	9.7%	2015	1,943	42	184	900	652	154	11	-

Notes:

The Lapse study does not consider transfer to LWPS (Lifetime Spousal WOP) or NFO a termination.

The Lapse study excludes LWPS (Lifetime Spousal WOP) and NFO 'renewals' from the study.

Mortality rate is calculated assuming actual deaths=expected deaths (i.e. 85% of the 1983 GAM)

Lapse Rates= 1-(1-total termination rates)/(1-mort).

Attachment A-4
Senior Health Insurance Company of Pennsylvania
Lapse Study for 2016
Experience Years 2004-2015 (ie 12/31/2003-12/31/2015)
LTC1

Experience Year	Lapse Rates by Issue Age Band and Experience Year Based on 85% of the 1983 GAM								Experience Year	Member Count Excludes NFO and Lifetime Spousal WOP Renewal Policies							
	All Ages	<50	55-59	60-64	65-69	70-74	75-79	80+		All Ages	<50	55-59	60-64	65-69	70-74	75-79	80-84
2004	6.9%	7.0%	7.0%	5.0%	5.0%	6.3%	8.7%	14.8%	2004	33,002	224	838	5,800	10,613	7,286	5,071	3,170
2005	6.7%	5.6%	5.6%	4.3%	4.8%	6.9%	9.6%	15.2%	2005	29,185	205	772	5,403	9,745	6,464	4,251	2,345
2006	5.7%	4.3%	4.3%	3.2%	4.3%	5.9%	9.4%	12.6%	2006	25,759	190	721	5,056	8,939	5,650	3,501	1,702
2007	6.3%	3.3%	3.3%	3.6%	4.3%	7.0%	11.4%	16.9%	2007	22,728	175	682	4,757	8,148	4,920	2,818	1,228
2008	7.3%	6.3%	6.3%	3.8%	4.6%	9.1%	14.7%	22.0%	2008	20,009	169	651	4,443	7,417	4,235	2,240	854
2009	7.9%	5.3%	5.3%	5.5%	6.0%	8.9%	15.1%	23.1%	2009	17,193	162	599	4,108	6,625	3,476	1,670	553
2010	8.1%	3.2%	3.2%	4.3%	5.2%	10.8%	22.5%	32.1%	2010	14,754	151	554	3,726	5,857	2,874	1,240	352
2011	6.2%	1.2%	1.2%	3.6%	4.8%	8.9%	16.9%	24.8%	2011	12,544	143	522	3,366	5,174	2,322	829	188
2012	4.4%	2.5%	2.5%	2.4%	4.0%	6.8%	11.8%	11.8%	2012	10,822	138	498	3,080	4,559	1,871	566	110
2013	4.7%	0.8%	0.8%	2.1%	4.2%	10.1%	12.5%	12.5%	2013	9,306	135	469	2,816	3,948	1,493	384	61
2014	4.8%	1.7%	1.7%	1.8%	5.2%	8.7%	17.1%	17.1%	2014	8,132	129	449	2,603	3,463	1,181	269	38
2015	3.8%	2.1%	2.1%	2.2%	4.0%	7.6%	7.6%	7.6%	2015	7,125	123	428	2,409	3,011	949	184	21

Notes:

The Lapse study does not consider transfer to LWPS (Lifetime Spousal WOP) or NFO a termination.

The Lapse study excludes LWPS (Lifetime Spousal WOP) and NFO 'renewals' from the study.

Mortality rate is calculated assuming actual deaths=expected deaths (i.e. 85% of the 1983 GAM)

Lapse Rates= 1-(1-total termination rates)/(1-mort).

Attachment A-5
Senior Health Insurance Company of Pennsylvania
Lapse Study for 2016
Experience Years 2004-2015 (ie 12/31/2003-12/31/2015)
LTC3

Experience Year	Lapse Rates by Issue Age Band and Experience Year Based on 85% of the 1983 GAM								Experience Year	Member Count Excludes NFO and Lifetime Spousal WOP Renewal Policies							
	All Ages	<50	55-59	60-64	65-69	70-74	75-79	80+		All Ages	<50	55-59	60-64	65-69	70-74	75-79	80-84
2004	4.8%	5.9%	4.1%	3.9%	4.7%	5.3%	7.5%	11.4%	2004	11,428	312	857	4,169	3,641	1,389	774	286
2005	4.3%	1.5%	3.1%	2.9%	3.2%	7.5%	12.8%	12.8%	2005	10,479	292	814	3,919	3,342	1,243	653	216
2006	3.3%	1.5%	1.6%	1.9%	4.2%	4.6%	8.0%	8.0%	2006	9,547	286	778	3,713	3,073	1,042	505	150
2007	3.8%	1.1%	2.2%	2.5%	3.3%	8.4%	11.4%	11.4%	2007	8,767	280	756	3,517	2,776	921	409	108
2008	3.8%	2.9%	2.7%	2.2%	3.1%	7.9%	15.6%	15.6%	2008	8,039	275	729	3,318	2,536	778	323	80
2009	4.0%	1.4%	3.0%	2.8%	3.8%	10.0%	10.7%	10.7%	2009	7,351	265	697	3,125	2,311	657	242	54
2010	4.2%	1.8%	2.4%	2.5%	4.6%	11.6%	11.6%	11.6%	2010	6,689	259	662	2,911	2,091	541	190	35
2011	1.8%	0.2%	0.2%	0.2%	3.8%	5.1%	5.1%	5.1%	2011	5,961	250	624	2,676	1,844	428	121	18
2012	1.6%	0.6%	0.6%	0.0%	2.5%	8.8%	8.8%	8.8%	2012	5,476	245	607	2,525	1,635	362	92	10
2013	2.6%	1.2%	1.2%	0.9%	3.8%	12.1%	12.1%	12.1%	2013	5,001	240	583	2,373	1,451	284	65	5
2014	1.4%	0.9%	0.9%	0.8%	2.5%	2.5%	2.5%	2.5%	2014	4,542	233	559	2,218	1,267	213	50	2
2015	1.9%	0.5%	0.5%	1.6%	3.1%	3.1%	3.1%	3.1%	2015	4,164	225	537	2,066	1,126	166	43	1

Notes:

The Lapse study does not consider transfer to LWPS (Lifetime Spousal WOP) or NFO a termination.

The Lapse study excludes LWPS (Lifetime Spousal WOP) and NFO 'renewals' from the study.

Mortality rate is calculated assuming actual deaths=expected deaths (i.e. 85% of the 1983 GAM)

Lapse Rates= 1-(1-total termination rates)/(1-mort).

Attachment A-6
 Senior Health Insurance Company of Pennsylvania
 Lapse Study for 2016
 Experience Years 2004-2015 (ie 12/31/2003-12/31/2015)
 LTC6

Experience Year	Lapse Rates by Issue Age Band and Experience Year Based on 85% of the 1983 GAM								Experience Year	Member Count Excludes NFO and Lifetime Spousal WOP Renewal Policies							
	All Ages	<50	55-59	60-64	65-69	70-74	75-79	80+		All Ages	<50	55-59	60-64	65-69	70-74	75-79	80-84
2004	5.2%	8.3%	6.6%	4.5%	4.3%	4.1%	6.2%	13.1%	2004	31,647	1,262	2,491	9,095	9,058	5,448	3,070	1,223
2005	3.7%	6.7%	4.3%	2.8%	3.0%	3.6%	5.7%	8.3%	2005	28,884	1,153	2,309	8,547	8,413	4,897	2,632	933
2006	3.0%	5.5%	3.0%	1.8%	2.4%	2.8%	5.4%	12.6%	2006	26,591	1,071	2,191	8,134	7,859	4,379	2,215	742
2007	4.5%	6.2%	4.6%	2.9%	3.5%	6.0%	8.6%	11.6%	2007	24,592	1,007	2,103	7,754	7,270	3,982	1,912	564
2008	4.4%	6.0%	4.0%	2.3%	4.0%	5.6%	9.1%	20.6%	2008	22,498	940	1,982	7,326	6,715	3,510	1,594	431
2009	4.0%	2.5%	3.0%	2.8%	3.7%	4.6%	11.0%	12.4%	2009	20,516	879	1,866	6,938	6,131	3,092	1,316	294
2010	3.5%	4.7%	3.0%	1.6%	2.9%	5.8%	10.7%	10.7%	2010	18,806	852	1,779	6,543	5,620	2,738	1,056	218
2011	2.5%	1.6%	1.4%	1.2%	2.5%	3.4%	10.5%	10.5%	2011	17,126	806	1,686	6,197	5,142	2,344	828	123
2012	1.9%	0.3%	1.6%	0.9%	1.5%	4.4%	9.0%	9.0%	2012	15,696	782	1,626	5,874	4,674	2,044	627	69
2013	1.9%	0.6%	0.6%	0.5%	2.2%	4.6%	11.0%	11.0%	2013	14,543	773	1,567	5,580	4,307	1,778	492	46
2014	1.8%	0.3%	0.6%	1.1%	1.9%	5.0%	6.2%	6.2%	2014	13,480	761	1,523	5,315	3,934	1,536	379	32
2015	2.1%	1.1%	1.3%	1.0%	1.6%	6.2%	12.9%	12.9%	2015	12,450	751	1,476	5,010	3,582	1,311	304	16

Notes:

The Lapse study does not consider transfer to LWPS (Lifetime Spousal WOP) or NFO a termination.

The Lapse study excludes LWPS (Lifetime Spousal WOP) and NFO 'renewals' from the study.

Mortality rate is calculated assuming actual deaths=expected deaths (i.e. 85% of the 1983 GAM)

Lapse Rates= 1-(1-total termination rates)/(1-mort).

Attachment A-7
 Senior Health Insurance Company of Pennsylvania
 Lapse Study for 2016
 Experience Years 2004-2015 (ie 12/31/2003-12/31/2015)
 HHC-NFL

Experience Year	Lapse Rates by Issue Age Band and Experience Year Based on 85% of the 1983 GAM								Experience Year	Member Count Excludes NFO and Lifetime Spousal WOP Renewal Policies							
	All Ages	<50	55-59	60-64	65-69	70-74	75-79	80+		All Ages	<50	55-59	60-64	65-69	70-74	75-79	80-84
2004	8.0%	5.8%	5.8%	7.5%	8.0%	7.2%	8.6%	10.5%	2004	19,140	198	512	2,123	4,512	5,178	4,539	2,078
2005	8.0%	5.7%	5.7%	5.2%	7.5%	7.3%	8.8%	13.7%	2005	16,605	191	478	1,928	4,020	4,568	3,824	1,596
2006	7.5%	6.1%	6.1%	6.1%	6.3%	7.4%	9.2%	10.3%	2006	14,002	178	446	1,780	3,558	3,826	3,047	1,167
2007	6.2%	2.6%	2.6%	3.8%	5.0%	5.8%	7.9%	14.1%	2007	12,046	162	414	1,631	3,201	3,259	2,479	900
2008	7.9%	3.9%	3.9%	5.7%	5.3%	9.1%	10.2%	16.0%	2008	10,566	156	398	1,529	2,912	2,850	2,059	662
2009	8.4%	4.3%	4.3%	4.3%	6.5%	9.4%	11.2%	20.3%	2009	9,075	147	377	1,396	2,623	2,399	1,661	472
2010	10.1%	2.7%	2.7%	5.2%	7.9%	10.3%	16.2%	30.0%	2010	7,631	141	355	1,277	2,251	1,994	1,303	310
2011	4.5%	2.4%	2.4%	2.8%	3.8%	5.4%	5.8%	14.9%	2011	6,308	139	337	1,156	1,932	1,615	956	173
2012	5.5%	2.7%	2.7%	2.8%	3.5%	7.0%	12.0%	12.0%	2012	5,461	130	322	1,061	1,715	1,355	766	112
2013	4.7%	3.8%	3.8%	3.1%	4.5%	6.3%	5.1%	5.1%	2013	4,706	124	305	976	1,529	1,119	570	83
2014	3.9%	2.5%	2.5%	1.6%	4.7%	3.5%	7.7%	7.7%	2014	4,113	122	284	901	1,353	935	459	59
2015	4.4%	-0.9%	-0.9%	2.9%	3.2%	7.1%	10.9%	10.9%	2015	3,604	113	269	837	1,186	799	355	45

Notes:

The Lapse study does not consider transfer to LWPS (Lifetime Spousal WOP) or NFO a termination.

The Lapse study excludes LWPS (Lifetime Spousal WOP) and NFO 'renewals' from the study.

Mortality rate is calculated assuming actual deaths=expected deaths (i.e. 85% of the 1983 GAM)

Lapse Rates= 1-(1-total termination rates)/(1-mort).

Attachment A-8
 Senior Health Insurance Company of Pennsylvania
 Lapse Study for 2016
 Experience Years 2004-2015 (ie 12/31/2003-12/31/2015)
 LTC-Misc

Experience Year	Lapse Rates by Issue Age Band and Experience Year Based on 85% of the 1983 GAM								Experience Year	Member Count Excludes NFO and Lifetime Spousal WOP Renewal Policies							
	All Ages	<50	55-59	60-64	65-69	70-74	75-79	80+		All Ages	<50	55-59	60-64	65-69	70-74	75-79	80-84
2004	6.0%	1.1%	1.1%	1.7%	4.9%	7.1%	11.3%	17.6%	2004	6,539	107	402	1,246	2,030	1,549	910	295
2005	7.3%	1.0%	1.0%	2.2%	7.8%	8.3%	14.8%	14.8%	2005	5,705	104	389	1,179	1,814	1,313	707	199
2006	6.4%	0.8%	0.8%	2.9%	6.1%	9.5%	12.1%	12.1%	2006	4,905	99	376	1,105	1,563	1,091	522	149
2007	7.1%	-0.2%	-0.2%	1.8%	7.8%	11.7%	14.7%	14.7%	2007	4,232	98	363	1,024	1,365	887	393	102
2008	7.5%	1.0%	1.0%	4.5%	7.8%	13.5%	10.7%	10.7%	2008	3,621	93	353	955	1,163	699	284	74
2009	7.5%	0.2%	0.2%	5.4%	8.4%	12.8%	12.8%	12.8%	2009	3,076	90	338	862	985	535	213	53
2010	6.1%	0.9%	0.9%	3.6%	6.9%	11.6%	11.6%	11.6%	2010	2,598	87	325	767	823	409	154	33
2011	5.8%	-1.3%	-1.3%	3.8%	7.3%	13.5%	13.5%	13.5%	2011	2,182	85	309	689	681	307	93	18
2012	5.3%	0.5%	0.5%	4.3%	8.4%	8.4%	8.4%	8.4%	2012	1,774	85	297	598	527	206	50	11
2013	3.8%	2.3%	2.3%	3.9%	4.6%	4.6%	4.6%	4.6%	2013	1,471	85	277	512	403	153	36	5
2014	3.9%	0.8%	0.8%	6.0%	4.0%	4.0%	4.0%	4.0%	2014	1,247	82	255	449	326	106	27	2
2015	4.6%	0.8%	0.8%	1.6%	10.8%	10.8%	10.8%	10.8%	2015	1,080	79	238	385	273	83	22	-

Notes:
 The Lapse study does not consider transfer to LWPS (Lifetime Spousal WOP) or NFO a termination.
 The Lapse study excludes LWPS (Lifetime Spousal WOP) and NFO 'renewals' from the study.
 Mortality rate is calculated assuming actual deaths=expected deaths (i.e. 85% of the 1983 GAM)
 Lapse Rates= 1-(1-total termination rates)/(1-mort).

Attachment A-9
 Senior Health Insurance Company of Pennsylvania
 Lapse Study for 2016
 Experience Years 2004-2015 (ie 12/31/2003-12/31/2015)
 LTC-UGLI

Experience Year	Lapse Rates by Issue Age Band and Experience Year Based on 85% of the 1983 GAM								Experience Year	Member Count Excludes NFO and Lifetime Spousal WOP Renewal Policies							
	All Ages	<50	55-59	60-64	65-69	70-74	75-79	80+		All Ages	<50	55-59	60-64	65-69	70-74	75-79	80-84
2004	9.5%			-3.3%	5.5%	5.8%	18.0%	45.3%	2004	231	-	-	11	63	94	56	7
2005	4.9%			15.1%	6.5%	2.2%	1.2%	58.4%	2005	191	-	-	11	56	81	40	3
2006	4.4%			7.3%	1.1%	9.1%	-0.7%	-27.8%	2006	165	-	-	9	49	72	34	1
2007	7.7%			-4.6%	18.0%	-0.6%	8.6%	100.0%	2007	142	-	-	8	45	59	29	1
2008	6.4%			8.0%	0.6%	8.1%	10.7%		2008	117	-	-	8	34	53	22	-
2009	8.6%			-5.2%	7.8%	9.4%	14.2%		2009	97	-	-	7	31	43	16	-
2010	17.9%			39.5%	6.3%	18.3%	30.7%		2010	78	-	-	7	26	34	11	-
2011	15.8%			21.1%	8.1%	17.2%	35.2%		2011	56	-	-	4	22	24	6	-
2012	12.5%			-5.6%	11.6%	16.6%	12.9%		2012	41	-	-	3	18	17	3	-
2013	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	2013	31	-	-	3	14	12	2	-
2014	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	2014	24	-	-	2	12	10	-	-
2015	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	2015	22	-	-	2	10	10	-	-

Notes:
 The Lapse study does not consider transfer to LWPS (Lifetime Spousal WOP) or NFO a termination.
 The Lapse study excludes LWPS (Lifetime Spousal WOP) and NFO 'renewals' from the study.
 Mortality rate is calculated assuming actual deaths=expected deaths (i.e. 85% of the 1983 GAM)
 Lapse Rates= 1-(1-total termination rates)/(1-mort).

Attachment A-10
Senior Health Insurance Company of Pennsylvania
Lapse Study for 2016
Experience Years 2004-2015 (ie 12/31/2003-12/31/2015)
Bseries

Experience Year	Lapse Rates by Issue Age Band and Experience Year Based on 85% of the 1983 GAM								Experience Year	Member Count Excludes NFO and Lifetime Spousal WOP Renewal Policies							
	All Ages	<50	55-59	60-64	65-69	70-74	75-79	80+		All Ages	<50	55-59	60-64	65-69	70-74	75-79	80-84
2004	5.8%	7.6%	6.3%	5.8%	5.0%	5.5%	7.2%	4.9%	2004	4,354	293	325	684	985	956	653	458
2005	4.2%	4.6%	5.2%	4.5%	5.2%	4.0%	4.8%	0.5%	2005	3,972	270	300	632	916	876	577	401
2006	2.6%	2.6%	2.6%	4.7%	2.4%	2.0%	1.7%	2.5%	2006	3,697	257	283	598	854	817	523	365
2007	1.4%	2.3%	2.3%	2.6%	0.9%	2.2%	0.9%	-2.3%	2007	3,492	251	274	564	818	775	487	323
2008	1.9%	2.3%	2.3%	1.3%	2.2%	1.9%	2.0%	1.5%	2008	3,326	239	266	543	794	731	455	298
2009	1.8%	2.3%	2.3%	0.8%	2.2%	1.8%	-0.4%	5.7%	2009	3,151	236	258	529	758	689	418	263
2010	1.9%	1.3%	1.3%	1.3%	1.0%	0.8%	5.0%	5.0%	2010	2,970	223	250	517	722	647	391	220
2011	1.0%	1.6%	1.6%	1.6%	0.1%	0.1%	2.0%	2.0%	2011	2,797	218	248	502	694	611	344	180
2012	0.3%	0.0%	0.0%	0.0%	0.6%	0.5%	0.4%	0.4%	2012	2,649	208	245	485	671	578	310	152
2013	1.1%	1.8%	1.8%	1.8%	-0.4%	0.4%	2.9%	2.9%	2013	2,469	200	240	471	639	535	274	110
2014	0.2%	0.1%	0.1%	0.1%	-0.9%	1.1%	1.1%	1.1%	2014	2,299	196	233	451	612	494	237	76
2015	0.5%	0.5%	0.5%	0.5%	0.4%	0.5%	0.5%	0.5%	2015	2,170	193	223	439	589	452	214	60

Notes:

The Lapse study does not consider transfer to LWPS (Lifetime Spousal WOP) or NFO a termination.

The Lapse study excludes LWPS (Lifetime Spousal WOP) and NFO 'renewals' from the study.

Mortality rate is calculated assuming actual deaths=expected deaths (i.e. 85% of the 1983 GAM)

Lapse Rates= 1-(1-total termination rates)/(1-mort).

Attachment A-11
Senior Health Insurance Company of Pennsylvania
Lapse Study for 2016
Experience Years 2001-2015 (ie 12/31/2000-12/31/2015)
Transport

Experience Year	Lapse Rates by Issue Age Band and Experience Year Based on 85% of the 1983 GAM								Experience Year	Member Count Excludes NFO and Lifetime Spousal WOP Renewal Policies							
	All Ages	<50	55-59	60-64	65-69	70-74	75-79	80+		All Ages	<50	55-59	60-64	65-69	70-74	75-79	80-84
2001	3.2%	2.8%	2.0%	2.1%	2.8%	4.2%	8.0%	15.4%	2001	60,695	1,883	7,543	18,201	18,278	9,928	3,729	953
2002	4.4%	4.0%	3.0%	3.0%	4.0%	6.2%	9.6%	12.5%	2002	53,125	1,674	6,733	16,043	16,086	8,646	3,090	700
2003	3.2%	5.2%	2.6%	2.2%	2.6%	4.3%	7.4%	13.7%	2003	48,833	1,597	6,446	15,168	14,808	7,609	2,534	527
2004	3.3%	3.3%	2.3%	2.3%	3.0%	4.8%	7.7%	13.8%	2004	44,985	1,501	6,158	14,324	13,654	6,727	2,096	386
2005	3.1%	3.1%	1.7%	1.6%	3.1%	5.7%	8.8%	16.7%	2005	41,532	1,439	5,921	13,557	12,564	5,919	1,720	279
2006	2.9%	1.1%	1.6%	1.7%	2.8%	5.6%	11.7%	11.7%	2006	37,991	1,382	5,717	12,868	11,381	4,983	1,346	186
2007	3.0%	2.4%	1.0%	2.2%	2.9%	5.5%	15.0%	15.0%	2007	34,737	1,353	5,508	12,098	10,280	4,235	1,021	117
2008	3.2%	2.2%	1.7%	1.7%	4.1%	6.7%	8.8%	8.8%	2008	31,857	1,305	5,331	11,325	9,323	3,621	744	84
2009	4.3%	2.3%	3.1%	2.8%	4.7%	8.3%	18.5%	18.5%	2009	29,022	1,260	5,094	10,579	8,289	3,038	581	62
2010	5.4%	2.3%	2.4%	3.5%	6.9%	13.2%	24.6%	24.6%	2010	25,968	1,211	4,788	9,693	7,259	2,480	398	27
2011	2.8%	0.7%	0.8%	1.8%	4.0%	8.2%	11.0%	11.0%	2011	22,982	1,161	4,517	8,833	6,203	1,906	250	5
2012	2.3%	1.1%	0.5%	1.6%	3.9%	6.3%	6.3%	6.3%	2012	20,492	1,128	4,291	8,061	5,282	1,457	167	3
2013	1.4%	0.8%	0.2%	0.7%	3.0%	4.6%	4.6%	4.6%	2013	18,169	1,086	4,068	7,283	4,420	1,110	101	1
2014	3.0%	2.0%	0.6%	1.9%	6.0%	10.8%	10.8%	10.8%	2014	16,405	1,051	3,877	6,665	3,775	865	75	1
2015	2.9%	1.4%	0.6%	3.1%	3.9%	10.4%	10.4%	10.4%	2015	14,585	1,002	3,665	5,992	3,134	645	51	-

Mortality rate is calculated assuming actual deaths=expected deaths (i.e. 85% of the 1983 GAM)
The Lapse study does not consider transfer to LWPS (Lifetime Spousal WOP) or NFO a termination.
The Lapse study excludes LWPS (Lifetime Spousal WOP) and NFO 'renewals' from the study.
Mortality rate is calculated assuming actual deaths=expected deaths (i.e. 85% of the 1983 GAM)
Lapse Rates= 1-(1-total termination rates)/(1-mort).

Attachment A-12
Senior Health Insurance Company of Pennsylvania
Lapse Rates By Attained Age and Year
ATL

Attained Age	Year-->						2011-2015
	2011	2012	2013	2014	2015	2016	
60	1.15%	2.03%	3.27%	1.53%	3.76%	2.61%	1.27%
61	3.06%	2.88%	2.37%	2.44%	3.42%	1.61%	0.84%
62	1.28%	1.56%	3.20%	2.19%	3.66%	3.51%	1.56%
63	1.96%	1.81%	1.43%	2.08%	2.55%	1.74%	0.33%
64	3.25%	2.70%	2.80%	3.05%	1.40%	2.12%	1.23%
65	3.93%	1.77%	3.30%	2.02%	3.80%	2.98%	1.57%
66	2.13%	1.92%	2.36%	2.14%	2.20%	1.40%	0.83%
67	3.32%	3.04%	3.86%	3.92%	2.94%	3.38%	1.59%
68	2.89%	2.73%	2.37%	2.97%	2.97%	3.44%	1.60%
69	2.84%	3.67%	3.07%	3.60%	3.79%	3.48%	0.94%
70	2.84%	3.29%	4.22%	4.15%	4.22%	3.99%	1.41%
71	3.93%	3.60%	4.45%	3.99%	3.44%	5.06%	0.71%
72	4.33%	4.49%	4.73%	4.16%	5.00%	5.20%	1.02%
73	4.76%	4.58%	4.67%	4.79%	5.82%	5.40%	0.89%
74	4.61%	4.87%	5.23%	5.89%	6.15%	5.61%	0.74%
75	5.59%	5.06%	5.80%	6.91%	6.74%	7.21%	1.08%
76	6.41%	6.73%	6.14%	6.98%	8.06%	7.96%	1.27%
77	7.01%	7.14%	8.83%	8.23%	8.87%	8.57%	0.94%
78	7.75%	8.18%	8.41%	8.65%	9.90%	9.67%	0.83%
79	8.60%	8.33%	9.82%	10.64%	11.44%	10.62%	1.09%
80	9.77%	8.77%	10.23%	12.01%	11.34%	12.42%	1.48%
81	9.93%	11.07%	11.79%	13.28%	13.24%	14.60%	1.52%
82	11.44%	12.56%	13.15%	13.30%	15.45%	15.16%	1.95%
83	13.53%	12.10%	14.01%	14.55%	16.63%	16.44%	2.18%
84	13.70%	15.24%	16.30%	17.26%	18.84%	17.31%	2.23%
85	16.49%	17.16%	18.50%	18.57%	20.21%	19.56%	3.03%
86	16.26%	18.28%	19.72%	17.27%	22.01%	23.25%	3.98%
87	18.75%	20.81%	21.19%	19.47%	25.29%	20.49%	3.75%
88	19.70%	21.59%	22.70%	19.37%	26.39%	22.33%	4.87%
89	22.44%	24.31%	21.67%	27.29%	28.86%	28.57%	5.82%
90	27.80%	25.48%	25.55%	30.68%	36.67%	33.04%	6.81%
91	27.32%	29.26%	29.13%	30.95%	30.17%	32.91%	7.57%
92	33.96%	33.96%	35.58%	31.00%	38.24%	26.19%	7.57%
93	31.34%	29.17%	22.22%	32.89%	52.00%	29.17%	9.44%
94	33.91%	27.45%	41.79%	30.56%	36.00%	31.25%	9.43%
95	47.52%	33.33%	22.58%	40.91%	15.38%	45.45%	11.89%
96	50.00%	25.81%	36.84%	41.67%	60.00%	50.00%	12.72%
97	44.44%	50.00%	85.71%				14.91%
98	42.11%	20.00%	50.00%	0.00%	66.67%	0.00%	12.12%
99	50.00%	37.50%	40.00%	100.00%			18.23%
100	0.00%	50.00%	0.00%	50.00%	0.00%	100.00%	11.31%
101	66.67%	100.00%				9.04%	12.68%
102	50.00%	100.00%		9.12%	9.59%	0.00%	8.45%
103	100.00%						9.09%
104							3.23%
105							35.33%
106							21.77%

Attachment A-13
Senior Health Insurance Company of Pennsylvania
Lapse Rates By Attained Age and Year
Transport

Attained Age	Year-->						2011-2015
	2011	2012	2013	2014	2015	2016	
65	-0.77%	8.32%	-0.64%	-1.03%	-0.64%	-1.43%	1.77%
66	-0.91%	-0.86%	9.20%	-0.71%	-1.16%	-0.71%	0.59%
67	-1.00%	-1.02%	-0.97%	-1.01%	-0.79%	24.02%	-0.18%
68	-0.07%	-1.12%	14.67%	-1.09%	10.10%	-0.88%	2.23%
69	2.33%	4.31%	-1.26%	-1.28%	-1.22%	-1.32%	1.63%
70	2.25%	-0.52%	2.12%	0.33%	-1.44%	-1.38%	0.97%
71	1.39%	1.56%	3.12%	0.82%	1.95%	-1.63%	1.57%
72	1.14%	1.30%	0.77%	3.15%	5.78%	5.60%	2.08%
73	-0.67%	-0.17%	-2.10%	6.19%	-2.07%	0.69%	0.05%
74	1.15%	0.69%	2.06%	0.41%	0.61%	1.88%	1.09%
75	0.87%	0.14%	-0.58%	-0.13%	1.36%	-0.38%	0.28%
76	0.26%	0.50%	0.14%	-0.89%	1.37%	1.20%	0.29%
77	0.44%	0.18%	1.01%	0.62%	-0.04%	-0.19%	0.41%
78	0.11%	-0.03%	-1.35%	-0.86%	-0.36%	-0.03%	-0.39%
79	1.07%	0.79%	-0.03%	0.35%	1.72%	-1.46%	0.56%
80	1.70%	0.08%	1.01%	1.71%	-0.79%	0.38%	0.80%
81	0.65%	1.34%	0.34%	0.41%	0.08%	-1.29%	0.42%
82	2.65%	0.81%	-0.03%	1.96%	1.72%	-1.96%	1.11%
83	2.20%	0.52%	0.53%	1.21%	0.55%	-1.18%	0.90%
84	2.20%	0.19%	0.20%	-0.18%	1.37%	-0.48%	0.68%
85	2.43%	2.11%	0.18%	1.97%	2.93%	-0.27%	1.61%
86	1.41%	3.94%	1.03%	0.37%	3.65%	2.63%	2.06%
87	4.30%	4.19%	1.71%	3.41%	3.69%	-0.54%	2.93%
88	5.23%	5.99%	2.38%	4.55%	1.95%	0.30%	3.30%
89	7.84%	6.29%	3.51%	4.84%	4.53%	0.76%	4.56%
90	6.35%	5.15%	5.48%	7.08%	3.48%	5.19%	5.42%
91	10.17%	5.83%	3.38%	11.06%	7.92%	3.82%	6.87%
92	13.06%	10.70%	9.72%	11.10%	4.41%	6.78%	9.10%
93	8.51%	5.26%	5.31%	12.20%	10.18%	4.48%	7.77%
94	18.01%	11.19%	6.13%	6.34%	10.15%	4.82%	8.76%
95	3.01%	7.70%	5.05%	20.24%	11.02%	10.09%	10.23%
96	17.65%	13.81%	-2.90%	21.38%	6.07%	6.34%	10.41%
97	17.05%	5.49%	-3.40%	22.75%	8.87%	-0.30%	7.50%
98	8.99%	17.22%	10.83%	6.10%	10.62%	20.15%	12.70%
99	12.35%	0.88%	2.58%	11.74%	22.71%	4.22%	10.28%
100	25.77%	32.10%	14.87%	37.75%	20.32%	22.01%	24.96%
101	11.88%	29.35%	-40.99%	64.75%	71.73%	18.97%	29.36%
102	-47.22%	41.11%	100.00%	26.39%	-47.22%	100.00%	26.38%
103	-53.53%	61.27%	-54.93%		-54.93%	100.00%	14.02%
104	2.71%	100.00%	-64.91%	17.54%		-64.91%	1.46%

Attachment A-14
Senior Health Insurance Company of Pennsylvania
Termination Rates By Attained Age and Year
ATL

Attained Age	Year-->						2016 2011-2015
	2011	2012	2013	2014	2015	2016	
60	1.15%	2.03%	3.27%	1.53%	3.76%	2.61%	1.78%
61	3.06%	2.88%	2.37%	2.44%	3.42%	1.61%	1.41%
62	1.28%	1.56%	3.20%	2.19%	3.66%	3.51%	2.17%
63	1.96%	1.81%	1.43%	2.08%	2.55%	1.74%	1.02%
64	3.25%	2.70%	2.80%	3.05%	1.40%	2.12%	1.99%
65	3.93%	1.77%	3.30%	2.02%	3.80%	2.98%	2.42%
66	2.13%	1.92%	2.36%	2.14%	2.20%	1.40%	1.79%
67	3.32%	3.04%	3.86%	3.92%	2.94%	3.38%	2.66%
68	2.89%	2.73%	2.37%	2.97%	2.97%	3.44%	2.80%
69	2.84%	3.67%	3.07%	3.60%	3.79%	3.48%	2.29%
70	2.84%	3.29%	4.22%	4.15%	4.22%	3.99%	2.92%
71	3.93%	3.60%	4.45%	3.99%	3.44%	5.06%	2.42%
72	4.33%	4.49%	4.73%	4.16%	5.00%	5.20%	2.93%
73	4.76%	4.58%	4.67%	4.79%	5.82%	5.40%	3.04%
74	4.61%	4.87%	5.23%	5.89%	6.15%	5.61%	3.18%
75	5.59%	5.06%	5.80%	6.91%	6.74%	7.21%	3.81%
76	6.41%	6.73%	6.14%	6.98%	8.06%	7.96%	4.33%
77	7.01%	7.14%	8.83%	8.23%	8.87%	8.57%	4.38%
78	7.75%	8.18%	8.41%	8.65%	9.90%	9.67%	4.70%
79	8.60%	8.33%	9.82%	10.64%	11.44%	10.62%	5.38%
80	9.77%	8.77%	10.23%	12.01%	11.34%	12.42%	6.23%
81	9.93%	11.07%	11.79%	13.28%	13.24%	14.60%	6.75%
82	11.44%	12.56%	13.15%	13.30%	15.45%	15.16%	7.68%
83	13.53%	12.10%	14.01%	14.55%	16.63%	16.44%	8.44%
84	13.70%	15.24%	16.30%	17.26%	18.84%	17.31%	9.07%
85	16.49%	17.16%	18.50%	18.57%	20.21%	19.56%	10.39%
86	16.26%	18.28%	19.72%	17.27%	22.01%	23.25%	11.88%
87	18.75%	20.81%	21.19%	19.47%	25.29%	20.49%	12.35%
88	19.70%	21.59%	22.70%	19.37%	26.39%	22.33%	14.06%
89	22.44%	24.31%	21.67%	27.29%	28.86%	28.57%	15.68%
90	27.80%	25.48%	25.55%	30.68%	36.67%	33.04%	17.38%
91	27.32%	29.26%	29.13%	30.95%	30.17%	32.91%	18.95%
92	33.96%	33.96%	35.58%	31.00%	38.24%	26.19%	19.94%
93	31.34%	29.17%	22.22%	32.89%	52.00%	29.17%	22.59%
94	33.91%	27.45%	41.79%	30.56%	36.00%	31.25%	23.76%
95	47.52%	33.33%	22.58%	40.91%	15.38%	45.45%	27.11%
96	50.00%	25.81%	36.84%	41.67%	60.00%	50.00%	29.15%
97	44.44%	50.00%	85.71%				32.36%
98	42.11%	20.00%	50.00%	0.00%	66.67%	0.00%	31.77%
99	50.00%	37.50%	40.00%	100.00%			38.14%
100	0.00%	50.00%	0.00%	50.00%	0.00%	100.00%	34.96%
101	66.67%	100.00%				9.04%	38.21%
102	50.00%	100.00%		9.12%	9.59%	0.00%	37.84%
103	100.00%						41.18%
104							41.18%
105							63.64%
106							60.00%

Attachment A-15
Senior Health Insurance Company of Pennsylvania
Termination Rates By Attained Age and Year
Transport

Attained Age	Year-->						2011-2015
	2011	2012	2013	2014	2015	2016	
65	0.00%	9.09%	0.00%	0.00%	0.00%	0.00%	2.56%
66	0.00%	0.00%	10.00%	0.00%	0.00%	0.00%	1.47%
67	0.00%	0.00%	0.00%	0.00%	0.00%	25.00%	0.82%
68	1.10%	0.00%	15.63%	0.00%	11.11%	0.00%	3.33%
69	3.57%	5.56%	0.00%	0.00%	0.00%	0.00%	2.88%
70	3.70%	0.93%	3.53%	1.72%	0.00%	0.00%	2.41%
71	3.00%	3.21%	4.67%	2.44%	3.51%	0.00%	3.18%
72	2.96%	3.11%	2.65%	4.90%	7.50%	7.27%	3.88%
73	1.51%	1.92%	0.00%	8.16%	0.00%	2.70%	2.15%
74	3.51%	3.10%	4.35%	2.72%	2.96%	4.12%	3.44%
75	3.50%	2.81%	2.16%	2.49%	3.93%	2.29%	2.93%
76	3.30%	3.47%	3.13%	2.19%	4.26%	4.09%	3.29%
77	3.79%	3.57%	4.30%	3.94%	3.37%	3.11%	3.76%
78	3.97%	3.72%	2.48%	2.88%	3.40%	3.78%	3.41%
79	5.31%	5.04%	4.14%	4.53%	5.75%	2.76%	4.75%
80	6.33%	4.81%	5.70%	6.25%	3.86%	4.92%	5.45%
81	5.82%	6.45%	5.53%	5.60%	5.18%	3.86%	5.58%
82	8.29%	6.48%	5.64%	7.56%	7.33%	3.74%	6.76%
83	8.50%	6.81%	6.73%	7.34%	6.74%	5.09%	7.15%
84	9.04%	7.18%	7.03%	6.66%	8.03%	6.34%	7.53%
85	9.85%	9.56%	7.77%	9.24%	10.14%	7.09%	9.01%
86	9.54%	11.87%	9.18%	8.59%	11.44%	10.47%	10.09%
87	12.79%	12.79%	10.51%	12.05%	12.30%	8.32%	11.59%
88	14.39%	15.04%	11.86%	13.85%	11.47%	9.98%	12.68%
89	17.64%	16.12%	13.62%	14.88%	14.65%	11.24%	14.63%
90	16.91%	16.10%	16.26%	17.68%	14.52%	16.14%	16.24%
91	21.31%	17.35%	15.51%	22.11%	19.27%	15.81%	18.42%
92	24.71%	22.63%	21.66%	23.19%	17.31%	19.31%	21.30%
93	21.92%	19.12%	18.97%	24.77%	23.50%	18.51%	21.23%
94	30.94%	25.45%	21.16%	21.13%	24.27%	20.22%	23.30%
95	20.00%	23.60%	21.37%	34.27%	26.35%	25.41%	25.74%
96	33.33%	30.14%	16.39%	36.14%	23.91%	23.85%	27.31%
97	34.21%	25.00%	18.18%	38.64%	27.45%	20.29%	26.55%
98	29.41%	36.00%	31.03%	27.27%	30.77%	37.84%	32.34%
99	33.33%	25.00%	26.67%	33.33%	41.67%	27.78%	32.26%
100	45.45%	50.00%	37.50%	54.55%	41.67%	42.86%	45.00%
101	37.50%	50.00%	0.00%	75.00%	80.00%	42.86%	50.00%
102	0.00%	60.00%	100.00%	50.00%	0.00%	100.00%	50.00%
103	0.00%	75.00%	0.00%		0.00%	100.00%	44.44%
104	9.15%	100.00%	0.00%	50.00%		0.00%	40.00%

Attachment B-1
 Senior Health Insurance Company of Pennsylvania
 LTC A/E Reports for 4Q2016
 Experience Period: 1/1/2000-12/31/2016

Claim & Reserves Thru: 12/31/2016
 Analysis by Experience Year
 All model Plans - ATL
 Non-NFO

All Model Plans-ATL (Non-NFO)

ExperienceYear	Lives_years_exposures	Exposures_with_dailybenefit	Paid Claims	Claim Reserves	Actual Claims (woodwork removed)	Expected Claims (with all fitting factors)	Adjusted AtoE:claimcosts
2000	236,058	21,334,736	251,070,079	475,020	251,545,099	307,789,024	81.7%
2001	220,827	20,425,166	260,106,933	506,116	260,613,048	311,633,074	83.6%
2002	201,203	19,004,023	276,638,263	956,851	277,595,113	302,375,761	91.8%
2003	179,179	17,283,148	255,460,538	1,284,183	256,744,722	280,277,269	91.6%
2004	160,364	15,828,805	228,417,785	2,054,395	230,472,180	263,053,771	87.6%
2005	143,215	14,436,415	229,101,335	3,236,841	232,338,177	247,023,508	94.1%
2006	128,477	13,278,557	239,876,396	3,289,352	243,165,749	236,092,937	103.0%
2007	115,775	12,288,976	220,420,701	4,572,611	224,993,312	231,302,182	97.3%
2008	103,541	11,303,534	220,261,556	6,332,908	226,594,464	226,852,468	99.9%
2009	91,229	10,244,818	210,181,353	5,849,938	216,031,291	219,526,281	98.4%
2010	80,278	9,288,010	222,925,720	16,498,452	217,658,339	210,663,903	103.3%
2011	70,819	8,471,497	197,106,453	19,811,691	197,198,313	202,073,211	97.6%
2012	63,801	7,886,056	191,088,178	29,646,529	200,667,915	197,899,414	101.4%
2013	57,653	7,357,887	156,980,352	37,592,690	194,573,042	194,745,516	99.9%
2014	52,379	6,903,745	129,871,001	66,348,489	196,219,490	192,915,445	101.7%
2015	47,384	6,460,784	85,104,187	99,567,684	184,671,871	189,787,669	97.3%
All Years	1,952,179	201,796,157	3,374,610,830	298,023,750	3,611,082,124	3,814,011,434	94.7%

LTC-1

ExperienceYear	Lives_years_exposures	Exposures_with_dailybenefit	Paid Claims	Claim Reserves	Actual Claims (woodwork removed)	Expected Claims (with all fitting factors)	Adjusted AtoE:claimcosts
2000	52,951	4,252,719	72,643,186	64,707	72,707,893	82,569,912	88.1%
2001	46,066	3,748,479	74,609,276	64,978	74,674,254	79,278,620	94.2%
2002	39,898	3,288,904	72,673,959	123,554	72,797,513	73,394,746	99.2%
2003	35,016	2,928,369	62,216,951	309,638	62,526,589	67,236,368	93.0%
2004	30,937	2,632,314	56,034,135	407,266	56,441,401	61,224,135	92.2%
2005	27,238	2,360,453	51,677,005	344,723	52,021,729	55,341,494	94.0%
2006	24,009	2,123,527	55,090,943	733,955	55,824,898	50,966,656	109.5%
2007	21,120	1,905,774	44,682,687	893,968	45,576,655	47,698,224	95.6%
2008	18,419	1,697,893	44,472,090	1,032,371	45,504,460	44,829,884	101.5%
2009	15,764	1,481,320	38,468,382	1,012,453	39,480,835	41,818,906	94.4%
2010	13,448	1,290,209	38,709,028	2,227,298	37,214,842	38,620,537	96.4%
2011	11,398	1,121,341	33,460,485	2,218,716	32,435,638	35,264,970	92.0%
2012	9,840	994,793	30,198,062	4,383,555	31,437,834	32,780,535	95.9%
2013	8,624	897,007	28,374,417	5,996,174	34,370,591	31,069,493	110.6%
2014	7,603	813,524	19,983,504	7,841,931	27,825,435	29,645,728	93.9%
2015	6,664	733,568	13,824,565	13,805,408	27,629,972	28,054,225	98.5%
All Years	368,996	32,270,193	737,118,675	41,460,695	768,470,539	799,794,432	96.1%

LTC-3

ExperienceYear	Lives_years_exposures	Exposures_with_dailybenefit	Paid Claims	Claim Reserves	Actual Claims (woodwork removed)	Expected Claims (with all fitting factors)	Adjusted AtoE:claimcosts
2000	15,087	1,504,621	13,872,981	0	13,872,981	14,697,074	94.4%
2001	14,004	1,441,823	13,447,226	0	13,447,226	14,660,708	91.7%
2002	12,937	1,376,357	18,060,419	146,497	18,206,916	14,563,619	125.0%
2003	11,912	1,310,403	14,746,885	0	14,746,885	14,599,848	101.0%
2004	10,908	1,243,789	12,543,516	0	12,543,516	14,712,547	85.3%
2005	9,947	1,176,949	13,865,983	0	13,865,983	14,960,291	92.7%
2006	9,103	1,122,074	13,819,373	85,332	13,904,705	15,498,695	89.7%
2007	8,380	1,077,277	18,516,167	240,313	18,756,480	16,415,808	114.3%
2008	7,705	1,029,194	18,042,403	60,752	18,103,155	17,240,320	105.0%
2009	6,969	965,440	16,623,832	373,330	16,997,162	17,739,553	95.8%
2010	6,280	906,306	18,912,471	568,904	17,710,342	18,217,858	97.2%
2011	5,691	859,024	19,823,102	1,141,651	19,058,867	18,825,707	101.2%
2012	5,224	827,184	19,966,718	1,738,154	19,731,702	19,698,263	100.2%
2013	4,774	788,836	19,877,143	3,722,561	23,599,704	20,454,802	115.4%
2014	4,387	754,753	13,786,873	4,529,727	18,316,600	21,277,348	86.1%
2015	4,000	716,773	10,841,284	8,334,109	19,175,393	21,777,435	88.1%
All Years	137,309	17,100,804	256,746,375	20,941,332	272,037,616	275,339,875	98.8%

Attachment B-1
Senior Health Insurance Company of Pennsylvania
LTC A/E Reports for 4Q2016
Experience Period: 1/1/2000-12/31/2016

Claim & Reserves Thru: 12/31/2016
Analysis by Experience Year
All model Plans - ATL
Non-NFO

HHC-NFL

ExperienceYear	Lives_years_exposures	Exposures_with_dailybenefit	Paid Claims	Claim Reserves	Actual Claims (woodwork removed)	Expected Claims (with all fitting factors)	Adjusted AtoE:claimcosts
2000	31,623	2,909,901	21,311,017	0	21,311,017	26,393,769	80.7%
2001	27,552	2,573,545	19,539,113	207,989	19,747,102	25,543,151	77.3%
2002	23,954	2,274,199	20,367,817	115,825	20,483,642	24,436,259	83.8%
2003	20,641	1,994,385	21,963,703	136,992	22,100,695	22,833,757	96.8%
2004	17,700	1,738,854	19,854,254	213,939	20,068,193	20,808,435	96.4%
2005	14,933	1,496,995	20,360,993	393,146	20,754,139	18,477,329	112.3%
2006	12,924	1,323,131	15,380,178	373,502	15,753,680	17,131,244	92.0%
2007	11,270	1,180,273	15,515,688	547,234	16,062,921	16,244,318	98.9%
2008	9,720	1,044,329	15,419,600	197,381	15,616,982	15,314,255	102.0%
2009	8,225	908,904	17,825,541	370,215	18,195,756	14,327,275	127.0%
2010	6,872	781,749	17,219,124	1,257,544	16,796,971	13,126,475	128.0%
2011	5,767	676,202	11,910,890	1,170,328	11,892,016	11,935,307	99.6%
2012	5,024	609,027	12,041,492	2,106,917	12,862,190	11,227,378	114.6%
2013	4,396	550,996	10,240,719	3,074,728	13,315,447	10,656,083	125.0%
2014	3,852	498,858	7,865,057	3,921,432	11,786,489	10,097,311	116.7%
2015	3,362	450,980	3,950,244	4,741,866	8,692,110	9,476,945	91.7%
All Years	207,813	21,012,330	250,765,431	18,829,040	265,439,353	268,029,291	99.0%

LTC-89

ExperienceYear	Lives_years_exposures	Exposures_with_dailybenefit	Paid Claims	Claim Reserves	Actual Claims (woodwork removed)	Expected Claims (with all fitting factors)	Adjusted AtoE:claimcosts
2000	14,868	1,078,667	16,772,723	0	16,772,723	15,764,004	106.4%
2001	13,302	987,550	17,144,762	0	17,144,762	14,932,619	114.8%
2002	11,729	891,969	16,535,080	0	16,535,080	14,159,399	116.8%
2003	10,410	810,210	14,070,923	18,489	14,089,412	13,671,306	103.1%
2004	9,105	726,984	12,992,261	0	12,992,261	12,924,156	100.5%
2005	7,866	643,996	14,037,902	147,631	14,185,532	12,127,268	117.0%
2006	6,927	581,093	12,927,016	0	12,927,016	11,789,680	109.6%
2007	6,111	522,778	11,115,075	32,510	11,147,586	11,419,268	97.6%
2008	5,300	461,002	11,511,769	61,453	11,573,222	10,848,469	106.7%
2009	4,571	402,276	11,136,292	177	11,136,469	10,225,019	108.9%
2010	3,907	346,619	9,989,966	156,847	9,224,375	9,314,244	99.0%
2011	3,271	294,367	7,332,221	100,824	6,757,314	8,336,565	81.1%
2012	2,785	254,023	7,945,581	370,402	7,559,985	7,639,701	99.0%
2013	2,392	219,995	7,849,696	291,872	8,141,568	7,040,043	115.6%
2014	2,073	191,870	5,057,381	982,000	6,039,382	6,503,653	92.9%
2015	1,796	167,769	4,656,966	2,480,227	7,137,193	5,930,219	120.4%
All Years	106,413	8,581,167	181,075,616	4,642,433	183,363,881	172,625,611	106.2%

LTC-6

ExperienceYear	Lives_years_exposures	Exposures_with_dailybenefit	Paid Claims	Claim Reserves	Actual Claims (woodwork removed)	Expected Claims (with all fitting factors)	Adjusted AtoE:claimcosts
2000	43,028	4,217,231	36,840,767	213,957	37,054,724	43,181,899	85.8%
2001	40,155	4,018,484	35,874,481	0	35,874,481	45,780,469	78.4%
2002	37,075	3,788,113	39,775,219	162,480	39,937,699	46,042,782	86.7%
2003	33,191	3,462,442	39,390,940	151,514	39,542,454	42,993,341	92.0%
2004	29,991	3,199,511	35,946,368	962,191	36,908,559	39,493,523	93.5%
2005	27,441	2,996,258	34,396,876	872,448	35,269,325	38,286,086	92.1%
2006	25,432	2,848,952	38,898,783	472,286	39,371,069	39,328,062	100.1%
2007	23,453	2,691,129	41,072,566	962,751	42,035,317	40,744,340	103.2%
2008	21,499	2,526,615	41,500,241	2,530,690	44,030,931	41,956,753	104.9%
2009	19,554	2,351,264	41,419,002	1,193,102	42,612,103	42,663,226	99.9%
2010	17,851	2,195,638	43,407,523	2,970,068	42,161,447	43,192,248	97.6%
2011	16,322	2,059,575	42,174,484	6,886,350	44,600,758	43,685,101	102.1%
2012	15,188	1,973,597	41,130,539	7,353,485	44,076,386	45,119,714	97.7%
2013	14,052	1,885,429	33,370,865	8,738,196	42,109,061	46,455,157	90.6%
2014	13,013	1,807,369	30,589,358	16,714,068	47,303,426	47,909,530	98.7%
2015	11,986	1,728,052	20,557,765	29,823,503	50,381,267	49,123,784	102.6%
All Years	389,231	43,749,659	596,345,778	80,007,089	663,269,008	695,956,016	95.3%

MISC and UGLI

ExperienceYear	Lives_years_exposures	Exposures_with_dailybenefit	Paid Claims	Claim Reserves	Actual Claims (woodwork removed)	Expected Claims (with all fitting factors)	Adjusted AtoE:claimcosts
2000	11,330	788,353	9,356,972	0	9,356,972	9,441,849	99.1%
2001	9,759	699,656	8,901,993	0	8,901,993	8,653,112	102.9%
2002	8,435	599,850	8,357,679	0	8,357,679	7,865,646	106.3%
2003	7,256	546,449	7,029,568	0	7,029,568	7,269,108	96.7%
2004	6,307	496,978	6,187,448	0	6,187,448	6,745,284	91.7%
2005	5,479	395,346	5,300,513	0	5,300,513	6,097,132	86.9%
2006	4,691	319,455	6,121,349	0	6,121,349	5,458,896	112.1%
2007	4,034	277,708	6,238,737	68,494	6,307,231	5,003,836	126.0%
2008	3,443	246,292	4,777,323	0	4,777,323	4,587,036	104.1%
2009	2,899	215,619	3,611,334	0	3,611,334	4,169,165	86.6%
2010	2,416	188,626	4,525,908	0	4,114,462	3,771,309	109.1%
2011	1,938	160,816	3,089,748	422	2,809,246	3,305,164	85.0%
2012	1,603	123,583	3,124,992	362,136	3,170,116	2,858,270	110.9%
2013	1,369	104,902	2,375,870	248,567	2,624,437	2,564,489	102.3%
2014	1,183	91,596	1,151,947	319,156	1,471,103	2,326,175	63.2%
2015	1,006	80,358	1,244,954	772,098	2,017,053	2,134,357	94.5%
All Years	73,149	5,335,589	81,396,334	1,770,873	82,157,825	82,250,828	99.9%

Attachment B-1
Senior Health Insurance Company of Pennsylvania
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Experience Period: 1/1/2000-12/31/2016

Claim & Reserves Thru: 12/31/2016
Analysis by Experience Year
All model Plans - ATL
Non-NFO

HHC-1 NFL

ExperienceYear	Lives_years_exposures	Exposures_with_dailybenefit	Paid Claims	Claim Reserves	Actual Claims (woodwork removed)	Expected Claims (with all fitting factors)	Adjusted AtoE:claimcosts
2000	12,774	1,231,236	10,428,828	0	10,428,828	11,712,804	89.0%
2001	11,194	1,100,152	9,773,433	0	9,773,433	11,037,255	88.5%
2002	9,853	990,616	9,926,233	0	9,926,233	10,354,042	95.9%
2003	8,562	883,655	9,397,953	0	9,397,953	9,573,801	98.2%
2004	7,417	784,121	8,251,559	0	8,251,559	8,713,980	94.7%
2005	6,322	688,563	7,458,099	0	7,458,099	7,776,075	95.9%
2006	5,507	618,458	6,474,781	0	6,474,781	7,252,817	89.3%
2007	4,869	564,252	6,062,782	0	6,062,782	7,064,441	85.8%
2008	4,261	511,138	6,966,962	778	6,967,740	6,815,450	102.2%
2009	3,663	455,209	9,701,794	779	9,702,573	6,497,435	149.3%
2010	3,118	401,857	7,428,547	39,959	6,789,551	6,081,398	111.6%
2011	2,662	354,938	6,723,850	173,426	6,270,251	5,630,348	111.4%
2012	2,335	324,729	6,275,668	714,104	6,354,338	5,441,978	116.8%
2013	2,061	298,537	6,063,334	1,197,728	7,261,062	5,291,202	137.2%
2014	1,816	272,389	5,410,072	2,285,863	7,695,935	5,084,213	151.4%
2015	1,592	248,463	1,824,720	2,015,884	3,840,604	4,798,927	80.0%
All Years	88,006	9,728,313	118,168,615	6,428,521	122,655,722	119,126,166	103.0%

HHC-2 NFL

ExperienceYear	Lives_years_exposures	Exposures_with_dailybenefit	Paid Claims	Claim Reserves	Actual Claims (woodwork removed)	Expected Claims (with all fitting factors)	Adjusted AtoE:claimcosts
2000	7,822	669,408	1,905,409	0	1,905,409	2,863,653	66.5%
2001	6,658	571,064	1,814,700	0	1,814,700	2,558,661	70.9%
2002	5,630	483,740	1,690,013	0	1,690,013	2,259,782	74.8%
2003	4,734	407,517	1,523,497	0	1,523,497	1,932,769	78.8%
2004	3,937	339,472	1,294,083	0	1,294,083	1,615,345	80.1%
2005	3,170	273,033	1,375,652	0	1,375,652	1,299,048	105.9%
2006	2,639	227,119	685,347	0	685,347	1,093,889	62.7%
2007	2,170	187,513	1,104,340	0	1,104,340	932,273	118.5%
2008	1,764	152,746	829,517	0	829,517	780,735	106.2%
2009	1,408	122,586	742,900	0	742,900	639,837	116.1%
2010	1,105	95,469	725,091	0	659,174	517,143	127.5%
2011	870	75,685	475,148	65,243	491,264	427,352	115.0%
2012	726	63,498	377,436	0	343,124	365,232	93.9%
2013	607	53,595	303,497	27,652	331,149	323,553	102.3%
2014	505	44,953	201,250	18,636	219,887	280,699	78.3%
2015	417	37,365	93,380	37,996	131,375	237,682	55.3%
All Years	44,163	3,804,762	15,141,261	149,527	15,141,432	18,127,651	83.5%

HHC-3 NFL

ExperienceYear	Lives_years_exposures	Exposures_with_dailybenefit	Paid Claims	Claim Reserves	Actual Claims (woodwork removed)	Expected Claims (with all fitting factors)	Adjusted AtoE:claimcosts
2000	4,965	416,788	3,706,402	0	3,706,402	4,528,039	81.9%
2001	4,198	354,683	2,994,697	0	2,994,697	4,315,994	69.4%
2002	3,603	307,543	3,259,200	115,825	3,375,025	4,121,775	81.9%
2003	3,099	267,548	4,949,963	96,056	5,046,020	3,841,730	131.3%
2004	2,671	232,111	4,316,054	117,149	4,433,203	3,509,999	126.3%
2005	2,256	198,407	4,864,607	138,821	5,003,428	3,097,260	161.5%
2006	1,948	173,776	3,422,791	246,026	3,668,817	2,854,896	128.5%
2007	1,724	154,291	3,211,586	150,619	3,362,204	2,685,311	125.2%
2008	1,486	134,417	2,513,704	0	2,513,704	2,452,808	102.5%
2009	1,248	114,068	2,209,541	48,464	2,258,005	2,254,657	100.2%
2010	1,039	96,322	2,411,067	604,677	2,741,586	2,030,669	135.0%
2011	865	81,395	1,311,738	384,397	1,541,941	1,820,682	84.7%
2012	763	73,235	1,714,623	201,588	1,742,010	1,741,919	100.0%
2013	661	64,583	1,196,052	594,262	1,790,314	1,629,309	109.9%
2014	577	57,757	537,947	261,934	799,881	1,485,090	53.9%
2015	508	51,432	716,445	887,056	1,603,501	1,357,906	118.1%
All Years	31,611	2,778,355	43,336,418	3,846,874	46,580,737	43,727,942	106.5%

HHC-4 NFL

ExperienceYear	Lives_years_exposures	Exposures_with_dailybenefit	Paid Claims	Claim Reserves	Actual Claims (woodwork removed)	Expected Claims (with all fitting factors)	Adjusted AtoE:claimcosts
2000	6,062	592,470	5,270,378	0	5,270,378	7,289,274	72.3%
2001	5,502	547,645	4,956,283	207,989	5,164,272	7,631,241	67.7%
2002	4,868	492,300	5,492,372	0	5,492,372	7,700,660	71.3%
2003	4,246	435,664	6,092,290	40,936	6,133,226	7,485,458	81.9%
2004	3,675	383,149	5,992,557	96,790	6,089,348	6,969,112	87.4%
2005	3,185	336,991	6,662,635	254,325	6,916,960	6,304,946	109.7%
2006	2,829	303,779	4,797,259	127,476	4,924,735	5,929,642	83.1%
2007	2,506	274,217	5,136,980	396,615	5,533,595	5,562,292	99.5%
2008	2,208	246,028	5,109,417	196,604	5,306,021	5,265,262	100.8%
2009	1,906	217,042	5,171,306	320,972	5,492,278	4,935,447	111.3%
2010	1,610	188,102	6,654,419	612,908	6,606,661	4,497,265	146.9%
2011	1,370	164,185	3,400,154	547,261	3,588,560	4,056,926	88.5%
2012	1,200	147,566	3,673,765	1,191,226	4,422,718	3,678,249	120.2%
2013	1,067	134,281	2,677,836	1,255,087	3,932,923	3,412,019	115.3%
2014	953	123,760	1,715,788	1,354,999	3,070,787	3,247,309	94.6%
2015	845	113,720	1,315,698	1,800,931	3,116,629	3,082,430	101.1%
All Years	44,033	4,700,900	74,119,137	8,404,119	81,061,462	87,047,532	93.1%

Attachment B-1
 Senior Health Insurance Company of Pennsylvania
 LTC A/E Reports for 4Q2016
 Experience Period: 1/1/2000-12/31/2016

Claim & Reserves Thru: 12/31/2016
 Analysis by Experience Year
 All model Plans - ATL
 Non-NFO

B-Series (A_Bser)

ExperienceYear	Lives_years_exposures	Exposures_with_dailybenefit	Paid Claims	Claim Reserves	Actual Claims (woodwork removed)	Expected Claims (with all fitting factors)	Adjusted AtoEclaimcosts
2000					0	0	0.0%
2001	579	58,379	0	0	0	348,957	0.0%
2002	3,170	314,643	626,849	67,688	694,537	1,805,912	38.5%
2003	4,518	446,110	1,832,041	0	1,832,041	2,749,831	66.6%
2004	4,141	412,930	1,135,562	0	1,135,562	2,802,315	40.5%
2005	3,824	386,600	2,042,942	42,653	2,085,595	2,926,240	71.3%
2006	3,585	367,966	2,517,547	0	2,517,547	3,079,125	81.8%
2007	3,412	355,365	1,754,009	80,205	1,834,215	3,245,756	56.5%
2008	3,242	343,018	2,903,384	153,849	3,057,233	3,392,120	90.1%
2009	3,057	328,845	2,721,296	0	2,721,296	3,486,218	78.1%
2010	2,884	316,268	3,582,138	343,795	3,569,030	3,606,645	99.0%
2011	2,708	302,542	3,912,129	636,047	4,134,706	3,652,697	113.2%
2012	2,544	288,567	4,018,806	571,796	4,173,275	3,550,100	117.6%
2013	2,367	272,233	2,747,111	892,328	3,639,439	3,389,406	107.4%
2014	2,236	261,709	2,629,803	1,437,942	4,067,746	3,385,704	120.1%
2015	2,103	250,761	2,005,939	2,705,358	4,711,297	3,424,719	137.6%
All Years	44,371	4,705,936	34,429,557	6,931,662	40,173,518	44,845,745	89.6%

FQ (A_FQse)

ExperienceYear	Lives_years_exposures	Exposures_with_dailybenefit	Paid Claims	Claim Reserves	Actual Claims (woodwork removed)	Expected Claims (with all fitting factors)	Adjusted AtoEclaimcosts
2000	28,975	2,717,307	11,734,720	133,778	11,868,498	22,692,937	52.3%
2001	34,860	3,332,179	18,855,070	125,340	18,980,410	29,065,166	65.3%
2002	33,292	3,231,147	23,138,960	32,459	23,171,419	31,128,737	74.4%
2003	30,073	2,957,553	26,660,114	242,494	26,902,608	31,878,081	84.4%
2004	28,025	2,799,762	27,493,784	296,265	27,790,049	32,972,628	84.3%
2005	26,003	2,646,487	26,834,095	323,189	27,157,285	33,643,416	80.7%
2006	24,009	2,494,250	35,739,671	677,595	36,417,266	33,822,209	107.7%
2007	22,359	2,368,230	29,598,641	638,178	30,236,819	34,361,632	88.0%
2008	20,534	2,215,812	31,893,934	1,025,550	32,859,484	34,488,832	95.3%
2009	18,584	2,038,776	33,279,996	1,886,939	35,166,935	33,658,961	104.5%
2010	16,958	1,896,429	35,229,000	4,470,609	36,090,553	32,620,911	110.6%
2011	15,512	1,772,507	30,940,496	4,294,850	32,032,133	31,602,315	101.4%
2012	14,296	1,675,501	29,632,001	6,159,362	32,537,603	30,952,440	105.1%
2013	13,173	1,583,758	23,371,313	7,322,853	30,694,166	30,654,241	100.1%
2014	12,213	1,513,191	20,420,097	12,851,309	33,271,407	30,928,056	107.6%
2015	11,311	1,446,953	10,377,837	15,654,059	26,031,896	31,337,213	83.1%
All Years	350,178	36,689,842	415,139,730	56,134,831	461,208,532	505,807,773	91.2%

Attachment B-2
Senior Health Insurance Company of Pennsylvania
LTC A/E Reports for 4Q2016
Experience Period: 1/1/2000-12/31/2016
Claim & Reserves Thru: 12/31/2016
Analysis by Experience Year
All Model Plans - Transport
Non-NFO

All Model Plans-Transport (Non-NFO)

Experience Year	Lives_years_exposures	Exposures_with_dailybenefit	Paid Claims	Claim Reserves	Actual Claims (woodwork removed)	Expected Claims (with all fitting factors)	Adjusted AtoE:claimcosts
2000	55,056	5,235,900	54,581,528	192,226	54,773,754	68,641,152	79.8%
2001	50,838	5,032,740	64,319,378	588,070	64,907,448	71,717,437	90.5%
2002	47,135	4,863,972	65,585,614	474,885	66,060,499	75,495,021	87.5%
2003	43,302	4,657,656	68,300,865	1,013,444	69,314,309	79,357,095	87.3%
2004	40,169	4,504,388	69,512,301	1,082,239	70,594,540	84,425,486	83.6%
2005	36,722	4,299,522	78,933,246	1,756,006	80,689,252	88,480,789	91.2%
2006	33,765	4,134,583	86,660,460	2,325,572	88,986,032	93,771,474	94.9%
2007	31,079	3,988,435	83,390,874	2,871,067	86,261,941	99,511,059	86.7%
2008	28,495	3,832,639	90,710,359	5,112,705	95,823,064	104,751,372	91.5%
2009	25,745	3,634,493	101,336,075	9,170,326	110,506,402	108,478,441	101.9%
2010	22,866	3,395,109	98,076,914	13,355,160	111,432,074	110,158,521	101.2%
2011	20,018	3,140,237	99,329,825	17,642,409	106,338,394	109,092,984	97.5%
2012	17,859	2,959,708	92,493,510	24,612,120	106,459,664	108,742,380	97.9%
2013	16,046	2,799,244	87,523,687	38,101,951	114,205,126	108,864,169	104.9%
2014	14,463	2,653,796	71,133,427	55,292,666	126,426,093	109,044,623	115.9%
2015	12,964	2,506,379	46,402,348	68,204,107	114,606,455	108,594,334	105.5%
All Years	496,521	61,638,801	1,258,290,412	241,794,952	1,467,385,046	1,529,126,338	96.0%

10770 Policy Form Grouping

Experience Year	Lives_years_exposures	Exposures_with_dailybenefit	Paid Claims	Claim Reserves	Actual Claims (woodwork removed)	Expected Claims (with all fitting factors)	Adjusted AtoE:claimcosts
2000	7,807	580,530	9,375,422	0	9,375,422	6,910,723	135.7%
2001	6,883	522,244	7,729,022	66,814	7,795,836	6,647,818	117.3%
2002	6,097	469,087	6,662,125	0	6,662,125	6,457,149	103.2%
2003	5,394	420,792	5,672,350	0	5,672,350	6,287,989	90.2%
2004	4,815	380,192	5,325,306	0	5,325,306	6,136,775	86.8%
2005	4,293	343,110	5,754,982	0	5,754,982	5,995,294	96.0%
2006	3,822	308,579	5,497,477	0	5,497,477	5,801,730	94.8%
2007	3,356	274,953	5,051,871	0	5,051,871	5,546,353	91.1%
2008	2,981	247,108	5,218,290	54,208	5,272,498	5,372,051	98.1%
2009	2,607	219,414	4,399,973	35,981	4,435,955	5,126,770	86.5%
2010	2,218	190,009	4,208,327	357,879	4,566,206	4,754,381	96.0%
2011	1,877	163,403	5,632,890	628,364	5,692,049	4,346,127	131.0%
2012	1,593	141,996	4,135,332	474,379	4,190,646	3,997,810	104.8%
2013	1,367	124,403	3,560,571	691,963	3,865,940	3,710,477	104.2%
2014	1,185	109,382	2,926,634	1,316,833	4,243,466	3,452,529	122.9%
2015	1,006	94,603	1,854,660	1,730,171	3,584,830	3,131,229	114.5%
All Years	57,300	4,589,805	83,005,232	5,356,592	86,986,961	83,675,206	104.0%

10853 Policy Form Grouping

Experience Year	Lives_years_exposures	Exposures_with_dailybenefit	Paid Claims	Claim Reserves	Actual Claims (woodwork removed)	Expected Claims (with all fitting factors)	Adjusted AtoE:claimcosts
2000	10,248	887,943	7,521,033	0	7,521,033	8,991,942	83.6%
2001	9,333	819,352	10,736,219	26,364	10,762,583	9,098,035	118.3%
2002	8,489	752,798	9,149,515	0	9,149,515	9,272,782	98.7%
2003	7,625	683,003	8,481,920	0	8,481,920	9,271,746	91.5%
2004	6,939	627,672	7,236,978	0	7,236,978	9,398,291	77.0%
2005	6,201	567,682	7,268,902	0	7,268,902	9,293,222	78.2%
2006	5,530	512,735	9,456,402	198,131	9,654,533	9,167,659	105.3%
2007	4,974	466,027	8,694,460	45,158	8,739,618	9,141,932	95.6%
2008	4,472	422,520	8,398,740	55,096	8,453,836	9,030,834	93.6%
2009	3,947	376,519	10,023,886	148,314	10,172,200	8,743,024	116.3%
2010	3,446	331,402	8,594,734	0	8,594,734	8,354,925	102.9%
2011	2,923	284,654	8,836,995	293,313	8,300,280	7,709,688	107.7%
2012	2,503	247,588	6,851,548	409,233	6,600,710	7,129,022	92.6%
2013	2,174	218,165	6,026,959	539,593	5,969,593	6,669,605	89.5%
2014	1,882	191,367	6,003,777	2,336,380	8,340,157	6,160,724	135.4%
2015	1,622	166,965	2,898,860	1,976,836	4,875,697	5,638,730	86.5%
All Years	82,309	7,556,391	126,180,928	6,028,419	130,122,288	133,072,161	97.8%

10955 Policy Form Grouping

Experience Year	Lives_years_exposures	Exposures_with_dailybenefit	Paid Claims	Claim Reserves	Actual Claims (woodwork removed)	Expected Claims (with all fitting factors)	Adjusted AtoE:claimcosts
2000	17,824	1,921,674	21,516,365	130,623	21,646,988	29,274,854	73.9%
2001	16,765	1,902,011	27,091,033	306,798	27,397,831	31,006,288	88.4%
2002	15,827	1,892,311	29,617,751	369,507	29,987,258	33,629,953	89.2%
2003	14,756	1,859,549	29,777,603	698,968	30,476,571	36,889,813	82.6%
2004	13,905	1,846,101	30,445,872	218,633	30,664,505	40,765,036	75.2%
2005	12,900	1,805,526	41,239,677	1,183,819	42,423,496	43,985,120	96.4%
2006	12,010	1,773,168	42,346,999	1,261,566	43,608,565	47,560,616	91.7%
2007	11,190	1,744,650	43,554,443	1,836,398	45,390,842	51,292,016	88.5%
2008	10,353	1,703,013	43,546,973	3,090,993	46,637,966	54,654,128	85.3%
2009	9,417	1,639,052	52,638,037	5,155,537	57,793,574	57,079,755	101.3%
2010	8,477	1,559,656	48,114,293	7,267,804	55,382,097	58,607,530	94.5%
2011	7,567	1,476,200	54,486,840	11,420,319	59,915,599	59,065,510	101.4%
2012	6,845	1,410,773	49,762,799	15,470,073	59,302,611	59,425,853	99.8%
2013	6,185	1,345,955	43,756,910	20,951,892	58,826,184	59,577,358	98.7%
2014	5,599	1,286,318	39,282,967	34,564,781	73,847,748	59,691,677	123.7%
2015	5,043	1,223,048	24,733,222	38,018,852	62,752,074	59,465,640	105.5%
All Years	174,664	26,389,004	621,911,785	141,946,564	746,053,910	781,971,150	95.4%

11011 Policy Form Grouping

Experience Year	Lives_years_exposures	Exposures_with_dailybenefit	Paid Claims	Claim Reserves	Actual Claims (woodwork removed)	Expected Claims (with all fitting factors)	Adjusted AtoE:claimcosts
2000	18,143	1,782,407	15,573,951	61,603	15,635,554	22,686,576	68.9%
2001	16,949	1,731,971	18,202,721	188,093	18,390,814	24,226,295	75.9%
2002	15,922	1,697,520	19,163,345	105,378	19,268,722	25,417,157	75.8%
2003	14,835	1,647,000	23,729,371	314,476	24,043,848	26,204,065	91.8%
2004	13,890	1,606,602	25,540,443	863,606	26,404,049	27,414,149	96.3%
2005	12,778	1,542,819	24,226,818	572,188	24,799,006	28,483,710	87.1%
2006	11,924	1,503,405	28,591,958	865,875	29,457,833	30,517,603	96.5%
2007	11,138	1,468,699	25,690,330	989,511	26,679,841	32,788,128	81.4%
2008	10,320	1,428,446	32,861,058	1,820,840	34,681,898	34,937,995	99.3%
2009	9,450	1,370,277	33,515,252	3,646,147	37,161,399	36,764,263	101.1%
2010	8,444	1,286,801	36,371,513	5,369,256	41,740,769	37,657,221	110.8%
2011	7,418	1,191,585	29,584,577	5,036,311	31,473,534	37,206,725	84.6%
2012	6,718	1,136,319	31,463,155	8,257,509	36,109,695	37,400,634	96.5%
2013	6,149	1,089,451	33,585,293	15,592,090	44,706,712	38,115,304	117.3%
2014	5,650	1,047,462	22,396,833	16,937,784	39,334,616	38,975,180	100.9%
2015	5,177	1,005,064	16,526,707	25,972,756	42,499,463	39,632,530	107.2%
All Years	174,906	22,535,827	417,023,325	86,593,423	492,387,754	518,427,533	95.0%

Miscellaneous Policy Form Grouping

Experience Year	Lives_years_exposures	Exposures_with_dailybenefit	Paid Claims	Claim Reserves	Actual Claims (woodwork removed)	Expected Claims (with all fitting factors)	Adjusted AtoE:claimcosts
2000	1,034	63,347	594,758	0	594,758	777,057	76.5%
2001	908	57,161	560,383	0	560,383	739,001	75.8%
2002	800	52,256	992,878	0	992,878	717,979	138.3%
2003	693	47,312	639,621	0	639,621	703,482	90.9%
2004	620	43,821	963,703	0	963,703	711,235	135.5%
2005	550	40,384	442,865	0	442,865	723,443	61.2%
2006	479	36,696	767,624	0	767,624	723,865	106.0%
2007	421	34,105	399,769	0	399,769	742,631	53.8%
2008	369	31,553	685,297	91,567	776,865	756,364	102.7%
2009	323	29,232	758,927	184,347	943,274	764,629	123.4%
2010	281	27,241	788,046	360,221	1,148,267	784,465	146.4%
2011	232	24,395	788,523	264,102	956,931	764,933	125.1%
2012	201	23,032	280,676	926	256,002	789,061	32.4%
2013	171	21,271	593,954	326,412	836,696	791,426	105.7%
2014	146	19,268	523,217	136,888	660,105	764,512	86.3%
2015	117	16,700	388,899	505,491	894,391	726,205	123.2%
All Years	7,342	567,774	10,169,142	1,869,954	11,834,133	11,980,287	98.8%

Attachment C1
Senior Health Insurance Company of Pennsylvania
Projected Lives, Deaths and Lapses by Projection Year
Non-NFO, Non-LWPS (Lifetime Waiver of Premium, Spouse)

Projection Year	Attained Age 80 at start of projection					Attained Age 85 at start of projection					Attained Age 90 at start of projection				
	Exposures	Deaths	Lapses	Projected Termination Rate	Actual Attained Age Termination Rate	Exposures	Deaths	Lapses	Projected Termination Rate	Actual Attained Age Termination Rate	Exposures	Deaths	Lapses	Projected Termination Rate	Actual Attained Age Termination Rate
2016	1,451					2,158					1,365				
2017	1,367	69	16	5.8%	6.2%	1,922	166	70	10.9%	10.4%	1,125	150	91	17.6%	17.4%
2018	1,276	73	18	6.6%	6.8%	1,697	158	67	11.7%	11.9%	912	136	77	18.9%	18.9%
2019	1,182	75	20	7.4%	7.7%	1,481	153	63	12.7%	12.4%	727	121	63	20.2%	19.9%
2020	1,084	77	21	8.3%	8.4%	1,277	146	58	13.8%	14.1%	570	106	52	21.7%	22.6%
2021	985	77	22	9.1%	9.1%	1,086	138	53	14.9%	15.7%	437	91	41	23.3%	23.8%
2022	887	77	22	10.0%	10.4%	911	128	47	16.1%	17.4%	328	77	32	25.0%	27.1%
2023	790	75	22	11.0%	11.9%	752	118	41	17.5%	18.9%	240	64	24	26.8%	29.2%
2024	695	73	21	11.9%	12.4%	609	107	36	18.9%	19.9%	171	51	18	28.8%	32.4%
2025	605	70	20	13.1%	14.1%	485	94	30	20.4%	22.6%	118	40	13	30.9%	31.8%
2026	518	67	19	14.3%	15.7%	377	83	25	22.2%	23.8%	79	30	9	33.3%	38.1%
2027	439	61	17	15.2%	17.4%	288	70	20	23.8%	27.1%	50	22	6	35.8%	35.0%
2028	367	57	16	16.5%	18.9%	215	57	16	25.3%	29.2%	32	15	4	37.3%	
2029	302	51	14	17.8%	19.9%	157	46	12	27.2%	32.4%	19	10	2	38.7%	
2030	244	45	12	19.1%	22.6%	111	37	9	29.1%	31.8%	11	7	1	43.9%	
2031	194	40	10	20.4%	23.8%	76	28	7	31.5%	38.1%	4	6	1	63.8%	
2032	151	35	8	22.2%	27.1%	49	22	5	34.9%	35.0%	-	4	0	100.0%	
2033	115	30	7	24.1%	29.2%	34	12	3	31.2%		-	(0)	0	N/A	
2034	85	24	5	25.8%	32.4%	19	13	2	44.0%		-	(0)	0	N/A	
2035	61	20	4	28.8%	31.8%	12	6	1	37.1%		-	(0)	0	N/A	
2036	43	15	3	29.6%	38.1%	1	11	1	95.1%		-	(0)	0	N/A	
2037	29	11	2	31.2%	35.0%	-	0	0	100.0%		-	(0)	0	N/A	
2038	20	8	1	31.8%		-	(0)	0	N/A		-	-	-	N/A	
2039	10	9	1	50.6%		-	(0)	0	N/A		-	-	-	N/A	
2040	7	2	1	29.7%		-	(0)	0	N/A		-	-	-	N/A	
2041	-	7	0	100.0%		-	(0)	0	N/A		-	-	-	N/A	
2042	-	(0)	0	N/A		-	(0)	0	N/A		-	-	-	N/A	

Attachment C2
Senior Health Insurance Company of Pennsylvania
Projected Lives, Deaths and Lapses by Projection Year as of 12/31/2016
Non-NFO - TRN

Projection Year	Attained Age 85 at start of projection					Attained Age 86 at start of projection					Attained Age 87 at start of projection				
	Exposures	Deaths	Lapses	Projected Termination Rate	Actual Attained Age Termination Rate	Exposures	Deaths	Lapses	Projected Termination Rate	Actual Attained Age Termination Rate	Exposures	Deaths	Lapses	Projected Termination Rate	Actual Attained Age Termination Rate
2016	807					886					852				
2017	726	60	21	10.0%	9.0%	787	70	29	11.2%	10.1%	746	72	34	12.4%	11.6%
2018	651	58	17	10.4%	10.1%	694	69	24	11.8%	11.6%	648	70	28	13.2%	12.7%
2019	573	57	20	11.9%	11.6%	602	66	26	13.2%	12.7%	551	68	29	14.9%	14.6%
2020	497	55	22	13.3%	12.7%	513	63	27	14.9%	14.6%	460	63	28	16.5%	16.2%
2021	424	52	21	14.7%	14.6%	429	59	25	16.3%	16.2%	377	57	26	18.0%	18.4%
2022	356	49	19	15.9%	16.2%	353	54	22	17.7%	18.4%	304	52	22	19.4%	21.3%
2023	295	45	16	17.3%	18.4%	287	48	18	18.9%	21.3%	240	46	18	21.1%	21.2%
2024	240	41	14	18.6%	21.3%	228	43	15	20.5%	21.2%	186	39	15	22.4%	23.3%
2025	192	37	12	20.2%	21.2%	177	38	13	22.5%	23.3%	141	34	12	24.4%	25.7%
2026	149	32	10	22.0%	23.3%	134	32	10	24.1%	25.7%	103	29	9	26.8%	27.3%
2027	115	27	8	23.3%	25.7%	99	27	8	25.9%	27.3%	74	22	7	28.0%	26.6%
2028	86	23	6	25.2%	27.3%	72	21	6	27.5%	26.6%	52	18	5	30.5%	
2029	63	18	5	27.0%	26.6%	51	17	4	29.4%	32.3%	35	13	4	32.1%	
2030	45	14	4	28.7%	32.3%	35	13	3	31.3%	32.3%	23	10	2	35.1%	
2031	31	11	3	30.0%	32.3%	23	10	2	34.2%	45.0%	15	6	2	32.9%	
2032	20	9	2	34.5%	45.0%	16	6	1	30.9%	50.0%	9	6	1	44.1%	
2033	14	6	1	33.5%	50.0%	9	6	1	44.2%		6	2	1	27.6%	
2034	8	5	1	40.0%	50.0%	6	2	1	33.4%		0	6	0	95.9%	
2035	5	3	0	42.4%	44.4%	1	5	0	83.2%		-	0	0	100.0%	
2036	1	3	0	72.8%	40.0%	-	1	0	100.0%		-	(0)	0	N/A	
2037	-	1	0	100.0%	0.0%	-	(0)	0	N/A		-	(0)	0	N/A	
2038	-	(0)	0	N/A		-	(0)	0	N/A		-	(0)	0	N/A	
2039	-	(0)	0	N/A		-	(0)	0	N/A		-	(0)	0	N/A	
2040	-	(0)	0	N/A		-	(0)	0	N/A		-	(0)	0	N/A	
2041	-	(0)	0	N/A		-	(0)	0	N/A		-	-	-	N/A	
2042	-	(0)	0	N/A		-	-	-	N/A		-	-	-	N/A	

Attachment C3
Senior Health Insurance Company of Pennsylvania
Projected Lives, Deaths and Lapses by Projection Year as of 12/31/2016
Non-NFO- TRN

Projection Year	Attained Age 88 at start of projection					Attained Age 89 at start of projection					Attained Age 90 at start of projection				
	Exposures	Deaths	Lapses	Projected Termination Rate	Actual Attained Age Termination Rate	Exposures	Deaths	Lapses	Projected Termination Rate	Actual Attained Age Termination Rate	Exposures	Deaths	Lapses	Projected Termination Rate	Actual Attained Age Termination Rate
2016	1,040					984					744				
2017	896	98	46	13.8%	12.7%	836	102	46	15.0%	14.6%	625	83	37	16.0%	16.2%
2018	765	94	37	14.6%	14.6%	703	96	37	15.9%	16.2%	519	77	29	17.0%	18.4%
2019	641	88	37	16.3%	16.2%	579	88	36	17.6%	18.4%	420	70	28	18.9%	21.3%
2020	526	80	35	17.9%	18.4%	467	79	33	19.4%	21.3%	333	62	25	20.7%	21.2%
2021	423	72	31	19.6%	21.3%	368	70	29	21.1%	21.2%	258	54	21	22.7%	23.3%
2022	333	63	26	21.1%	21.2%	284	60	23	22.8%	23.3%	195	46	17	24.3%	25.7%
2023	258	55	21	22.7%	23.3%	215	51	19	24.4%	25.7%	144	38	13	26.3%	27.3%
2024	194	47	17	24.7%	25.7%	158	42	14	26.4%	27.3%	103	31	10	28.3%	26.6%
2025	143	38	13	26.3%	27.3%	113	34	11	28.6%	26.6%	72	24	7	30.3%	32.3%
2026	103	31	10	28.2%	26.6%	79	26	8	30.2%	32.3%	48	18	5	32.7%	32.3%
2027	70	25	7	31.5%	32.3%	53	21	6	33.1%	32.3%	31	13	3	34.9%	45.0%
2028	49	17	5	30.6%	32.3%	34	15	4	36.3%	45.0%	20	9	2	37.1%	
2029	32	14	3	34.9%	45.0%	21	10	2	38.3%	50.0%	12	6	1	37.5%	
2030	18	11	2	41.9%	50.0%	14	6	1	34.1%	50.0%	7	4	1	41.0%	
2031	12	6	1	37.6%	50.0%	8	5	1	43.2%	44.4%	3	3	0	52.8%	
2032	7	3	1	36.0%	44.4%	2	5	0	68.8%	40.0%	-	3	0	100.0%	
2033	0	7	0	95.3%	40.0%	-	2	0	100.0%		-	(0)	0	N/A	
2034	-	0	0	100.0%	0.0%	-	(0)	0	N/A		-	(0)	0	N/A	
2035	-	(0)	0	N/A	0.0%	-	(0)	0	N/A		-	(0)	0	N/A	
2036	-	(0)	0	N/A	0.0%	-	(0)	0	N/A		-	(0)	0	N/A	
2037	-	(0)	0	N/A	0.0%	-	(0)	0	N/A		-	(0)	0	N/A	
2038	-	(0)	0	N/A		-	(0)	0	N/A		-	-	-	N/A	
2039	-	(0)	0	N/A		-	-	-	N/A		-	-	-	N/A	
2040	-	-	-	N/A		-	-	-	N/A		-	-	-	N/A	
2041	-	-	-	N/A		-	-	-	N/A		-	-	-	N/A	
2042	-	-	-	N/A		-	-	-	N/A		-	-	-	N/A	

**Senior Health Insurance Company of Pennsylvania
Assumptions from Various Filings
Lapse Rates**

Original Pricing Assumptions By Duration and Milliman Grouping														
Duration	Milliman Groupings													
	A_Bser	A_FQSe	A_HHC1	A_HHC2	A_HHC3	A_HHC4	A_LTC1	A_LTC3	A_LTC6	T_Misc	T10770	T10853	T10955	T11001
1	8.00%	15.00%	22.67%	20.00%	20.00%	20.00%	20.00%	20.00%	22.74%	28.00%	28.00%	28.00%	28.00%	25.00%
2	6.00%	12.50%	17.30%	15.00%	15.00%	15.00%	15.00%	15.00%	19.21%	20.00%	20.00%	20.00%	20.00%	18.00%
3	4.00%	10.00%	11.86%	10.00%	10.00%	10.00%	10.00%	10.00%	15.96%	15.00%	15.00%	15.00%	15.00%	14.00%
4	3.00%	7.50%	8.53%	8.00%	8.00%	8.00%	8.00%	8.00%	13.00%	12.00%	12.00%	12.00%	12.00%	11.00%
5	3.00%	5.00%	7.14%	6.00%	6.00%	6.00%	6.00%	6.00%	10.73%	12.00%	12.00%	12.00%	12.00%	11.00%
6	3.00%	5.00%	7.02%	6.00%	5.00%	5.00%	6.00%	6.00%	11.74%	12.00%	12.00%	12.00%	12.00%	11.00%
7	3.00%	5.00%	6.95%	6.00%	4.00%	4.00%	6.00%	6.00%	11.50%	12.00%	12.00%	12.00%	12.00%	11.00%
8	3.00%	5.00%	6.86%	6.00%	3.00%	3.00%	6.00%	6.00%	11.26%	12.00%	12.00%	12.00%	12.00%	11.00%
9	3.00%	5.00%	6.60%	6.00%	3.00%	3.00%	6.00%	6.00%	11.00%	12.00%	12.00%	12.00%	12.00%	11.00%
10	3.00%	5.00%	6.20%	6.00%	3.00%	3.00%	6.00%	6.00%	10.72%	12.00%	12.00%	12.00%	12.00%	11.00%
11+	3.00%	5.00%	6.05%	6.00%	3.00%	3.00%	6.00%	6.00%	2.10%	12.00%	12.00%	12.00%	12.00%	11.00%

Current Actuarial Assumptions Ultimate Lapse Rates by Milliman Grouping Year End 2016 Assumptions														
Duration	Milliman Groupings													
	A_Bser	A_FQSe	A_HHC1	A_HHC2	A_HHC3	A_HHC4	A_LTC1	A_LTC3	A_LTC6	T_Misc	T10770	T10853	T10955	T11001
Ultimate	0.52%	1.89%	4.34%	4.34%	4.34%	4.34%	3.72%	1.84%	1.96%	2.86%	2.86%	2.86%	2.86%	2.86%

An additional lapses increasing by attained age, starting at attained age 80 at zero and increasing to 5% at age 100.

Notes:

- 1) For an index of what policy forms are including in each "Milliman Grouping", see Exhibit D of rate increase Actuarial Memorandum.
- 2) Only ultimate lapse rates are shown for the current actuarial assumptions because by the time we get to cash flow testing for year end 2015 all policyholders are in their ultimate duration.
- 3) For the 2015 cash flow testing, lapse rates were entered into the projection model separately by Milliman Grouping and Issue Age bands. For simplicity and comparison purposes, we are showing only the composited ultimate lapse rates here over all issue ages.
- 4) For the year end 2015 cash flow testing, lapses were calculated by starting from total terminations and backing out expected mortality. The expected mortality is assumed to be lower for the 2015 cash flow testing and thus some of the higher lapse rates are due to the higher assumed mortality.

**Senior Health Insurance Company of Pennsylvania
Assumptions from Various Filings
Mortality Tables**

Original Pricing Assumptions By Milliman Grouping *		
Milliman Grouping	Mortality Table	Inforce Distribution **
A_Bser	1983 GAM	0.6%
A_FQSe	1983 GAM	11.4%
A_HHC1	1979-81 U.S. Population Table	2.1%
A_HHC2	1980 CSO, Table D	0.4%
A_HHC3	1979-81 U.S. Population Table	1.1%
A_HHC4	1979-81 U.S. Population Table	1.3%
A_LTC1	1980 CSO	3.8%
A_LTC3	1980 CSO	2.5%
A_LTC6	1979-81 U.S. Population Table	23.7%
T_Misc	1965-70 SOA Ultimate Combined	0.5%
T10770	1965-70 SOA Ultimate Combined	0.6%
T10853	1965-70 SOA Ultimate Combined	1.5%
T10955	1965-70 SOA Ultimate Combined	30.9%
T11001	1965-70 SOA Ultimate Combined	<u>19.6%</u>
		100.0%

Current Actuarial Assumptions Used For All Milliman Groupings	
Mortality Table Mortality Improvement	85% of 1983 GAM graded up to 100% of 1983 GAM over 10 years 0.6% per year, non-NFO policies only, for 15 years

Notes:

* For index of how "Milliman Groupings" map to individual policy forms, see Exhibit D of rate increase Actuarial Memorandum.

** Distribution here based on historical inforce counts through 12/31/2015. Only looks at count of policy-holders in duration 1.

Distribution shown here to give an idea of the magnitude of each "Milliman Grouping".

**Senior Health Insurance Company of Pennsylvania
Assumptions from Various Filings
Interest Rate ***

Prior Filing	Composite Interest Rate *
Original Pricing Assumptions	4.17%
Current Actuarial Assumptions	4.96%

* Interest rates are composited over all policy forms using historical inforce through 12/31/2015.

**Annual Rate Report for Long-Term Care Insurance Policies
Issued Prior to October 1, 2003
Pre Rate Stability**

**Reporting
Period** **2017**

Company Name	Primerica Life Insurance Company
Company NAIC Number	65919
Form Number(s)	900
Issue Dates	900 - 1989:1990
SERFF Filing Number	_____
Prior SERFF Filing Number(s)	_____

I, Juliet M. Spector, am a member of the American Academy of Actuaries. I meet the Academy's qualification standards for rendering this opinion and am familiar with the requirements for filing and reviewing long-term care insurance premiums.

In my opinion: The premium rate schedule(s) are not sufficient to cover anticipated costs under best estimate assumptions and the premium rate schedule(s) may not be reasonably expected to be sustainable over the life of the policies with no future premium increases anticipated. Based on my review of recent experience of the policies involved, in my opinion, a rate action is necessary at this time as a result of this analysis, and a rate increase filing will be submitted in the future.

In forming my opinion, I have used actuarial assumptions and actuarial methods and such tests of the actuarial calculations as I considered necessary. An actuarial memorandum that provides the historical experience and the expected future and lifetime loss ratios based on the current best-estimate assumptions; and a detailed description and actuarial support for each assumption used in the projections will be provided along with the action plan.

Juliet M. Spector

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March 14, 2019

**Actuarial Memorandum Supporting Annual Filing for
Primerica
Long-Term Care Insurance Plan**

1. SCOPE AND PURPOSE

The purpose of this filing is to compile with Virginia's Annual Rate Report requirements. This filing is for Primerica (the Company) individual long-term care products and associated riders. This filing is not intended to be used for other purposes.

The following memorandum supports the annual rate report submitted June 30, 2018.

2. PROJECTION ASSUMPTIONS

Mortality, lapse, and morbidity assumptions used in the lifetime loss ratio projection are consistent with the assumptions used in SHIP's 2016 cash flow testing. They are based on best estimate assumptions and do not include any margin for adverse deviation.

Interest

A 4.96% net annual rate of interest has been assumed for accumulating historical experience and for discounting projected future experience. This is a weighted average of the valuation rate based on the policy issue date of all policies subject to this filing.

Mortality

Projected future experience assumes 85% of the 1983 Group Annuitant Mortality (GAM), graded up to 100% over 10 years. In addition, a 0.6% per year mortality improvement assumption was used for 15 years.

Lapse Rates

On average, the projected lapse rate is 2.6% (benefit exhaust is not modeled explicitly, but implied in the lapse rate). Projected future experience assumes best estimate lapse rates, which vary by policy form and issue age. There is also an additional lapse applied, which increases by attained age, starting with attained age 80 at zero and increasing to 5% at age 100.

Morbidity

Projected future experience uses morbidity assumptions which are based on SHIP experience. Claim costs were calculated by attained age, sex, marital status, policy duration, benefit period, and elimination period. Adjustment factors were applied to estimated claim costs to reflect actual experience.

3. RENEWABILITY

For Primerica: All policy forms are guaranteed renewable.

4. LIFETIME LOSS RATIO

The development of the anticipated nationwide lifetime loss ratio is shown in Appendix A. An annual interest rate of 4.96% was used to calculate the lifetime loss ratio and was determined based on a weighted average of statutory valuation rates by policies sold by issue year.

5. SUMMARY OF APPENDICES

Appendix A contains an updated development of the nationwide lifetime loss ratio using experience through December 31, 2016. The Appendix includes historical and projected nationwide experience for all policies issued under this product (if the issue range for this product crossed over this state's rate stabilization date, then both policies issued before and after this state's rate stabilization date are included). The premium in Appendix A is shown on a nationwide rate basis. The appendix also includes the anticipated nationwide lifetime loss ratio.

6. ACTUARIAL CERTIFICATION

I, Juliet M. Spector, am a member of the American Academy of Actuaries. I meet the Academy's qualification standards for rendering this opinion and am familiar with the requirements for filing and reviewing long-term care insurance premiums.

In my opinion: The premium rate schedule(s) are not sufficient to cover anticipated costs under best estimate assumptions, and the premium rate schedule(s) may not be reasonably expected to be sustainable over the life of the policies with no future premium increases anticipated. Based on my review of recent experience of the policies involved, in my opinion, a rate action is necessary at this time as a result of this analysis, and a rate increase filing will be submitted in the future.

In forming my opinion, I have used actuarial assumptions and actuarial methods and such tests of the actuarial calculations as I considered necessary.



Juliet M. Spector, FSA, MAAA
Principal and Consulting Actuary



Exhibit 1

**Historical and Projected Experience
Virginia
Excluding product series 11001
Includes Primerica**

Exhibit 1
Senior Health Insurance Company of Pennsylvania (SHIP)
PLI Block of Business Excluding T11001
Historical and Projected Experience
No Rate Increases
Virginia Experience

Historical

Calendar Year	Earned Premium	Incurred Claims	Incurred Ratio
2000 & Prior	52,247	29,348	56%
2001	6,230	0	0%
2002	4,471	0	0%
2003	4,388	0	0%
2004	3,689	0	0%
2005	3,566	0	0%
2006	3,595	0	0%
2007	3,366	0	0%
2008	2,956	0	0%
2009	2,832	0	0%
2010	2,833	0	0%
2011	3,133	0	0%
2012	3,133	0	0%
2013	3,091	0	0%
2014	3,133	0	0%
2015	2,620	88,601	3382%
2016	2,573	936	36%

Baseline Projection

Calendar Year	Earned Premium	Incurred Claims	Incurred Ratio
2017	2,375	12,300	518%
2018	2,131	11,821	555%
2019	1,915	10,775	563%
2020	1,721	9,555	555%
2021	1,549	9,299	600%
2022	1,400	9,284	663%
2023	1,271	9,467	745%
2024	1,158	9,797	846%
2025	1,058	10,203	964%
2026	968	10,582	1093%
2027	886	10,847	1224%
2028	811	10,944	1349%
2029	742	10,819	1459%
2030	676	10,469	1549%
2031	613	9,928	1620%
2032	553	9,453	1710%
2033	495	8,886	1793%
2034	441	8,253	1871%
2035	390	7,589	1948%
2036	341	6,904	2024%
2037	296	6,203	2096%
2038	254	5,493	2163%
2039	215	4,787	2224%
2040	180	4,099	2276%
2041	149	3,439	2316%
2042	120	2,810	2334%
2043	96	2,271	2370%
2044	75	1,776	2377%
2045	57	1,335	2345%
2046	42	960	2270%
2047	31	660	2157%
2048	21	433	2022%
2049	15	273	1881%
2050	9	165	1750%
2051	6	96	1638%
2052	3	54	1543%
2053	2	28	1453%
2054	1	13	1352%
2055 & Later	1	9	1224%

Loss Ratio Summaries

Accumulated Value of Historical to 12/31/2016	224,751	157,607	70%
Present Value of Future to 12/31/2016	15,564	133,665	859%
Total Values (Discounted at 4.96%)	240,315	291,272	121%
Projected Lifetime Loss Ratio			121%
Minimum Lifetime Loss Ratio			60%
Maximum Allowable Increase			1575%
Requested Rate Increase			40%



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March 28, 2019

Actuarial Memorandum Supporting Annual Filing for Primerica Long-Term Care Insurance Plan

1. SCOPE AND PURPOSE

The purpose of this filing is to comply with Virginia's Annual Rate Report requirements. This filing is for Primerica (the Company) individual long-term care products and associated riders. This filing is not intended to be used for other purposes.

The following memorandum supports the June 30, 2018 annual rate report.

2. PROJECTION ASSUMPTIONS

Mortality, lapse, and morbidity assumptions used in the lifetime loss ratio projection are consistent with the assumptions used in SHIP's 2017 cash flow testing. They are based on best estimate assumptions and do not include any margin for adverse deviation.

Interest

A 5.05% net annual rate of interest has been assumed for accumulating historical experience and for discounting projected future experience. This is a weighted average of the valuation rate based on the policy issue date of all policies subject to this filing.

Mortality

Projected future experience assumes 88% of the 1983 Group Annuitant Mortality (GAM), graded up to 100% over 10 years. In addition, a 0.6% per year mortality improvement assumption was used for 15 years.

Lapse Rates

On average, the projected lapse rate is 2.5%, comprised of an average assumption of 1.8% for policies with inflation protection and 3.3% for policies without inflation protection (benefit exhaust is not modeled explicitly, but implied in the lapse rate). Projected future experience assumes best estimate lapse rates, which vary by policy form, issue age, and inflation. There is also an additional lapse applied, which increases by attained age, starting with attained age 80 at zero and increasing to 5% at age 100.

Morbidity

Projected future experience uses morbidity assumptions which are based on SHIP experience. Claim costs were calculated by attained age, sex, marital status, policy duration, benefit period, and elimination period. Adjustment factors were applied to estimated claim costs to reflect actual experience.

3. RENEWABILITY

For Primerica: All policy forms are guaranteed renewable.

4. LIFETIME LOSS RATIO

The development of the anticipated Virginia lifetime loss ratio is shown in Exhibit 1. An annual interest rate of 5.05% was used to calculate the lifetime loss ratio and was determined based on a weighted average of statutory valuation rates by policies sold by issue year.

5. SUMMARY OF EXHIBITS

Exhibit 1 contains an updated development of the Virginia lifetime loss ratio using experience through December 31, 2017. The Exhibit includes historical and projected Virginia experience for all policies issued under this product (if the issue range for this product crossed over this state's rate stabilization date, then both policies issued before and after this state's rate stabilization date are included). The premium in Exhibit 1 is shown on a nationwide rate basis. The exhibit also includes the anticipated Virginia lifetime loss ratio.

6. ACTUARIAL CERTIFICATION

I, Juliet M. Spector, am a member of the American Academy of Actuaries. I meet the Academy's qualification standards for rendering this opinion and am familiar with the requirements for filing and reviewing long-term care insurance premiums.

In my opinion: The premium rate schedule(s) are not sufficient to cover anticipated costs under best estimate assumptions, and the premium rate schedule(s) may not be reasonably expected to be sustainable over the life of the policies with no future premium increases anticipated. Based on my review of recent experience of the policies involved, in my opinion, a rate action is necessary at this time as a result of this analysis, and a rate increase filing will be submitted in the future.

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Juliet M. Spector, FSA, MAAA
Principal and Consulting Actuary



Exhibit 1

**Historical and Projected Experience
Virginia
All product series
Includes Primerica**

Exhibit 1
Senior Health Insurance Company of Pennsylvania (SHIP)
PLI Block of Business
Historical and Projected Experience
No Rate Increases
Virginia Experience

Historical

Calendar Year	Earned Premium	Incurred Claims	Incurred Ratio
2000 & Prior	52,247	29,298	56%
2001	6,230	0	0%
2002	4,471	0	0%
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2004	3,689	0	0%
2005	3,566	0	0%
2006	3,595	0	0%
2007	3,366	0	0%
2008	2,956	0	0%
2009	2,832	0	0%
2010	2,833	0	0%
2011	3,133	0	0%
2012	3,133	0	0%
2013	3,091	0	0%
2014	3,133	0	0%
2015	2,620	117,675	4491%
2016	2,573	935	36%
2017	2,573	935	36%

Baseline Projection

Calendar Year	Earned Premium	Incurred Claims	Incurred Ratio
2018	2,356	12,083	513%
2019	2,079	11,485	552%
2020	1,849	10,861	587%
2021	1,658	10,543	636%
2022	1,498	10,527	703%
2023	1,362	10,769	791%
2024	1,245	11,211	900%
2025	1,144	11,773	1029%
2026	1,053	12,329	1171%
2027	970	12,762	1315%
2028	894	12,997	1453%
2029	823	12,989	1578%
2030	756	12,736	1686%
2031	690	12,274	1778%
2032	627	11,641	1855%
2033	567	10,969	1935%
2034	509	10,283	2021%
2035	453	9,543	2106%
2036	400	8,762	2190%
2037	350	7,946	2271%
2038	303	7,106	2348%
2039	259	6,257	2418%
2040	218	5,416	2481%
2041	182	4,600	2534%
2042	148	3,815	2570%
2043	119	3,067	2575%
2044	94	2,399	2563%
2045	72	1,819	2528%
2046	54	1,319	2448%
2047	39	914	2326%
2048	28	605	2181%
2049	19	384	2028%
2050	12	234	1887%
2051	8	138	1765%
2052	5	77	1662%
2053	3	41	1569%
2054	1	20	1447%
2055	1	9	1354%
2056 & Later	0	5	1379%

Loss Ratio Summaries

Accumulated Value of Historical to 12/31/2017	241,990	199,475	82%
Present Value of Future to 12/31/2017	15,259	148,698	974%
Total Values (Discounted at 5.05%)	257,249	348,172	135%
Projected Lifetime Loss Ratio			135%
Minimum Lifetime Loss Ratio			60%
Maximum Allowable Increase			2117%
Requested Rate Increase			40%

Senior Health Insurance Company of Pennsylvania Long Term Care Insurance Rate Increase Filings

SUPPLEMENTAL INFORMATION – KEY ASSUMPTIONS

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Senior Health Insurance Company of Pennsylvania (SHIP) is seeking rate increases on its Long Term Care Insurance (LTC) products because current estimates of lifetime loss ratios are in excess of expected.

We are now projecting lifetime loss ratios far in excess of what was assumed when the product was priced. Below describes how the key assumptions were derived.

MODEL

The projections of future experience were modeled using Milliman's modeling software, MG-ALFA. The assumptions, methodology, and distribution of business are listed in the Actuarial Memorandum, supporting the rate increase filing and described in further detail in this document. The model used the inforce policies as of December 31, 2017.

LAPSE STUDY DETAILS

For 2017 cash flow testing, Milliman created a lapse study that derived lapse rates, using 88% of the '83 GAM as the assumed mortality table, by calendar year, by policy duration, by form grouping, by inflation type, and by a number of other variables. NFO and lifetime waiver spouse policies were included in both the numerator and the denominator of the calculation of the lapse rate for the year in which the person went onto paid up status (i.e., they were not counted as a lapse), and were excluded from both the numerator and denominator for years after the change to NFO or lifetime waiver status (i.e., so their 100% persistency after that point did not affect the future lapse calculation).

An additional lapse increasing by attained age, starting at attained age 80 at 0% and increasing to 5% at age 100, is also included. This change was driven by older attained age lapse experience exhibited on the block.

Tables 1a and 1b below shows the voluntary lapse rates used in this model. Table 1a shows lapse rates for inflationary policies, while Table 1b contains lapse rates for policies with no inflation rider.

We have developed lapse rates and mortality rates for the 2017 cash flow testing and projection based on experience year 2016. Due to the total termination model, a more recent experience year of 2016 is best at accounting for the impact of benefit exhaust and total terminations. We observe in prior lapse and mortality studies that the lapse rate and mortality rate are typically incomplete for the last year of the study; therefore, we used 2016 experience year for the assumption.

**Senior Health Insurance Company of Pennsylvania
Long Term Care Insurance Rate Increase Filings**

SUPPLEMENTAL INFORMATION – KEY ASSUMPTIONS

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**Table 1a
Senior Health Insurance Company of Pennsylvania
Ultimate Voluntary Lapse Rates by Age – Used for 2017CFT*
With Inflation Protection**

Form	Issue Age Band							All Issue Ages
	<55	55-59	60-64	65-69	70-74	75-79	80+	
LTC-89	2.8%	2.8%	2.8%	2.8%	2.8%	2.8%	2.8%	4.1%
LTC-1	2.5%	2.5%	2.5%	6.7%	6.7%	6.7%	6.7%	3.3%
LTC-3	0.5%	0.5%	3.0%	3.0%	3.0%	3.0%	3.0%	2.1%
LTC-6	0.5%	0.5%	0.6%	0.5%	0.5%	0.5%	0.5%	0.8%
HHC-FL	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
HHC-non-FL	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	2.8%
FQ	1.3%	0.5%	1.1%	1.3%	1.3%	1.3%	1.3%	1.1%
B Series	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
JC Penney	0.5%	0.5%	1.7%	9.2%	9.2%	9.2%	9.2%	3.0%
Miscellaneous	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
UGLI	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Transport	0.5%	0.5%	2.2%	4.4%	4.4%	4.4%	4.4%	1.8%

**2017CFT assumes 88% of the '83 GAM.*

**Table 1b
Senior Health Insurance Company of Pennsylvania
Ultimate Voluntary Lapse Rates by Age – Used for 2017CFT*
No Inflation Protection**

Form	Issue Age Band							All Issue Ages
	<55	55-59	60-64	65-69	70-74	75-79	80+	
LTC-89	2.1%	2.1%	2.1%	4.0%	4.0%	4.0%	4.0%	2.8%
LTC-1	3.2%	3.2%	3.2%	6.4%	7.8%	14.2%	14.2%	5.7%
LTC-3	1.6%	1.6%	1.6%	4.6%	4.6%	4.6%	4.6%	2.8%
LTC-6	1.9%	1.9%	0.8%	2.2%	6.0%	6.0%	6.0%	2.5%
HHC-FL	0.5%	0.5%	0.5%	1.8%	6.0%	6.0%	6.0%	1.8%
HHC-non-FL	4.6%	4.6%	4.6%	5.3%	5.9%	5.9%	5.9%	5.5%
FQ	1.2%	0.5%	0.5%	1.8%	4.4%	9.4%	9.4%	2.5%
B Series	0.5%	0.5%	0.5%	0.5%	2.5%	2.5%	2.5%	1.3%
JC Penney	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.1%
Miscellaneous	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	4.5%
UGLI	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Transport	0.5%	0.5%	2.2%	5.5%	5.5%	5.5%	5.5%	3.9%

**2017CFT assumes 88% of the '83 GAM.*

**Senior Health Insurance Company of Pennsylvania
Long Term Care Insurance Rate Increase Filings**

SUPPLEMENTAL INFORMATION – KEY ASSUMPTIONS

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Detailed results of SHIP's internal lapse study are provided in the Attachments at the end of this memo:

- Attachment A-1: Ultimate Voluntary Lapse Rates by Policy Form and Issue Age
- Attachment A-2: Lapse Study for 2017, ATL Projected Lives, Deaths, and Lapses (Attained Ages 80, 85, 90)
- Attachment A-3: Lapse Study for 2017, TRN Projected Lives, Deaths, and Lapses (Attained Ages 85, 86, 87)
- Attachment A-4: Lapse Study for 2017, TRN Projected Lives, Deaths, and Lapses (Attained Ages 88, 89, 90)
- Attachment A-5: Lapse Study for 2017, Termination Rates By Attained Age and Year
- Attachment A-6: Morbidity Study for 2017, ATL Analysis by Experience Year
- Attachment A-7: Morbidity Study for 2017, Transport Analysis by Experience Year

MORTALITY STUDY DETAILS

A mortality study was conducted by SHIP by comparing the Social Security number and insured name on policies terminating to the Social Security death master file. The past few years, the death master file has been supplemented with information from the Pension Benefit Institute. Data was pulled for 2005 through 2017. Actual to expected mortality studies were performed by comparing the actual number of deaths, by policy form grouping, policy duration, age, and calendar year, to the expected number of deaths derived from applying the '83 GAM to exposure. The A to E's varied by a number of these factors, but generally were increasing and were around 88% of the '83 GAM in 2016 (the most recent "complete" year).

For the 2017CFT, 88% of the '83 GAM was graded up to 100% of the '83 GAM over 10 years. On top of this, a 0.6% per year mortality improvement assumption was used for 15 years. This assumption is consistent with the rate increase projection.

Detailed results of SHIP's internal mortality study are provided in the Tables 2, 3, and 4 below.

**Senior Health Insurance Company of Pennsylvania
Long Term Care Insurance Rate Increase Filings**

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**Table 2
Senior Health Insurance Company of Pennsylvania
Experience Through December 31, 2017
Mortality Study for 2017 - By Experience Year**

Experience Year	Actual Number of Deaths	Mortality A:E
2005	7,644	70%
2006	7,245	68
2007	7,398	71
2008	7,256	70
2009	7,993	80
2010	8,291	87
2011	7,947	86
2012	7,580	86
2013	7,398	87
2014	6,856	85
2015	6,681	88
2016	6,320	88

**Table 3
Senior Health Insurance Company of Pennsylvania
Experience Year 2016
Mortality Study for 2017
By Policy Duration**

Duration	Actual Number of Deaths	Mortality A:E
13	17	71%
14	64	71
15	124	83
16	252	79
17	335	80
18	426	87
19	652	89
20	813	92
21+	3,637	89
Total	6,320	88

**Senior Health Insurance Company of Pennsylvania
Long Term Care Insurance Rate Increase Filings**

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**Table 4
Senior Health Insurance Company of Pennsylvania
Experience Year 2016
Mortality Study for 2017
By Policy Form Group**

Group	Actual Number of Deaths	Mortality A:E
A_Bser	110	73%
A_FQSe	724	84
A_HHC	1,003	87
A_JCP0	386	97
A_LT89	205	83
A_LTC1	896	96
A_LTC3	358	89
A_LTC6	985	87
A_MISC	141	92
A_UGLI	4	125
Transport	1,508	85
Total	6,320	88

**Table 5
Senior Health Insurance Company of Pennsylvania
Experience Year 2016
Mortality Study for 2017
By Issue Age Group**

Group	Actual Number of Deaths	Mortality A:E
<55	77	77%
55-59	435	71
60-64	2,212	82
65-69	4,454	87
70-74	5,723	88
75-79	6,227	88
80+	93	77
Total	6,320	88

**Senior Health Insurance Company of Pennsylvania
Long Term Care Insurance Rate Increase Filings**

SUPPLEMENTAL INFORMATION – KEY ASSUMPTIONS

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TOTAL TERMINATION RATES

In the past, lapse rates were developed that varied by policy form and issue age band. An additional lapse is included that increases by attained age, starting at age 80 at 0% and increasing to 5% at age 100, consistent with last year. This was reviewed in light of recent experience observed by other LTC carriers, a new SOA / LIMRA persistency study released in 2016, as well as a review of SHIP's data. We note that part of the driver for the assumption is implicit benefit exhaustion that is not explicitly modeled in the projection. Benefit exhaustion is likely to increase further in the future as a greater percentage of members go on claim.

The persistency assumptions used for 2017 CFT include multiple components. The projection impact is ultimately driven by the combination of these components, so it is important to examine the overall persistency level relative to historical experience. Please see Attachments A-2, A-3 and A-4 for an analysis of termination rates contained in the projection relative to historical experience. The analysis compares actual and projected termination rates by attained age for several sample attained ages at the start of the projection. This analysis demonstrates that the final policy termination assumptions are generally at or below actual observed terminations by attained age.

MORBIDITY STUDY DETAILS

A claim experience analysis was performed on all of the Company's LTC business in order to develop appropriate morbidity assumptions for the loss ratio projections.

For ATL and Transport, the morbidity expected claim cost assumptions are based on a Conseco 2006 claim cost study, with claim costs by attained age, sex, marital status, coverage type (i.e., NH, Comprehensive, and HHC), issued in Florida or other than Florida, policy duration, benefit period, and elimination period. We developed actual to expected adjustment factors, where appropriate, and applied them to these expected claim costs. The 2006 Conseco claim costs were developed on a total lives basis and, thus, the MG-ALFA model is a total lives model.

Actual to expected adjustment factors have been applied in our models by policy plan, by issue age grouping, by benefit period, by inflation type, and by marital status. The adjustment factors were developed to adjust for correlations between policy plans, issue age groups, benefit periods, and inflation types. As a result, some adjusting factors are different than in prior years, as well as the additional marital status adjustment.

The experience period for the actual to expected adjustment factors was 2007 to 2016, for both ATL and Transport. Consistent with 2016CFT, we then backed out an estimated 10% "woodwork effect" for what we deemed the relevant adverse selection years due to the rate increases (2010, 2011, and 2012 for ATL and 2011, 2012, and 2013 for Transport). Detailed results of SHIP's internal morbidity studies are provided in Attachments A-6 and A-7 at the end of this memo. These studies use experience from January 1, 2000, through September 30, 2017, are shown by experience year, and are shown separately for each policy form grouping within ATL and Transport.

The following Table 6 shows the A:E's that were chosen for the 2017 CFT, by form grouping. Tables 7, 8, 9, and 10 show the A:E's chosen by issue age, by benefit period, by inflation option, and by marital status.

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Long Term Care Insurance Rate Increase Filings**

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The actual to expected factors are global, i.e., applied to all claim costs in all durations with the exception of those in NFO status. The NFO policies were adjusted by calendar year period from the start of the projection with an adjustment factor of 0.625 in calendar year 2016, grading to an ultimate of 0.825 in 2024 and thereafter. Table 6 provides the global adjustments by policy form groupings used in the model.

Table 6 Senior Health Insurance Company of Pennsylvania Actual to Expected Adjustments by Policy Form Grouping	
Form Grouping	2017CFT
B Series	1.033
FQ Series	1.498
HHC-1	1.238
HHC-2	0.754
HHC-3	1.320
HHC-4	1.359
JC Penney	1.022
LTC-89	0.933
LTC-1	0.992
LTC-3	0.981
LTC-6	1.029
Miscellaneous	1.080
UGLI	0.792
T10770	0.844
T10853	0.982
T10955	1.259
T11001	1.048
T_MISC	0.973
NFO	0.625 grading up 2.5% per year for 9 calendar years to 0.825

For 2017CFT, an ultimate factor of .98 and 1.011 was applied to ATL and Transport, respectively, to adjust for recent morbidity experience.

In addition to looking at A:E's by experience year and by form grouping, we looked at A:E's by issue age and duration. This showed A:E's for the older issue ages that are much higher than A:E's for the younger issue ages. This difference in morbidity by issue age does not appear to wear-off as the issue age group ages. In other words, those who are issued at a younger age have better morbidity at the higher attained ages than those who were issued at the higher ages. The following table shows the A:E factors by issue age that were applied in the projection.

**Senior Health Insurance Company of Pennsylvania
Long Term Care Insurance Rate Increase Filings**

SUPPLEMENTAL INFORMATION – KEY ASSUMPTIONS

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**Table 7
Senior Health Insurance Company of Pennsylvania
Actual to Expected Adjustments by Issue Age
Grouping (Normalized)**

Issue Age	2017CFT	
	ATL	Transport
52	0.802	1.068
57	0.910	0.893
62	0.958	0.970
67	0.978	1.039
72	1.058	1.143
77	1.038	1.173
82	1.217	1.717
87	1.259	N/A

Actual to expected factors that varied by benefit period were also applied. The factors used are shown in Tables 8a and 8b.

**Table 8a
Senior Health Insurance Company of Pennsylvania
ATL – Long Term Care
Actual to Expected Adjustments by Benefit Period (Normalized)**

Benefit Period	B Series & FQ Series	JC Penney	LTC-6	ATL- 2017CFT	
				LTC-89, LTC-1, LTC-3, ATL Misc & UGLI	HHC
1 year	0.805	1.838	0.787	0.951	1.000
2 years	0.903	1.022	0.769	0.857	1.000
3 years	0.934	2.993	0.883	0.943	1.000
4 years (J)	1.121	1.126	0.983	1.059	1.000
4 years (U)	N/A	0.568	N/A	N/A	1.000
5 years	0.970	1.142	1.031	0.968	1.000
6 years	N/A	0.716	N/A	N/A	1.000
Lifetime (T)	1.065	1.340	1.127	1.120	1.000
Lifetime (W)	N/A	0.611	N/A	N/A	1.000

**Senior Health Insurance Company of Pennsylvania
Long Term Care Insurance Rate Increase Filings**

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Table 8b Senior Health Insurance Company of Pennsylvania Transport – Long Term Care Actual to Expected Adjustments by Benefit Period (Normalized)						
Benefit Period	TRN – 2017CFT					
	T_Misc	T10770	T10853	T10955	T11001	T11001
1 Year	0.582	1.026	0.836	0.694		0.952
2 Year	0.423	0.943	0.844	0.863		0.890
3 Year	0.660	0.828	0.954	0.809		0.922
4 Year (J)	1.087	0.762	1.010	0.876		0.933
5 Year	0.965	1.000	1.000	1.000		1.000
Lifetime (T)	1.437	1.414	1.256	1.045		1.035

Lastly, actual to expected factors were applied by inflation option and marital status, based on the factors shown in Table 9 and Table 10, respectively.

Table 9 Senior Health Insurance Company of Pennsylvania Actual to Expected Adjustments by Inflation Type (Normalized)		
2017CFT		
Inflation Type	ATL	Transport
None	0.99	0.98
Compound	1.03	1.01
Simple	1.03	0.97

Table 10 Senior Health Insurance Company of Pennsylvania Actual to Expected Adjustments by Marital Status (Normalized)		
2017CFT		
Marital Status	ATL	Transport
Single	0.894	N/A
Married	1.246	N/A

Morbidity was assumed to improve by 1.6% per year for 12 years and 1.2% for the following 3 years.

In addition, some utilization improvement is assumed on compound inflation reimbursement policies (4% inflation for NH and 2% for HHC). This is a small adjustment as the majority of compound inflation policies are indemnity policies, and this adjustment only applied to the small percentage of policies that were reimbursement.

**Senior Health Insurance Company of Pennsylvania
Long Term Care Insurance Rate Increase Filings**

SUPPLEMENTAL INFORMATION – KEY ASSUMPTIONS

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The actual to expected ratios shown above were calculated assuming no historic morbidity improvement. If the same 1.6% per year morbidity improvement assumption had been built into the past expected claim costs, the expected claims would have increased, and the actual to expected ratios would be lower.

Adverse selection is also included and dependent on rate increase class and magnitude. 5% compound inflation policies receive a 5% adverse selection adjustment when facing a 40% rate increase. A rate increase below 40% would scale the 5% adverse selection down by a proportionate amount. Similarly, the adverse selection for 0 Day EP and other policies facing a rate increase is 5%, and will scale down based on a respective 30% and 25% rate increase.

Attachment A-1a
Senior Health Insurance Company of Pennsylvania
Ultimate Voluntary Lapse Rates by Policy Form and Issue Age
Used for 2017 CFT / 2017 Plan - With Inflation Protection

Form	Issue Age Band							All Issue Ages
	<55	55-59	60-64	65-69	70-74	75-79	80+	
LTC-89	2.8%	2.8%	2.8%	2.8%	2.8%	2.8%	2.8%	4.1%
LTC-1	2.5%	2.5%	2.5%	6.7%	6.7%	6.7%	6.7%	3.3%
LTC-3	0.5%	0.5%	3.0%	3.0%	3.0%	3.0%	3.0%	2.1%
LTC-6	0.5%	0.5%	0.6%	0.5%	0.5%	0.5%	0.5%	0.8%
HHC-FL	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
HHC-non-FL	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	2.8%
FQ	1.3%	0.5%	1.1%	1.3%	1.3%	1.3%	1.3%	1.1%
B Series	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
JC Penney	0.5%	0.5%	1.7%	9.2%	9.2%	9.2%	9.2%	3.0%
Miscellaneous	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
UGLI	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Transport	0.5%	0.5%	2.2%	4.4%	4.4%	4.4%	4.4%	1.8%

Attachment A-1b
Senior Health Insurance Company of Pennsylvania
Non-NFO Member Count by Age & Policy Form - Lapse Experience Year 2016
Member Count for policies with Inflation protection

Form	Issue Age Band							All Issue Ages
	<55	55-59	60-64	65-69	70-74	75-79	80+	
LTC-89	24	89	404	182	33	1	0	733
LTC-1	63	175	697	317	64	4	0	1,320
LTC-3	181	392	1,226	452	45	12	0	2,308
LTC-6	472	735	1,977	928	183	10	0	4,305
HHC-FL	23	36	93	80	6	0	0	238
HHC-non-FL	71	142	297	241	81	24	3	859
FQ	569	849	902	548	172	26	0	3,066
B Series	77	95	150	152	86	19	3	582
JC Penney	194	340	977	406	72	3	0	1,992
Miscellaneous	15	59	82	46	5	0	0	207
UGLI	0	0	0	0	0	0	0	-
Transport	900	2,952	4,344	1,892	269	7	0	10,364

Attachment A-1c
Senior Health Insurance Company of Pennsylvania
Ultimate Voluntary Lapse Rates by Policy Form and Issue Age
Used for 2017 CFT / 2017 Plan - No Inflation Protection

Form	Issue Age Band							All Issue Ages
	<55	55-59	60-64	65-69	70-74	75-79	80+	
LTC-89	2.1%	2.1%	2.1%	4.0%	4.0%	4.0%	4.0%	2.8%
LTC-1	3.2%	3.2%	3.2%	6.4%	7.8%	14.2%	14.2%	5.7%
LTC-3	1.6%	1.6%	1.6%	4.6%	4.6%	4.6%	4.6%	2.8%
LTC-6	1.9%	1.9%	0.8%	2.2%	6.0%	6.0%	6.0%	2.5%
HHC-FL	0.5%	0.5%	0.5%	1.8%	6.0%	6.0%	6.0%	1.8%
HHC-non-FL	4.6%	4.6%	4.6%	5.3%	5.9%	5.9%	5.9%	5.5%
FQ	1.2%	0.5%	0.5%	1.8%	4.4%	9.4%	9.4%	2.5%
B Series	0.5%	0.5%	0.5%	0.5%	2.5%	2.5%	2.5%	1.3%
JC Penney	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.1%
Miscellaneous	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	4.5%
UGLI	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Transport	0.5%	0.5%	2.2%	5.5%	5.5%	5.5%	5.5%	3.9%

0.000%

Attachment A-1d
Senior Health Insurance Company of Pennsylvania
Non-NFO Member Count by Age & Policy Form - Lapse Experience Year 2016
Member Count for policies with No Inflation protection

Form	Issue Age Band							All Issue Ages
	<55	55-59	60-64	65-69	70-74	75-79	80+	
LTC-89	16	86	401	337	81	8	0	704
LTC-1	54	230	1,512	2,321	700	121	15	4,107
LTC-3	44	124	671	530	93	22	0	1,110
LTC-6	250	666	2,700	2,289	900	213	11	6,060
HHC-FL	23	64	398	748	432	162	4	1,554
HHC-non-FL	39	120	468	804	566	238	26	1,833
FQ	457	843	1,855	2,293	1,642	539	71	6,848
B Series	115	119	271	401	329	159	45	1,311
JC Penney	14	53	331	253	116	15	0	432
Miscellaneous	61	162	261	164	43	16	0	575
UGLI	0	0	2	6	7	0	0	11
Transport	146	472	948	752	214	28	0	1,162

Attachment A-2
Senior Health Insurance Company of Pennsylvania
Projected Lives, Deaths and Lapses by Projection Year as of December 31, 2017
Non-NFO, Non-LWPS (at valuation date) - ATL

Projection Year	Attained Age 80 at start of projection					Attained Age 85 at start of projection					Attained Age 90 at start of projection				
	Exposures	Deaths	Lapses	Projected Termination Rate	Actual Attained Age Termination Rate	Exposures	Deaths	Lapses	Projected Termination Rate	Actual Attained Age Termination Rate	Exposures	Deaths	Lapses	Projected Termination Rate	Actual Attained Age Termination Rate
2017	1,141					2,087					1,415				
2018	1,072	57	13	6.1%	6.2%	1,856	162	69	11.1%	10.3%	1,162	161	91	17.8%	17.2%
2019	998	59	15	6.9%	6.7%	1,633	158	65	12.0%	11.9%	940	145	77	19.1%	18.8%
2020	922	60	16	7.7%	7.6%	1,422	151	61	13.0%	12.2%	748	128	63	20.4%	19.5%
2021	844	61	17	8.5%	8.4%	1,223	143	56	14.0%	14.1%	585	112	51	21.8%	22.4%
2022	765	61	17	9.3%	9.0%	1,038	134	50	15.1%	15.5%	448	96	41	23.4%	23.6%
2023	687	61	17	10.2%	10.3%	869	124	45	16.3%	17.2%	336	81	32	25.1%	26.4%
2024	611	59	17	11.1%	11.9%	716	113	39	17.6%	18.8%	246	66	24	26.9%	28.9%
2025	537	57	17	12.1%	12.2%	581	102	34	18.9%	19.5%	175	53	18	28.8%	32.8%
2026	466	55	16	13.2%	14.1%	462	90	28	20.4%	22.4%	121	41	13	30.9%	32.5%
2027	399	52	15	14.3%	15.5%	360	79	23	22.1%	23.6%	81	31	9	33.2%	37.6%
2028	338	48	13	15.4%	17.2%	274	66	19	23.7%	26.4%	52	23	6	35.4%	33.0%
2029	282	44	12	16.6%	18.8%	205	55	15	25.4%	28.9%	32	16	4	37.7%	
2030	232	40	11	17.8%	19.5%	149	44	11	27.1%	32.8%	19	11	2	40.3%	
2031	187	35	9	19.2%	22.4%	106	35	8	29.0%	32.5%	11	7	1	43.2%	
2032	149	31	8	20.6%	23.6%	73	27	6	31.1%	37.6%	6	4	1	46.5%	
2033	115	27	7	22.3%	26.4%	49	20	4	33.5%		3	3	0	50.7%	
2034	88	23	5	24.1%	28.9%	31	15	3	36.0%		1	1	0	55.6%	
2035	65	19	4	26.0%	32.8%	19	10	2	38.8%		0	1	0	61.4%	
2036	47	15	3	28.1%	32.5%	11	7	1	41.9%		0	0	0	68.2%	
2037	32	12	2	30.3%		6	4	1	45.6%		0	0	0	78.1%	
2038	22	9	2	32.8%		3	3	0	49.9%		0	0	0	92.1%	
2039	14	7	1	35.3%		1	2	0	54.9%		0	0	-	99.2%	
2040	9	5	1	38.2%		1	1	0	60.8%		-	0	-	100.0%	
2041	5	3	0	41.4%		0	0	0	67.7%		-	-	-	N/A	
2042	3	2	0	45.1%		0	0	0	77.9%		-	-	-	N/A	
2043	1	1	0	49.5%		0	0	0	92.1%		-	-	-	N/A	

Attachment A-3
Senior Health Insurance Company of Pennsylvania
Projected Lives, Deaths and Lapses by Projection Year as of December 31, 2017
Non-NFO - TRN

Projection Year	Attained Age 85 at start of projection					Attained Age 86 at start of projection					Attained Age 87 at start of projection				
	Exposures	Deaths*	Lapses	Projected Termination Rate	Actual Attained Age Termination Rate	Exposures	Deaths*	Lapses	Projected Termination Rate	Actual Attained Age Termination Rate	Exposures	Deaths*	Lapses	Projected Termination Rate	Actual Attained Age Termination Rate
2017	662					731					777				
2018	595	50	16	10.1%	8.9%	650	59	22	11.1%	10.1%	681	69	28	12.4%	11.4%
2019	530	50	16	11.0%	10.1%	572	58	21	12.1%	11.4%	589	66	26	13.5%	12.7%
2020	466	48	15	12.0%	11.4%	496	55	20	13.1%	12.7%	503	63	23	14.6%	14.4%
2021	406	46	15	13.0%	12.7%	426	53	18	14.3%	14.4%	423	58	21	15.8%	15.7%
2022	348	44	13	14.2%	14.4%	360	49	16	15.5%	15.7%	351	54	19	17.1%	18.5%
2023	295	41	12	15.4%	15.7%	299	46	15	16.8%	18.5%	286	49	16	18.5%	20.6%
2024	246	38	11	16.7%	18.5%	245	42	13	18.1%	20.6%	229	44	14	20.0%	21.2%
2025	201	35	10	18.1%	20.6%	197	37	11	19.7%	21.2%	179	38	11	21.7%	23.6%
2026	162	31	8	19.6%	21.2%	155	33	9	21.4%	23.6%	137	33	9	23.5%	26.1%
2027	127	27	7	21.3%	23.6%	119	28	7	23.2%	26.1%	102	28	7	25.4%	27.6%
2028	98	23	6	22.9%	26.1%	89	24	6	24.9%	27.6%	75	22	6	27.2%	28.8%
2029	74	20	5	24.6%	27.6%	65	19	5	26.7%	28.8%	53	18	4	29.1%	30.1%
2030	55	16	4	26.4%	28.8%	47	15	3	28.7%	30.1%	36	13	3	31.3%	
2031	39	13	3	28.3%		32	12	3	30.8%		24	10	2	33.6%	
2032	27	10	2	30.5%		22	9	2	33.1%		15	7	1	35.9%	
2033	18	8	1	32.9%		14	7	1	35.6%		9	5	1	38.7%	
2034	12	6	1	35.4%		9	5	1	38.5%		5	3	1	41.9%	
2035	7	4	1	38.3%		5	3	0	41.7%		3	2	0	45.6%	
2036	4	3	0	41.5%		3	2	0	45.4%		1	1	0	49.9%	
2037	2	2	0	45.2%		1	1	0	49.7%		1	1	0	55.0%	
2038	1	1	0	49.6%		1	1	0	54.8%		0	0	0	60.9%	
2039	1	1	0	54.7%		0	0	0	60.8%		0	0	0	67.8%	
2040	0	0	0	60.7%		0	0	0	67.7%		0	0	0	78.0%	
2041	0	0	0	67.6%		0	0	0	77.8%		0	0	0	91.9%	
2042	0	0	0	77.8%		0	0	0	91.9%		-	0	-	100.0%	
2043	0	0	0	91.9%		-	0	-	100.0%		-	-	-	N/A	

Attachment A-4
Senior Health Insurance Company of Pennsylvania
Projected Lives, Deaths and Lapses by Projection Year as of December 31, 2017
Non-NFO - TRN

Projection Year	Attained Age 88 at start of projection					Attained Age 89 at start of projection					Attained Age 90 at start of projection				
	Exposures	Deaths*	Lapses	Projected Termination Rate	Actual Attained Age Termination Rate	Exposures	Deaths*	Lapses	Projected Termination Rate	Actual Attained Age Termination Rate	Exposures	Deaths*	Lapses	Projected Termination Rate	Actual Attained Age Termination Rate
2017	758					892					848				
2018	653	73	33	13.9%	12.7%	755	94	43	15.4%	14.4%	706	98	44	16.8%	15.7%
2019	554	69	30	15.1%	14.4%	629	88	38	16.6%	15.7%	578	90	38	18.1%	18.5%
2020	464	64	26	16.3%	15.7%	517	80	33	17.9%	18.5%	466	80	32	19.4%	20.6%
2021	383	58	23	17.5%	18.5%	417	72	28	19.2%	20.6%	368	70	27	20.9%	21.2%
2022	311	53	20	18.9%	20.6%	331	63	23	20.7%	21.2%	285	61	22	22.5%	23.6%
2023	247	47	16	20.4%	21.2%	257	55	19	22.3%	23.6%	216	52	17	24.2%	26.1%
2024	193	41	14	22.0%	23.6%	195	47	15	24.1%	26.1%	160	43	13	26.1%	27.6%
2025	147	35	11	23.8%	26.1%	144	39	12	26.0%	27.6%	115	35	10	28.0%	28.8%
2026	109	29	9	25.7%	27.6%	104	31	9	28.0%	28.8%	80	27	7	30.2%	30.1%
2027	79	24	6	27.7%	28.8%	73	25	7	30.1%	30.1%	54	21	5	32.5%	34.5%
2028	55	19	5	29.7%	30.1%	49	19	5	32.3%	34.5%	35	15	4	34.8%	
2029	38	14	3	31.8%		32	14	3	34.5%		22	11	2	37.1%	
2030	25	11	2	34.1%		20	10	2	36.9%		13	7	1	39.7%	
2031	16	8	2	36.5%		12	7	1	39.5%		8	5	1	42.7%	
2032	10	5	1	39.1%		7	4	1	42.5%		4	3	0	46.1%	
2033	6	4	1	42.2%		4	3	0	46.1%		2	2	0	50.3%	
2034	3	2	0	45.9%		2	2	0	50.4%		1	1	0	55.3%	
2035	1	1	0	50.2%		1	1	0	55.4%		0	1	0	61.1%	
2036	1	1	0	55.2%		0	0	0	61.3%		0	0	0	67.9%	
2037	0	0	0	61.1%		0	0	0	68.2%		0	0	0	77.9%	
2038	0	0	0	68.0%		0	0	0	78.5%		0	0	0	92.1%	
2039	0	0	0	78.1%		0	0	0	91.8%		-	0	-	100.0%	
2040	0	0	0	92.0%		-	0	-	100.0%		-	-	-	N/A	
2041	-	0	-	100.0%		-	-	-	N/A		-	-	-	N/A	
2042	-	-	-	N/A		-	-	-	N/A		-	-	-	N/A	
2043	-	-	-	N/A		-	-	-	N/A		-	-	-	N/A	

Attachment A-5
Senior Health Insurance Company of Pennsylvania
Termination Rates By Attained Age for 2011-2017

Attained Age	ATL	Transport
65	2.48%	2.50%
66	1.75%	1.45%
67	2.68%	0.81%
68	2.74%	3.29%
69	2.37%	2.87%
70	2.94%	2.38%
71	2.42%	3.11%
72	2.92%	3.76%
73	2.95%	2.23%
74	3.16%	3.50%
75	3.85%	2.92%
76	4.24%	3.27%
77	4.37%	3.78%
78	4.76%	3.49%
79	5.40%	4.66%
80	6.17%	5.38%
81	6.74%	5.68%
82	7.62%	6.65%
83	8.40%	7.16%
84	9.03%	7.62%
85	10.33%	8.91%
86	11.88%	10.11%
87	12.23%	11.39%
88	14.09%	12.69%
89	15.50%	14.41%
90	17.15%	15.70%
91	18.76%	18.52%
92	19.53%	20.64%
93	22.39%	21.20%
94	23.60%	23.58%
95	26.39%	26.10%
96	28.95%	27.63%
97	32.85%	28.84%
98	32.53%	30.14%
99	37.60%	34.48%
100	32.97%	42.47%
101	35.71%	47.62%
102	38.04%	36.36%
103	36.36%	44.44%
104	47.83%	40.00%
105	54.55%	50.00%

Attachment A-6
Senior Health Insurance Company of Pennsylvania (SHIP)
LTC A/E Reports for 3Q2017
Experience Period: January 1, 2000 - September 30, 2017
Claim & Reserves Thru: September 30, 2017
Analysis by Experience Year
All Model Plans - ATL (Non-NFO)

All Model Plans-ATL (Non-NFO)

Experience Year	Lives_years_exposures	Exposures_with_dailybenefit	Paid Claims	Claim Reserves	Actual Claims (woodwork removed)	Expected Claims (with all fitting factors)	Adjusted AtoE:claimcosts
2000	237,085	21,430,349	251,197,577	500,845	251,698,422	297,199,448	84.7%
2001	221,868	20,523,225	260,338,402	491,373	260,829,775	301,926,225	86.4%
2002	201,577	19,044,463	276,828,639	780,581	277,609,219	293,257,013	94.7%
2003	178,688	17,245,630	255,669,254	1,012,896	256,682,150	271,042,618	94.7%
2004	159,357	15,744,523	228,527,030	1,554,873	230,081,902	254,424,987	90.4%
2005	141,388	14,274,949	229,005,414	2,390,926	231,396,340	238,273,002	97.1%
2006	126,164	13,068,205	239,480,926	2,600,008	242,080,933	227,208,766	106.5%
2007	113,227	12,053,062	219,504,788	3,428,253	222,933,041	222,681,620	100.1%
2008	100,879	11,053,445	217,542,974	5,849,321	223,392,294	218,714,063	102.1%
2009	89,423	10,073,438	207,084,439	5,022,743	212,107,182	213,517,110	99.3%
2010	79,738	9,231,697	225,010,189	12,380,414	215,809,639	207,514,363	104.0%
2011	70,800	8,462,155	201,321,571	14,654,059	196,341,482	200,516,168	97.9%
2012	63,687	7,867,346	198,998,344	22,369,245	201,243,263	196,787,623	102.3%
2013	57,511	7,335,739	169,063,916	26,490,393	195,554,309	194,083,265	100.8%
2014	52,220	6,879,293	152,362,975	45,703,276	198,066,250	192,665,203	102.8%
2015	47,217	6,434,794	117,091,982	69,897,275	186,989,257	189,933,955	98.4%
2016	42,715	6,013,067	67,108,585	105,696,053	172,804,638	186,345,829	92.7%
All Years	1,983,546	206,735,383	3,516,137,003	320,822,532	3,775,620,096	3,906,091,258	96.7%
2007-2016							100.1%

LTC-1

Experience Year	Lives_years_exposures	Exposures_with_dailybenefit	Paid Claims	Claim Reserves	Actual Claims (woodwork removed)	Expected Claims (with all fitting factors)	Adjusted AtoE:claimcosts
2000	53,208	4,273,679	72,662,432	53,220	72,715,653	75,463,372	96.4%
2001	46,322	3,769,650	74,628,578	52,919	74,681,496	72,716,572	102.7%
2002	39,943	3,292,880	72,682,094	78,528	72,760,622	67,408,804	107.9%
2003	34,914	2,920,762	62,271,508	109,520	62,381,028	61,861,345	100.8%
2004	30,792	2,621,588	56,108,969	295,258	56,404,228	56,536,963	99.8%
2005	26,994	2,342,156	51,512,654	184,394	51,697,048	51,226,017	100.9%
2006	23,704	2,100,778	55,008,186	488,654	55,496,840	47,318,531	117.3%
2007	20,721	1,874,518	44,558,540	528,110	45,086,651	44,386,288	101.6%
2008	17,957	1,660,948	43,595,418	590,458	44,185,875	41,837,432	105.6%
2009	15,450	1,455,793	37,732,864	735,695	38,468,560	39,388,132	97.7%
2010	13,374	1,283,745	38,875,895	1,602,444	36,798,490	36,874,645	99.8%
2011	11,432	1,124,110	33,965,503	1,481,566	32,224,609	33,972,513	94.9%
2012	9,844	994,899	31,302,357	3,145,221	31,315,980	31,673,598	98.9%
2013	8,622	896,636	30,256,656	4,103,926	34,360,583	30,127,274	114.1%
2014	7,594	812,475	23,033,852	4,688,469	27,722,321	28,811,570	96.2%
2015	6,655	732,408	18,498,737	8,521,641	27,020,378	27,364,076	98.7%
2016	5,847	662,098	10,266,730	12,870,212	23,136,941	25,906,713	89.3%
All Years	373,375	32,819,123	756,960,975	39,530,235	786,457,301	772,873,844	101.8%
2007-2016							100.0%

Attachment A-6
Senior Health Insurance Company of Pennsylvania (SHIP)
LTC A/E Reports for 3Q2017
Experience Period: January 1, 2000 - September 30, 2017
Claim & Reserves Thru: September 30, 2017
Analysis by Experience Year
All Model Plans - ATL (Non-NFO)

LTC-3

Experience Year	Lives_years_exposures	Exposures_with_dailybenefit	Paid Claims	Claim Reserves	Actual Claims (woodwork removed)	Expected Claims (with all fitting factors)	Adjusted AtoE:claimcosts
2000	15,137	1,509,345	13,872,981	0	13,872,981	13,723,473	101.1%
2001	14,054	1,446,647	13,447,226	0	13,447,226	13,757,492	97.7%
2002	12,962	1,378,963	18,094,058	164,315	18,258,373	13,729,009	133.0%
2003	11,922	1,311,761	14,743,389	0	14,743,389	13,844,606	106.5%
2004	10,877	1,241,940	12,541,538	0	12,541,538	14,008,127	89.5%
2005	9,873	1,171,130	13,865,983	0	13,865,983	14,282,135	97.1%
2006	9,005	1,113,574	13,750,492	107,599	13,858,091	14,875,705	93.2%
2007	8,271	1,067,509	18,506,210	82,083	18,588,292	15,825,388	117.5%
2008	7,591	1,018,591	17,842,303	70,584	17,912,888	16,703,161	107.2%
2009	6,886	958,321	16,596,049	260,611	16,856,659	17,346,404	97.2%
2010	6,247	903,863	18,911,739	606,422	17,743,783	17,983,765	98.7%
2011	5,691	859,211	20,022,900	1,111,709	19,213,281	18,732,508	102.6%
2012	5,217	826,370	20,635,921	1,396,804	20,029,750	19,668,707	101.8%
2013	4,766	787,823	21,390,949	2,504,400	23,895,349	20,499,286	116.6%
2014	4,380	753,704	15,752,483	2,495,630	18,248,113	21,424,044	85.2%
2015	3,992	715,532	14,463,972	5,117,169	19,581,141	22,035,216	88.9%
2016	3,636	672,617	8,635,641	11,626,195	20,261,835	22,141,184	91.5%
All Years	140,508	17,736,901	273,073,834	25,543,520	292,918,673	290,580,211	100.8%
2007-2016							100.0%

HHC-FL

Experience Year	Lives_years_exposures	Exposures_with_dailybenefit	Paid Claims	Claim Reserves	Actual Claims (woodwork removed)	Expected Claims (with all fitting factors)	Adjusted AtoE:claimcosts
2000	25,516	2,574,955	52,866,533	95,077	52,961,610	78,838,602	67.2%
2001	22,745	2,312,633	58,719,157	84,424	58,803,582	78,383,312	75.0%
2002	19,652	2,017,299	59,843,153	184,821	60,027,975	72,906,166	82.3%
2003	15,402	1,599,635	50,141,826	260,386	50,402,211	58,871,921	85.6%
2004	13,231	1,388,308	39,463,183	161,968	39,625,151	52,269,045	75.8%
2005	11,084	1,174,278	39,717,049	324,228	40,041,277	44,838,792	89.3%
2006	8,753	941,636	33,643,215	246,520	33,889,734	36,731,378	92.3%
2007	7,266	795,756	31,915,613	397,460	32,313,073	32,915,641	98.2%
2008	6,054	677,914	28,905,980	555,065	29,461,045	30,241,857	97.4%
2009	5,102	584,866	25,614,575	273,215	25,887,790	27,799,331	93.1%
2010	4,365	509,094	28,833,441	1,001,086	27,122,298	25,633,423	105.8%
2011	3,735	445,279	24,382,564	580,298	22,693,511	23,532,146	96.4%
2012	3,265	398,710	23,661,428	2,067,150	23,389,616	21,905,885	106.8%
2013	2,860	356,312	16,319,833	2,499,828	18,819,661	20,323,150	92.6%
2014	2,518	318,361	13,435,068	3,755,823	17,190,891	18,873,070	91.1%
2015	2,191	282,269	9,125,746	4,936,261	14,062,007	17,252,412	81.5%
2016	1,929	252,213	4,952,537	7,504,031	12,456,568	15,824,098	78.7%
All Years	155,669	16,629,518	541,540,902	24,927,639	559,147,999	657,140,229	85.1%
2007-2016							95.3%

HHC-NFL

Experience Year	Lives_years_exposures	Exposures_with_dailybenefit	Paid Claims	Claim Reserves	Actual Claims (woodwork removed)	Expected Claims (with all fitting factors)	Adjusted AtoE:claimcosts
2000	31,772	2,923,728	21,311,017	0	21,311,017	27,084,349	78.7%
2001	27,701	2,587,489	19,566,389	295,228	19,861,616	26,281,062	75.6%
2002	24,017	2,280,496	20,379,642	67,607	20,447,249	25,161,778	81.3%
2003	20,632	1,994,385	21,999,263	162,576	22,161,839	23,523,379	94.2%
2004	17,591	1,729,368	19,887,256	208,132	20,095,388	21,439,957	93.7%
2005	14,657	1,471,540	20,429,601	430,224	20,859,826	18,967,433	110.0%
2006	12,634	1,296,366	15,429,923	483,163	15,913,086	17,603,153	90.4%
2007	10,971	1,152,613	15,579,069	348,184	15,927,253	16,699,260	95.4%
2008	9,390	1,013,379	15,355,098	240,618	15,595,716	15,747,813	99.0%
2009	8,000	887,379	17,831,463	439,499	18,270,962	14,810,646	123.4%
2010	6,804	774,633	17,502,534	1,393,442	17,178,160	13,685,384	125.5%
2011	5,764	675,344	12,184,937	1,023,464	12,007,637	12,504,539	96.0%
2012	5,019	608,147	12,750,225	1,707,936	13,143,782	11,798,880	111.4%
2013	4,389	549,902	11,233,931	2,601,889	13,835,820	11,203,122	123.5%
2014	3,842	497,340	9,075,878	2,878,356	11,954,234	10,620,889	112.6%
2015	3,351	449,261	5,279,477	3,889,958	9,169,435	9,984,839	91.8%
2016	2,919	406,936	3,967,947	6,340,394	10,308,341	9,367,732	110.0%
All Years	209,452	21,298,306	259,763,649	22,510,670	278,041,361	286,484,216	97.1%
2007-2016							108.7%

Attachment A-6
Senior Health Insurance Company of Pennsylvania (SHIP)
LTC A/E Reports for 3Q2017
Experience Period: January 1, 2000 - September 30, 2017
Claim & Reserves Thru: September 30, 2017
Analysis by Experience Year
All Model Plans - ATL (Non-NFO)
B-Series and FQ

Experience Year	Lives_years_exposures	Exposures_with_dailybenefit	Paid Claims	Claim Reserves	Actual Claims (woodwork removed)	Expected Claims (with all fitting factors)	Adjusted AtoE:claimcosts
2000	29,009	2,720,759	11,762,617	161,160	11,923,777	21,911,368	54.4%
2001	35,487	3,395,490	18,880,950	58,803	18,939,753	28,446,171	66.6%
2002	36,518	3,551,442	23,810,999	56,419	23,867,418	32,021,861	74.5%
2003	34,653	3,409,784	28,603,256	196,027	28,799,283	33,818,128	85.2%
2004	32,228	3,218,763	28,726,791	262,846	28,989,637	35,027,346	82.8%
2005	29,890	3,039,055	28,959,650	185,880	29,145,529	35,908,375	81.2%
2006	27,656	2,868,080	38,544,429	469,636	39,014,065	36,366,784	107.3%
2007	25,833	2,729,334	31,544,224	686,411	32,230,635	37,193,596	86.7%
2008	23,839	2,564,395	35,102,335	1,209,286	36,311,621	37,598,088	96.6%
2009	21,699	2,372,449	36,521,870	1,676,252	38,198,122	37,002,871	103.2%
2010	19,891	2,216,150	39,828,596	3,420,605	39,317,456	36,203,442	108.6%
2011	18,228	2,073,932	36,088,885	4,083,334	36,520,199	35,278,303	103.5%
2012	16,812	1,959,127	35,438,418	5,164,310	36,911,571	34,534,056	106.9%
2013	15,497	1,849,320	28,311,202	5,505,816	33,817,018	34,131,418	99.1%
2014	14,399	1,767,366	27,538,753	10,039,777	37,578,530	34,473,426	109.0%
2015	13,361	1,689,358	18,138,333	13,169,139	31,307,472	34,966,770	89.5%
2016	12,391	1,616,809	11,520,884	23,079,868	34,600,752	35,591,085	97.2%
All Years	407,392	43,041,612	479,322,192	69,425,569	537,472,838	580,473,089	92.6%
2007-2016							99.9%

LTC-89

Experience Year	Lives_years_exposures	Exposures_with_dailybenefit	Paid Claims	Claim Reserves	Actual Claims (woodwork removed)	Expected Claims (with all fitting factors)	Adjusted AtoE:claimcosts
2000	14,910	1,081,681	16,772,723	0	16,772,723	15,412,258	108.8%
2001	13,344	990,594	17,144,762	0	17,144,762	14,662,800	116.9%
2002	11,735	892,498	16,531,739	0	16,531,739	13,931,003	118.7%
2003	10,393	809,231	14,077,609	16,944	14,094,553	13,501,012	104.4%
2004	9,058	723,975	12,983,228	0	12,983,228	12,796,117	101.5%
2005	7,764	637,574	14,073,413	133,121	14,206,533	11,994,339	118.4%
2006	6,820	574,394	12,906,556	0	12,906,556	11,710,657	110.2%
2007	5,993	515,150	11,013,092	0	11,013,092	11,377,724	96.8%
2008	5,154	450,915	11,285,819	0	11,285,819	10,803,653	104.5%
2009	4,466	394,987	10,848,639	0	10,848,639	10,246,487	105.9%
2010	3,869	343,697	9,930,935	39,300	9,063,851	9,454,398	95.9%
2011	3,274	294,589	7,360,002	87,470	6,770,429	8,563,106	79.1%
2012	2,786	254,013	8,035,992	168,361	7,458,503	7,868,366	94.8%
2013	2,392	219,924	8,014,221	129,675	8,143,897	7,257,026	112.2%
2014	2,072	191,768	5,810,953	483,908	6,294,860	6,718,712	93.7%
2015	1,795	167,668	6,113,422	955,898	7,069,320	6,143,968	115.1%
2016	1,545	144,257	3,467,080	2,495,164	5,962,244	5,518,378	108.0%
All Years	107,367	8,686,914	186,370,184	4,509,842	188,550,747	177,960,004	106.0%
2007-2016							100.0%

LTC-6

Experience Year	Lives_years_exposures	Exposures_with_dailybenefit	Paid Claims	Claim Reserves	Actual Claims (woodwork removed)	Expected Claims (with all fitting factors)	Adjusted AtoE:claimcosts
2000	43,173	4,231,836	36,882,916	191,388	37,074,304	40,404,315	91.8%
2001	40,300	4,033,206	35,874,481	0	35,874,481	42,995,605	83.4%
2002	37,124	3,793,937	39,841,897	228,891	40,070,787	43,302,401	92.5%
2003	33,135	3,459,054	39,422,720	148,328	39,571,048	40,466,379	97.8%
2004	29,807	3,184,311	36,057,981	599,485	36,657,467	37,194,831	98.6%
2005	27,136	2,968,478	34,499,593	820,540	35,320,133	36,177,340	97.6%
2006	25,085	2,816,884	38,914,848	305,539	39,220,386	37,305,054	105.1%
2007	23,074	2,654,051	40,911,770	794,977	41,706,747	38,782,213	107.5%
2008	21,120	2,487,995	41,437,603	2,574,658	44,012,261	40,117,251	109.7%
2009	19,274	2,321,697	41,094,252	1,205,549	42,299,801	41,090,536	102.9%
2010	17,724	2,180,399	43,757,357	2,431,809	41,990,151	41,968,163	100.1%
2011	16,260	2,050,182	43,608,883	5,073,389	44,256,611	42,702,355	103.6%
2012	15,126	1,963,941	43,091,074	6,052,484	44,675,961	44,356,369	100.7%
2013	13,989	1,875,306	35,852,541	6,560,010	42,412,551	45,893,436	92.4%
2014	12,951	1,796,930	36,444,221	12,199,756	48,643,977	47,528,041	102.3%
2015	11,923	1,717,379	29,194,623	21,836,478	51,031,101	48,890,097	104.4%
2016	10,986	1,642,640	14,998,342	25,472,649	40,470,990	50,020,585	80.9%
All Years	398,189	45,178,227	631,885,101	86,495,929	705,288,757	719,191,971	98.1%
2007-2016							100.0%

Attachment A-6
Senior Health Insurance Company of Pennsylvania (SHIP)
LTC A/E Reports for 3Q2017
Experience Period: January 1, 2000 - September 30, 2017
Claim & Reserves Thru: September 30, 2017
Analysis by Experience Year
All Model Plans - ATL (Non-NFO)

JCP

Experience Year	Lives_years_exposures	Exposures_with_dailybenefit	Paid Claims	Claim Reserves	Actual Claims (woodwork removed)	Expected Claims (with all fitting factors)	Adjusted AtoE:claimcosts
2000	12,992	1,324,082	15,709,386	0	15,709,386	15,477,122	101.5%
2001	12,118	1,285,919	13,174,866	0	13,174,866	16,537,671	79.7%
2002	11,182	1,236,681	17,287,377	0	17,287,377	17,395,271	99.4%
2003	10,388	1,195,067	17,380,115	119,116	17,499,231	18,324,961	95.5%
2004	9,475	1,139,791	16,570,635	27,184	16,597,819	18,815,837	88.2%
2005	8,518	1,075,891	20,650,873	312,539	20,963,413	19,143,414	109.5%
2006	7,821	1,037,540	25,161,928	498,898	25,660,826	20,155,697	127.3%
2007	7,070	986,919	19,223,736	535,989	19,759,725	20,789,080	95.0%
2008	6,340	933,817	19,319,061	608,652	19,927,713	21,352,310	93.3%
2009	5,652	882,633	17,310,350	431,921	17,742,271	21,907,760	81.0%
2010	5,034	830,921	22,841,555	1,885,306	22,478,965	22,158,960	101.4%
2011	4,467	778,263	20,614,103	1,212,829	19,842,665	22,136,728	89.6%
2012	4,013	738,475	20,835,605	2,429,308	21,149,921	22,314,112	94.8%
2013	3,626	695,613	15,085,804	2,442,562	17,528,367	22,256,542	78.8%
2014	3,282	649,753	20,044,890	9,018,346	29,063,236	22,044,655	131.8%
2015	2,943	600,560	14,671,812	10,965,516	25,637,328	21,310,198	120.3%
2016	2,599	544,462	8,281,687	14,956,022	23,237,709	20,161,286	115.3%
All Years	117,520	15,936,386	304,163,783	45,444,190	343,260,818	342,281,604	100.3%
2007-2016							100.0%

MISC and UGLI

Experience Year	Lives_years_exposures	Exposures_with_dailybenefit	Paid Claims	Claim Reserves	Actual Claims (woodwork removed)	Expected Claims (with all fitting factors)	Adjusted AtoE:claimcosts
2000	11,368	790,285	9,356,972	0	9,356,972	8,884,589	105.3%
2001	9,797	701,597	8,901,993	0	8,901,993	8,145,541	109.3%
2002	8,444	600,268	8,357,679	0	8,357,679	7,400,720	112.9%
2003	7,249	545,951	7,029,568	0	7,029,568	6,830,886	102.9%
2004	6,300	496,480	6,187,448	0	6,187,448	6,336,763	97.6%
2005	5,472	394,848	5,296,597	0	5,296,597	5,738,156	92.3%
2006	4,684	318,954	6,121,349	0	6,121,349	5,141,806	119.1%
2007	4,027	277,212	6,252,536	55,038	6,307,574	4,712,431	133.8%
2008	3,433	245,492	4,699,356	0	4,699,356	4,312,499	109.0%
2009	2,895	215,314	3,534,379	0	3,534,379	3,924,942	90.0%
2010	2,430	189,195	4,528,136	0	4,116,487	3,552,183	115.9%
2011	1,949	161,244	3,093,794	0	2,812,540	3,093,969	90.9%
2012	1,605	123,666	3,247,326	237,672	3,168,179	2,667,651	118.8%
2013	1,369	104,902	2,598,777	142,287	2,741,064	2,392,012	114.6%
2014	1,183	91,596	1,226,877	143,211	1,370,088	2,170,795	63.1%
2015	1,006	80,358	1,605,861	505,214	2,111,075	1,986,379	106.3%
2016	863	71,035	1,017,738	1,351,518	2,369,256	1,814,769	130.6%
All Years	74,075	5,408,397	83,056,383	2,434,939	84,481,602	79,106,089	106.8%
2007-2016							108.5%

HHC-1 NFL

Experience Year	Lives_years_exposures	Exposures_with_dailybenefit	Paid Claims	Claim Reserves	Actual Claims (woodwork removed)	Expected Claims (with all fitting factors)	Adjusted AtoE:claimcosts
2000	12,837	1,237,582	10,428,828	0	10,428,828	11,543,073	90.3%
2001	11,257	1,106,535	9,773,433	0	9,773,433	10,935,516	89.4%
2002	9,874	993,225	9,922,248	0	9,922,248	10,289,905	96.4%
2003	8,548	883,018	9,379,203	0	9,379,203	9,543,539	98.3%
2004	7,363	779,490	8,237,252	0	8,237,252	8,718,141	94.5%
2005	6,220	678,811	7,443,193	0	7,443,193	7,795,917	95.5%
2006	5,403	608,395	6,459,098	0	6,459,098	7,305,907	88.4%
2007	4,763	554,063	6,005,964	0	6,005,964	7,146,850	84.0%
2008	4,147	500,280	6,855,952	0	6,855,952	6,922,647	99.0%
2009	3,590	447,968	9,600,336	0	9,600,336	6,647,731	144.4%
2010	3,099	399,959	7,412,822	4,532	6,743,050	6,279,423	107.4%
2011	2,666	355,274	6,746,853	16,979	6,148,938	5,847,022	105.2%
2012	2,338	325,025	6,626,471	227,793	6,231,149	5,670,581	109.9%
2013	2,064	298,783	6,603,487	756,344	7,359,831	5,513,034	133.5%
2014	1,818	272,470	6,301,217	1,538,562	7,839,779	5,305,363	147.8%
2015	1,592	248,387	2,475,497	1,559,894	4,035,392	5,028,914	80.2%
2016	1,389	226,606	2,284,877	3,088,100	5,372,977	4,767,653	112.7%
All Years	88,969	9,915,874	122,556,730	7,192,204	127,836,621	125,261,215	102.1%
2007-2016							111.9%

Attachment A-6
Senior Health Insurance Company of Pennsylvania (SHIP)
LTC A/E Reports for 3Q2017
Experience Period: January 1, 2000 - September 30, 2017
Claim & Reserves Thru: September 30, 2017
Analysis by Experience Year
All Model Plans - ATL (Non-NFO)

HHC-2 NFL

Experience Year	Lives_years_exposures	Exposures_with_dailybenefit	Paid Claims	Claim Reserves	Actual Claims (woodwork removed)	Expected Claims (with all fitting factors)	Adjusted AtoE:claimcosts
2000	7,851	671,938	1,905,409	0	1,905,409	3,256,233	58.5%
2001	6,688	573,608	1,814,700	0	1,814,700	2,917,537	62.2%
2002	5,637	484,220	1,690,013	0	1,690,013	2,576,394	65.6%
2003	4,725	406,597	1,520,748	0	1,520,748	2,204,258	69.0%
2004	3,905	336,500	1,292,272	0	1,292,272	1,834,332	70.4%
2005	3,093	266,465	1,371,548	0	1,371,548	1,452,855	94.4%
2006	2,559	220,294	682,128	0	682,128	1,217,447	56.0%
2007	2,091	180,792	1,094,565	0	1,094,565	1,032,895	106.0%
2008	1,680	145,495	813,066	0	813,066	858,204	94.7%
2009	1,354	117,981	732,521	0	732,521	710,648	103.1%
2010	1,092	94,412	723,937	0	658,124	587,663	112.0%
2011	869	75,473	475,148	0	431,952	486,887	88.7%
2012	724	63,257	377,436	0	343,124	417,320	82.2%
2013	604	53,279	309,331	25,228	334,559	368,892	90.7%
2014	502	44,594	204,821	0	204,821	320,214	64.0%
2015	414	37,011	96,022	0	96,022	269,908	35.6%
2016	348	31,619	103,361	91,284	194,645	235,496	82.7%
All Years	44,137	3,803,535	15,207,025	116,512	15,180,217	20,747,184	73.2%
2007-2016							92.7%

HHC-3 NFL

Experience Year	Lives_years_exposures	Exposures_with_dailybenefit	Paid Claims	Claim Reserves	Actual Claims (woodwork removed)	Expected Claims (with all fitting factors)	Adjusted AtoE:claimcosts
2000	4,993	419,166	3,706,402	0	3,706,402	4,863,827	76.2%
2001	4,226	357,071	2,994,697	0	2,994,697	4,641,814	64.5%
2002	3,617	308,730	3,275,010	67,607	3,342,617	4,428,395	75.5%
2003	3,098	267,584	4,994,465	115,143	5,109,608	4,123,804	123.9%
2004	2,650	230,543	4,335,233	140,663	4,475,896	3,757,561	119.1%
2005	2,206	194,387	4,911,729	177,579	5,089,308	3,292,927	154.6%
2006	1,897	169,643	3,463,803	330,458	3,794,261	3,033,851	125.1%
2007	1,674	150,188	3,246,725	116,451	3,363,176	2,852,061	117.9%
2008	1,430	129,585	2,518,812	0	2,518,812	2,607,311	96.6%
2009	1,208	110,568	2,205,659	59,086	2,264,745	2,409,812	94.0%
2010	1,024	94,824	2,526,526	721,207	2,952,484	2,188,553	134.9%
2011	866	81,278	1,401,026	416,981	1,652,734	1,974,177	83.7%
2012	762	73,043	1,775,449	232,978	1,825,843	1,886,938	96.8%
2013	658	64,256	1,313,754	558,897	1,872,652	1,761,968	106.3%
2014	573	57,329	588,960	147,271	736,231	1,601,742	46.0%
2015	504	50,989	943,696	881,422	1,825,118	1,464,479	124.6%
2016	437	44,688	435,178	1,091,325	1,526,503	1,304,542	117.0%
All Years	31,819	2,803,870	44,637,124	5,057,068	49,051,085	48,193,761	101.8%
2007-2016							102.4%

HHC-4 NFL

Experience Year	Lives_years_exposures	Exposures_with_dailybenefit	Paid Claims	Claim Reserves	Actual Claims (woodwork removed)	Expected Claims (with all fitting factors)	Adjusted AtoE:claimcosts
2000	6,090	595,042	5,270,378	0	5,270,378	7,421,217	71.0%
2001	5,530	550,275	4,983,559	295,228	5,278,787	7,786,196	67.8%
2002	4,889	494,321	5,492,372	0	5,492,372	7,867,083	69.8%
2003	4,261	437,186	6,104,847	47,433	6,152,280	7,651,778	80.4%
2004	3,673	382,834	6,022,499	67,469	6,089,968	7,129,923	85.4%
2005	3,138	331,877	6,703,132	252,645	6,955,777	6,425,733	108.2%
2006	2,775	298,033	4,824,894	152,706	4,977,599	6,045,948	82.3%
2007	2,444	267,569	5,231,815	231,734	5,463,548	5,667,455	96.4%
2008	2,133	238,019	5,167,269	240,618	5,407,887	5,359,651	100.9%
2009	1,848	210,862	5,292,946	380,413	5,673,360	5,042,455	112.5%
2010	1,589	185,438	6,839,249	667,703	6,824,502	4,629,745	147.4%
2011	1,364	163,320	3,561,910	589,504	3,774,013	4,196,454	89.9%
2012	1,196	146,821	3,970,869	1,247,165	4,743,667	3,824,041	124.0%
2013	1,063	133,583	3,007,358	1,261,420	4,268,778	3,559,228	119.9%
2014	949	122,948	1,980,880	1,192,523	3,173,404	3,393,571	93.5%
2015	840	112,875	1,764,262	1,448,642	3,212,903	3,221,538	99.7%
2016	746	104,023	1,144,531	2,069,686	3,214,216	3,060,041	105.0%
All Years	44,527	4,775,028	77,362,770	10,144,887	85,973,439	92,282,055	93.2%
2007-2016							109.1%

Attachment A-6
Senior Health Insurance Company of Pennsylvania (SHIP)
LTC A/E Reports for 3Q2017
Experience Period: January 1, 2000 - September 30, 2017
Claim & Reserves Thru: September 30, 2017
Analysis by Experience Year
All Model Plans - ATL (Non-NFO)
B-Series (A_Bser)

Experience Year	Lives_years_exposures	Exposures_with_dailybenefit	Paid Claims	Claim Reserves	Actual Claims (woodwork removed)	Expected Claims (with all fitting factors)	Adjusted AtoE:claimcosts
2000	0	0	0	0	0	0	0.0%
2001	580	58,476	0	0	0	364,675	0.0%
2002	3,176	315,286	656,718	56,419	713,137	1,889,156	37.7%
2003	4,529	447,196	1,832,041	0	1,832,041	2,878,315	63.6%
2004	4,152	414,045	1,135,562	0	1,135,562	2,934,278	38.7%
2005	3,835	387,715	2,048,224	0	2,048,224	3,064,956	66.8%
2006	3,596	369,085	2,516,571	0	2,516,571	3,226,060	78.0%
2007	3,423	356,487	1,774,366	91,533	1,865,899	3,401,571	54.9%
2008	3,253	344,147	2,956,602	170,622	3,127,225	3,555,878	87.9%
2009	3,068	329,975	2,721,296	0	2,721,296	3,655,486	74.4%
2010	2,895	317,402	3,675,329	329,061	3,640,355	3,782,652	96.2%
2011	2,713	303,027	4,089,152	350,894	4,036,406	3,824,420	105.5%
2012	2,544	288,451	4,220,640	376,744	4,179,440	3,708,881	112.7%
2013	2,365	271,997	3,005,543	613,363	3,618,906	3,537,854	102.3%
2014	2,234	261,462	3,167,791	953,571	4,121,362	3,536,531	116.5%
2015	2,101	250,474	2,903,350	2,365,047	5,268,397	3,576,605	147.3%
2016	1,973	240,355	1,260,967	2,375,393	3,636,360	3,644,668	99.8%
All Years	46,437	4,955,580	37,964,152	7,682,648	44,461,180	50,581,986	87.9%
2007-2016							100.0%

FQ (A_FQSe)

Experience Year	Lives_years_exposures	Exposures_with_dailybenefit	Paid Claims	Claim Reserves	Actual Claims (woodwork removed)	Expected Claims (with all fitting factors)	Adjusted AtoE:claimcosts
2000	29,009	2,720,759	11,762,617	161,160	11,923,777	21,911,368	54.4%
2001	34,907	3,337,014	18,880,950	58,803	18,939,753	28,081,496	67.4%
2002	33,342	3,236,156	23,154,281	0	23,154,281	30,132,704	76.8%
2003	30,124	2,962,588	26,771,215	196,027	26,967,242	30,939,814	87.2%
2004	28,076	2,804,718	27,591,229	262,846	27,854,075	32,093,069	86.8%
2005	26,054	2,651,340	26,911,426	185,880	27,097,305	32,843,420	82.5%
2006	24,060	2,498,995	36,027,858	469,636	36,497,494	33,140,724	110.1%
2007	22,410	2,372,847	29,769,858	594,878	30,364,736	33,792,025	89.9%
2008	20,586	2,220,248	32,145,733	1,038,664	33,184,397	34,042,210	97.5%
2009	18,631	2,042,474	33,800,574	1,676,252	35,476,826	33,347,385	106.4%
2010	16,996	1,898,748	36,153,267	3,091,544	35,677,101	32,420,790	110.0%
2011	15,515	1,770,905	31,999,734	3,732,439	32,483,794	31,453,883	103.3%
2012	14,268	1,670,676	31,217,778	4,787,566	32,732,131	30,825,174	106.2%
2013	13,132	1,577,323	25,305,659	4,892,453	30,198,112	30,593,564	98.7%
2014	12,165	1,505,904	24,370,962	9,086,206	33,457,168	30,936,895	108.1%
2015	11,260	1,438,884	15,234,983	10,804,091	26,039,075	31,390,165	83.0%
2016	10,418	1,376,454	10,259,917	20,704,476	30,964,392	31,946,418	96.9%
All Years	360,955	38,086,032	441,358,040	61,742,920	493,011,658	529,891,103	93.0%
2007-2016							99.9%

HHC-NFL without California

Experience Year	Lives_years_exposures	Exposures_with_dailybenefit	Paid Claims	Claim Reserves	Actual Claims (woodwork removed)	Expected Claims (with all fitting factors)	Adjusted AtoE:claimcosts
2000	27,165	2,463,643	14,166,933	0	14,166,933	22,065,081	64.2%
2001	23,810	2,191,747	13,839,411	295,228	14,134,639	21,583,534	65.5%
2002	20,666	1,931,362	15,319,990	67,607	15,387,597	20,739,698	74.2%
2003	17,802	1,690,867	16,688,025	47,433	16,735,458	19,461,282	86.0%
2004	15,232	1,470,504	12,417,643	67,469	12,485,112	17,828,332	70.0%
2005	12,719	1,252,299	15,582,418	316,230	15,898,649	15,823,842	100.5%
2006	10,962	1,101,579	10,850,334	203,551	11,053,885	14,693,709	75.2%
2007	9,504	975,510	11,624,661	289,980	11,914,641	13,868,982	85.9%
2008	8,105	851,774	11,506,382	240,618	11,746,999	13,035,282	90.1%
2009	6,865	739,208	12,565,317	439,499	13,004,816	12,136,516	107.2%
2010	5,818	640,381	12,895,500	798,726	12,449,297	11,112,825	112.0%
2011	4,943	558,774	9,456,202	740,220	9,269,475	10,189,677	91.0%
2012	4,295	499,730	9,561,589	1,363,139	9,931,570	9,527,751	104.2%
2013	3,751	451,075	8,555,691	2,221,017	10,776,709	9,011,066	119.6%
2014	3,274	406,195	6,156,943	1,918,202	8,075,145	8,523,085	94.7%
2015	2,850	365,904	4,278,979	3,193,079	7,472,058	8,000,676	93.4%
2016	2,489	331,911	3,196,935	5,223,075	8,420,010	7,537,961	111.7%
All Years	180,252	17,922,461	188,662,955	17,425,073	202,922,994	235,139,299	86.3%
2007-2016							100.1%

Attachment A-7
Senior Health Insurance Company of Pennsylvania (SHIP)
LTC A/E Reports for 3Q2017
Experience Period: January 1, 2000 - September 30, 2017
Claim & Reserves Thru: September 30, 2017
Analysis by Experience Year
All Model Plans - Transport (Non-NFO)

All Model Plans-Transport (Non-NFO)

Experience Year	Lives_years_exposures	Exposures_with_dailybenefit	Paid Claims	Claim Reserves	Actual Claims (woodwork removed)	Expected Claims (with all fitting factors)	Adjusted AtoE:claimcosts
2000	55,332	5,263,122	54,622,263	60,584	54,682,847	69,813,197	78.3%
2001	51,113	5,060,588	64,469,558	531,672	65,001,230	72,982,052	89.1%
2002	47,343	4,886,938	65,703,463	217,838	65,921,301	76,804,966	85.8%
2003	43,375	4,669,720	68,543,129	724,250	69,267,379	80,640,588	85.9%
2004	40,126	4,505,511	69,785,362	736,731	70,522,093	85,649,786	82.3%
2005	36,500	4,283,303	79,370,316	1,161,152	80,531,468	89,508,398	90.0%
2006	33,485	4,112,726	86,987,546	1,904,398	88,891,945	94,794,608	93.8%
2007	30,777	3,963,921	83,750,071	1,670,655	85,420,726	100,592,789	84.9%
2008	28,148	3,802,454	91,290,812	3,917,731	95,208,543	105,810,553	90.0%
2009	25,486	3,611,686	103,245,097	7,449,886	110,694,983	109,704,703	100.9%
2010	22,853	3,395,931	100,802,869	9,839,963	110,642,833	111,770,653	99.0%
2011	20,069	3,146,084	103,388,954	13,007,056	105,814,555	110,585,903	95.7%
2012	17,853	2,958,468	98,542,858	20,076,659	107,835,924	109,952,751	98.1%
2013	16,019	2,794,865	96,759,821	31,632,973	116,720,722	109,919,497	106.2%
2014	14,421	2,646,949	84,869,847	41,313,928	126,183,775	109,974,226	114.7%
2015	12,920	2,498,728	64,871,818	55,987,260	120,859,078	109,470,103	110.4%
2016	11,623	2,371,751	37,202,703	76,037,237	113,239,939	109,202,233	103.7%
All Years	507,443	63,972,745	1,354,206,488	266,269,971	1,587,439,339	1,657,177,007	95.8%
2007-2016							100.5%

10770 Policy Form Grouping

Experience Year	Lives_years_exposures	Exposures_with_dailybenefit	Paid Claims	Claim Reserves	Actual Claims (woodwork removed)	Expected Claims (with all fitting factors)	Adjusted AtoE:claimcosts
2000	7,815	581,044	9,377,958	0	9,377,958	6,994,789	134.1%
2001	6,891	522,757	7,747,293	26,642	7,773,935	6,730,247	115.5%
2002	6,094	468,878	6,664,129	0	6,664,129	6,527,715	102.1%
2003	5,362	418,693	5,672,350	0	5,672,350	6,331,726	89.6%
2004	4,781	377,953	5,325,306	0	5,325,306	6,176,388	86.2%
2005	4,259	340,884	5,745,629	0	5,745,629	6,032,974	95.2%
2006	3,788	306,353	5,478,940	0	5,478,940	5,837,066	93.9%
2007	3,322	272,727	5,051,871	0	5,051,871	5,579,001	90.6%
2008	2,948	244,902	5,195,129	28,919	5,224,048	5,403,467	96.7%
2009	2,577	217,410	4,382,843	30,686	4,413,528	5,160,421	85.5%
2010	2,223	190,264	4,285,484	292,746	4,578,230	4,822,184	94.9%
2011	1,888	164,080	5,815,284	524,770	5,763,685	4,415,403	130.5%
2012	1,596	142,172	4,268,809	459,979	4,298,898	4,046,852	106.2%
2013	1,368	124,460	3,781,887	458,407	3,854,812	3,751,094	102.8%
2014	1,185	109,382	3,247,630	644,546	3,892,176	3,488,053	111.6%
2015	1,006	94,603	2,531,737	1,531,439	4,063,176	3,163,118	128.5%
2016	864	82,371	1,419,382	1,550,469	2,969,851	2,877,853	103.2%
All Years	57,965	4,658,934	85,991,659	5,548,602	90,148,522	87,338,351	103.2%
2007-2016							103.3%

Attachment A-7
Senior Health Insurance Company of Pennsylvania (SHIP)
LTC A/E Reports for 3Q2017
Experience Period: January 1, 2000 - September 30, 2017
Claim & Reserves Thru: September 30, 2017
Analysis by Experience Year
All Model Plans - Transport (Non-NFO)
10853 Policy Form Grouping

Experience Year	Lives_years_exposures	Exposures_with_dailybenefit	Paid Claims	Claim Reserves	Actual Claims (woodwork removed)	Expected Claims (with all fitting factors)	Adjusted AtoE:claimcosts
2000	10,304	893,042	7,521,033	0	7,521,033	9,129,553	82.4%
2001	9,388	824,454	10,745,050	23,008	10,768,058	9,242,895	116.5%
2002	8,529	756,506	9,149,515	0	9,149,515	9,415,582	97.2%
2003	7,635	684,087	8,481,920	0	8,481,920	9,402,161	90.2%
2004	6,927	626,914	7,204,004	0	7,204,004	9,507,466	75.8%
2005	6,148	563,494	7,239,997	0	7,239,997	9,359,148	77.4%
2006	5,456	507,006	9,426,265	202,541	9,628,806	9,208,893	104.6%
2007	4,894	459,952	8,672,074	0	8,672,074	9,175,731	94.5%
2008	4,381	415,664	8,299,646	67,697	8,367,343	9,050,220	92.5%
2009	3,874	371,038	9,945,359	149,966	10,095,325	8,785,114	114.9%
2010	3,440	331,288	8,538,002	0	8,538,002	8,468,899	100.8%
2011	2,945	286,462	8,902,985	218,074	8,291,872	7,836,842	105.8%
2012	2,512	248,313	7,034,263	408,249	6,765,920	7,223,966	93.7%
2013	2,179	218,547	6,279,192	350,947	6,027,400	6,751,591	89.3%
2014	1,883	191,444	6,924,997	1,553,511	8,478,508	6,224,304	136.2%
2015	1,622	166,965	3,775,936	936,342	4,712,279	5,693,526	82.8%
2016	1,410	146,799	2,692,125	3,115,978	5,808,103	5,215,165	111.4%
All Years	83,528	7,691,974	130,832,362	7,026,314	135,750,157	139,691,055	97.2%
2007-2016							101.8%

10955 Policy Form Grouping

Experience Year	Lives_years_exposures	Exposures_with_dailybenefit	Paid Claims	Claim Reserves	Actual Claims (woodwork removed)	Expected Claims (with all fitting factors)	Adjusted AtoE:claimcosts
2000	17,933	1,933,386	21,536,643	0	21,536,643	29,785,803	72.3%
2001	16,873	1,914,161	27,161,350	295,920	27,457,270	31,562,112	87.0%
2002	15,915	1,902,948	29,705,202	114,791	29,819,993	34,227,128	87.1%
2003	14,802	1,866,201	29,924,930	415,913	30,340,844	37,501,581	80.9%
2004	13,909	1,848,279	30,533,535	105,858	30,639,393	41,387,849	74.0%
2005	12,851	1,802,036	41,537,651	610,035	42,147,686	44,561,606	94.6%
2006	11,943	1,767,640	42,646,010	893,519	43,539,529	48,159,496	90.4%
2007	11,113	1,737,569	43,901,864	962,205	44,864,070	51,931,210	86.4%
2008	10,256	1,692,678	44,079,830	2,397,549	46,477,379	55,273,698	84.1%
2009	9,339	1,630,017	53,859,788	4,553,449	58,413,237	57,737,591	101.2%
2010	8,467	1,559,356	49,748,503	5,294,053	55,042,556	59,418,616	92.6%
2011	7,573	1,478,030	57,232,303	8,858,053	60,082,142	59,827,731	100.4%
2012	6,833	1,409,903	53,434,357	12,932,713	60,333,701	60,080,047	100.4%
2013	6,165	1,343,395	48,963,957	17,869,450	60,757,643	60,140,590	101.0%
2014	5,574	1,282,379	47,501,848	25,588,466	73,090,314	60,184,229	121.4%
2015	5,016	1,218,611	35,053,138	32,641,051	67,694,189	59,927,926	113.0%
2016	4,550	1,167,260	18,754,784	40,652,970	59,407,754	59,901,358	99.2%
All Years	179,111	27,553,849	675,575,692	154,185,998	811,644,341	851,608,572	95.3%
2007-2016							100.3%

Attachment A-7
Senior Health Insurance Company of Pennsylvania (SHIP)
LTC A/E Reports for 3Q2017
Experience Period: January 1, 2000 - September 30, 2017
Claim & Reserves Thru: September 30, 2017
Analysis by Experience Year
All Model Plans - Transport (Non-NFO)
11011 Policy Form Grouping

Experience Year	Lives_years_exposures	Exposures_with_dailybenefit	Paid Claims	Claim Reserves	Actual Claims (woodwork removed)	Expected Claims (with all fitting factors)	Adjusted AtoE:claimcosts
2000	18,247	1,792,304	15,591,871	60,584	15,652,455	23,117,447	67.7%
2001	17,053	1,742,054	18,255,482	186,102	18,441,584	24,699,668	74.7%
2002	16,009	1,706,525	19,191,739	103,047	19,294,786	25,910,347	74.5%
2003	14,892	1,653,819	23,824,308	308,336	24,132,644	26,697,593	90.4%
2004	13,897	1,608,947	25,776,522	630,872	26,407,394	27,862,982	94.8%
2005	12,700	1,536,907	24,404,173	551,117	24,955,290	28,827,386	86.6%
2006	11,826	1,495,434	28,680,011	808,338	29,488,349	30,861,578	95.6%
2007	11,034	1,459,970	25,724,493	708,450	26,432,943	33,160,383	79.7%
2008	10,202	1,418,041	32,990,468	1,325,519	34,315,987	35,322,694	97.1%
2009	9,379	1,364,312	34,226,162	2,535,700	36,761,862	37,252,129	98.7%
2010	8,444	1,287,866	37,432,560	4,253,164	41,685,724	38,268,790	108.9%
2011	7,431	1,193,117	30,593,010	3,184,923	30,707,211	37,732,581	81.4%
2012	6,711	1,135,048	33,524,753	6,275,717	36,182,246	37,804,144	95.7%
2013	6,136	1,087,192	37,040,210	12,620,777	45,146,351	38,476,091	117.3%
2014	5,633	1,044,476	26,573,142	13,473,509	40,046,651	39,304,718	101.9%
2015	5,160	1,001,849	22,916,423	20,102,124	43,018,546	39,951,339	107.7%
2016	4,699	960,105	14,281,557	30,687,365	44,968,922	40,480,458	111.1%
All Years	179,455	23,487,966	451,026,884	97,815,644	537,638,946	565,730,329	95.0%
2007-2016							100.4%

Miscellaneous Policy Form Grouping

Experience Year	Lives_years_exposures	Exposures_with_dailybenefit	Paid Claims	Claim Reserves	Actual Claims (woodwork removed)	Expected Claims (with all fitting factors)	Adjusted AtoE:claimcosts
2000	1,034	63,347	594,758	0	594,758	785,605	75.7%
2001	908	57,161	560,383	0	560,383	747,130	75.0%
2002	796	52,081	992,878	0	992,878	724,194	137.1%
2003	685	46,920	639,621	0	639,621	707,528	90.4%
2004	612	43,418	945,996	0	945,996	715,100	132.3%
2005	542	39,982	442,865	0	442,865	727,285	60.9%
2006	471	36,293	756,321	0	756,321	727,575	104.0%
2007	413	33,703	399,769	0	399,769	746,463	53.6%
2008	361	31,169	725,739	98,047	823,787	760,473	108.3%
2009	317	28,910	830,945	180,085	1,011,031	769,449	131.4%
2010	279	27,158	798,321	0	798,321	792,164	100.8%
2011	232	24,395	845,374	221,235	969,644	773,347	125.4%
2012	201	23,032	280,676	0	255,160	797,741	32.0%
2013	171	21,271	694,575	333,392	934,516	800,131	116.8%
2014	146	19,268	622,231	53,895	676,126	772,922	87.5%
2015	117	16,700	594,585	776,303	1,370,888	734,193	186.7%
2016	100	15,216	54,854	30,455	85,310	727,400	11.7%
All Years	7,384	580,023	10,779,891	1,693,413	12,257,372	12,808,701	95.7%
2007-2016							96.2% 95.4%