

**State:** Connecticut **Filing Company:** John Hancock Life Insurance Company (USA)  
**TOI/Sub-TOI:** LTC03G Group Long Term Care/LTC03G.001 Qualified  
**Product Name:** CT rerate filing, group-long-term care insurance  
**Project Name/Number:** CT rerate filing, group long-term care insurance/

### Filing at a Glance

Company: John Hancock Life Insurance Company (USA)  
Product Name: CT rerate filing, group-long-term care insurance  
State: Connecticut  
TOI: LTC03G Group Long Term Care  
Sub-TOI: LTC03G.001 Qualified  
Filing Type: Rate  
Date Submitted: 05/08/2013  
SERFF Tr Num: MULF-129019410  
SERFF Status: Closed-Disapproved  
State Tr Num: 201396350  
State Status:  
Co Tr Num: CT RERATE FILING, GROUP LONG-TERM CARE INSURANCE  
Implementation: On Approval  
Date Requested:  
Author(s): Michelle Fluet, Carol Folsom, Pat Hamlett, Joanne Witham  
Reviewer(s): Paul Lombardo (primary)  
Disposition Date: 08/08/2013  
Disposition Status: Disapproved  
Implementation Date:

State Filing Description:

**State:** Connecticut **Filing Company:** John Hancock Life Insurance Company (USA)  
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## General Information

Project Name: CT rerate filing, group long-term care insurance Status of Filing in Domicile: Authorized  
 Project Number: Date Approved in Domicile:  
 Requested Filing Mode: Review & Approval Domicile Status Comments:  
 Explanation for Combination/Other: Market Type: Group  
 Submission Type: Resubmission Previous Filing Number: MULF-127616992  
 Group Market Size: Small and Large Group Market Type: Employer, Association, Trust  
 Overall Rate Impact: 58.1% Filing Status Changed: 08/08/2013  
 State Status Changed:  
 Deemer Date: Created By: Michelle Fluet  
 Submitted By: Michelle Fluet Corresponding Filing Tracking Number:

### Filing Description:

We are re-filing for the rate increases for our P-FACE(2002) policy series in the above mentioned filing.

We would like you to reconsider your disposition on March 3, 2011, regarding SERFF Tracking #126947414 and subsequent June 23, 2011 and January 27, 2012 dispositions regarding SERFF Tracking# 127134149. We also intend to re-submit the rate increase filings for our remaining Group LTC products (which we have previously filed) when we have completed updating their Exhibits with our latest experience.

For our P-FACE(2002) policy series, we have added one additional year (2011) of experience to the data and determined new rate increases as well as applicable landing spots.

The additional data further demonstrates that experience to date continues to be worse than our original expectation and further validates our lifetime projections.

We continue to believe that comparing projected results, over the life of the business (actual experience projected with future expected assumptions), to original pricing expectations, also over the life of the business, is the appropriate approach for determining the adequacy of Long-Term Care insurance premium rates.

While we appreciate the intent of the Department in trying to limit rate increases on policyholders until the experience clearly warrants an increase, we believe that it is important to address the adverse experience deviations early on in order to prevent much larger necessary rate increases at a later time. And we believe that the volume of data that underlies our projection assumptions is credible enough to give full weight to our lifetime projections for this purpose.

We look forward to discussing this rate increase filing with you in greater detail. Please do not hesitate to contact me if you require further information in the meantime.

## Company and Contact

### Filing Contact Information

Michelle Fluet, Senior Contract Consultant mfluet@jhancock.com  
 200 Berkeley Street 617-572-0101 [Phone]  
 B6-06 617-572-0399 [FAX]  
 Boston, MA 02117

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**Filing Company Information**

John Hancock Life Insurance Company (USA)  
200 Berkeley Street  
Boston, MA 02176  
(617) 572-6000 ext. [Phone]

CoCode: 65838  
Group Code: 904  
Group Name:  
FEIN Number: 01-0233346

State of Domicile: Michigan  
Company Type:  
State ID Number:

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**Filing Fees**

Fee Required? No  
Retaliatory? No  
Fee Explanation:

<b>State:</b>	Connecticut	<b>Filing Company:</b>	John Hancock Life Insurance Company (USA)
<b>TOI/Sub-TOI:</b>	LTC03G Group Long Term Care/LTC03G.001 Qualified		
<b>Product Name:</b>	CT rerate filing, group-long-term care insurance		
<b>Project Name/Number:</b>	CT rerate filing, group long-term care insurance/		

## Correspondence Summary

### Dispositions

Status	Created By	Created On	Date Submitted
Disapproved	Paul Lombardo	08/08/2013	08/08/2013

### Objection Letters and Response Letters

#### Objection Letters

Status	Created By	Created On	Date Submitted
Requesting Additional Information	Paul Lombardo	06/19/2013	06/19/2013

#### Response Letters

Responded By	Created On	Date Submitted
Michelle Fluet	06/20/2013	06/20/2013

### Amendments

Schedule	Schedule Item Name	Created By	Created On	Date Submitted
Supporting Document	Actuarial Memorandum	Michelle Fluet	05/09/2013	05/09/2013

<b>State:</b> Connecticut	<b>Filing Company:</b> John Hancock Life Insurance Company (USA)
<b>TOI/Sub-TOI:</b> LTC03G Group Long Term Care/LTC03G.001 Qualified	
<b>Product Name:</b> CT rerate filing, group-long-term care insurance	
<b>Project Name/Number:</b> CT rerate filing, group long-term care insurance/	

## Disposition

Disposition Date: 08/08/2013

Implementation Date:

Status: Disapproved

Comment: Please review attached disposition.

Company Name:	Overall % Indicated Change:	Overall % Rate Impact:	Written Premium Change for this Program:	# of Policy Holders Affected for this Program:	Written Premium for this Program:	Maximum % Change (where req'd):	Minimum % Change (where req'd):
John Hancock Life Insurance Company (USA)	58.100%	58.100%	\$1,352,731	1,779	\$2,328,281	133.800%	0.000%

Schedule	Schedule Item	Schedule Item Status	Public Access
Supporting Document (revised)	Actuarial Memorandum		Yes
Supporting Document	Actuarial Memorandum		Yes
Supporting Document	Cover Letter		Yes
Supporting Document	Response to 6/19/13 objection		Yes
Rate	P-FACE(2002) rates		Yes



# STATE OF CONNECTICUT

## INSURANCE DEPARTMENT

### John Hancock Life Insurance Company (USA) Group LTC 2013 Rate Filing

#### Finding of Facts

1. Connecticut specific experience:

Calendar Year	Earned Premium	Incurred Claims	Actual Loss Ratio	Expected Loss Ratio	Actual/Expected
2003-2008	4,364,450	192,816	4.42%	11.61%	0.38
2009	1,902,747	205,681	10.81%	12.67%	0.85
2010	2,141,403	21,133	0.99%	14.53%	0.07
2011	2,334,761	167,094	7.16%	15.90%	0.45
Total	10,743,361	586,724	5.46%	13.30%	0.41

2. Nationwide experience:

Calendar Year	Earned Premium	Incurred Claims	Actual Loss Ratio	Expected Loss Ratio	Actual/Expected
2003-2008	271,244,648	32,348,215	11.93%	10.66%	1.12
2009	128,445,839	14,047,473	10.94%	12.08%	0.91
2010	155,656,506	19,359,238	12.44%	13.58%	0.92
2011	172,770,165	29,423,657	17.03%	15.25%	1.12
Total	728,117,158	95,178,583	13.07%	12.61%	1.04

- John Hancock Life Insurance Company is requesting an average increase of 58.1% on group policy form P-FACE (2002-2). The increase ranges from 0% to 133.8%.
- There have been no previous rate increases for this group policy form.
- This represents a closed block of business with an issue date range of 3/2003 to 1/2010.
- As of 12/31/2011 there were 1,779 certificate holders in Connecticut.
- John Hancock projected that the nationwide lifetime loss ratio with and without the average 58.1% rate increase request is 88.4% and 120.3% respectively, while the Connecticut specific lifetime loss ratio with and without the average 58.1% rate increase is 99.5% and 132.9% respectively.

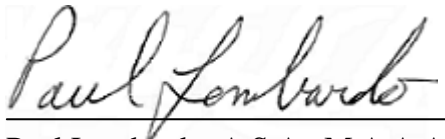
### Department Summary

Connecticut specific experience from inception-to-date is much better than what John Hancock expected based upon the original pricing assumptions with an actual-to-expected loss ratio of 0.41, while nationwide experience from inception-to-date has been slightly worse than anticipated with an actual-to-expected ratio of 1.04. Connecticut insurance regulations require group long term care to meet a loss ratio requirement of 65%.

### Department Disposition

Based upon the finding of fact, and the summary information described above, the average rate increase of 58.1% is disapproved as submitted. The inception-to-date loss ratios indicate that experience is coming in well below expectations in Connecticut. Current Connecticut inception-to-date loss ratio of 5.46% will need to meet the 65% loss ratio requirement over the lifetime of the policy for those Connecticut customers that were issued certificates in Connecticut. The Department believes that any increase at this time is considered excessive.

Dated August 8, 2013.

A handwritten signature in cursive script that reads "Paul Lombardo". The signature is written in black ink on a white background.

Paul Lombardo, A.S.A., M.A.A.A.  
Insurance Actuary  
Connecticut Insurance Department

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## Objection Letter

Objection Letter Status	Requesting Additional Information
Objection Letter Date	06/19/2013
Submitted Date	06/19/2013
Respond By Date	07/03/2013

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Dear Michelle Fluet,

**Introduction:**

As in previous rate filings, please provide Connecticut specific experience in the same format as nationwide experience has been provided. Thank you in advance for your cooperation.

**Conclusion:**

Sincerely,  
Paul Lombardo



SERFF Tracking #: MULF-129019410 State Tracking #: 201396350 Company Tracking #: CT RERATE FILING, GROUP LONG-TERM CARE I...

State: Connecticut Filing Company: John Hancock Life Insurance Company (USA)  
TOI/Sub-TOI: LTC03G Group Long Term Care/LTC03G.001 Qualified  
Product Name: CT rerate filing, group-long-term care insurance  
Project Name/Number: CT rerate filing, group long-term care insurance/

## Response Letter

Response Letter Status Submitted to State  
Response Letter Date 06/20/2013  
Submitted Date 06/20/2013

Dear Paul Lombardo,

### Introduction:

Thank you for your letter.

### Response 1

#### Comments:

Please find our response to your June 19, 2013 objection on the Supporting Documentation tab labeled as "Response to 6/19/13 objection".

### Changed Items:

Supporting Document Schedule Item Changes	
Satisfied - Item:	Response to 6/19/13 objection
Comments:	
Attachment(s):	Response to 6.19 obj.pdf GLTC 2002 LR Exh II - CT.pdf

No Form Schedule items changed.

No Rate/Rule Schedule items changed.

### Conclusion:

Should you have any additional questions or concerns, please do not hesitate to contact us.

Sincerely,

Michelle Fluet

<b>State:</b>	Connecticut	<b>Filing Company:</b>	John Hancock Life Insurance Company (USA)
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<b>Project Name/Number:</b>	CT rerate filing, group long-term care insurance/		

## Amendment Letter

Submitted Date: 05/09/2013

Comments:

We are amending this submission in order to provide a revised actuarial memorandum.

Changed Items:

*No Form Schedule Items Changed.*

*No Rate Schedule Items Changed.*

Supporting Document Schedule Item Changes	
<b>Satisfied - Item:</b>	Actuarial Memorandum
<b>Comments:</b>	
<b>Attachment(s):</b>	Connecticut Care Choice Memo.pdf
<i>Previous Version</i>	
<b>Satisfied - Item:</b>	<i>Actuarial Memorandum</i>
<b>Comments:</b>	
<b>Attachment(s):</b>	<i>Connecticut Care Choice Memo.pdf</i>

State: Connecticut Filing Company: John Hancock Life Insurance Company (USA)  
 TOI/Sub-TOI: LTC03G Group Long Term Care/LTC03G.001 Qualified  
 Product Name: CT rerate filing, group-long-term care insurance  
 Project Name/Number: CT rerate filing, group long-term care insurance/

### Rate Information

Rate data applies to filing.

Filing Method:  
 Rate Change Type: Increase  
 Overall Percentage of Last Rate Revision: %  
 Effective Date of Last Rate Revision:  
 Filing Method of Last Filing:

### Company Rate Information

Company Name:	Overall % Indicated Change:	Overall % Rate Impact:	Written Premium Change for this Program:	# of Policy Holders Affected for this Program:	Written Premium for this Program:	Maximum % Change (where req'd):	Minimum % Change (where req'd):
John Hancock Life Insurance Company (USA)	58.100%	58.100%	\$1,352,731	1,779	\$2,328,281	133.800%	0.000%

State: Connecticut      Filing Company: John Hancock Life Insurance Company (USA)  
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## Rate/Rule Schedule

Item No.	Schedule Item Status	Document Name	Affected Form Numbers (Separated with commas)	Rate Action	Rate Action Information	Attachments
1		P-FACE(2002) rates	P-FACE(2002)	Revised	Previous State Filing Number:  Percent Rate Change Request: 58.1	CT P-FACE(2002-2) Rates.pdf,

**Appendix B**  
**John Hancock Life Insurance Company**  
**P-FACE (2002-2)**

**Rates per \$5 of Monthly Benefit - 90 Day Elimination Period**  
**75% HHC benefit**

Issue Age	Future Purchase Option Benefit Period									ABI Option: (5% Compound Inflation) Benefit Period								
	2	3	4	5	6	7	8	10	Life	2	3	4	5	6	7	8	10	Life
18-29	0.48	0.53	0.56	0.59	0.62	0.63	0.66	0.90	0.97	2.36	2.59	2.76	2.87	3.01	3.10	3.23	4.31	4.60
30	0.48	0.53	0.56	0.59	0.62	0.63	0.66	0.90	0.97	2.36	2.59	2.76	2.87	3.01	3.10	3.23	4.31	4.60
31	0.50	0.55	0.58	0.61	0.64	0.66	0.69	0.94	1.00	2.43	2.68	2.86	2.98	3.13	3.22	3.36	4.47	4.78
32	0.51	0.57	0.61	0.63	0.66	0.68	0.71	0.97	1.04	2.51	2.77	2.97	3.09	3.24	3.34	3.48	4.64	4.96
33	0.53	0.59	0.63	0.66	0.69	0.71	0.74	1.01	1.08	2.58	2.87	3.07	3.21	3.36	3.47	3.61	4.81	5.14
34	0.54	0.61	0.65	0.68	0.71	0.73	0.77	1.05	1.12	2.66	2.97	3.19	3.33	3.49	3.60	3.75	4.99	5.34
35	0.56	0.63	0.67	0.71	0.74	0.76	0.79	1.09	1.16	2.75	3.08	3.30	3.46	3.62	3.73	3.89	5.18	5.54
36	0.58	0.65	0.70	0.73	0.77	0.79	0.82	1.13	1.21	2.83	3.18	3.43	3.59	3.76	3.87	4.03	5.38	5.74
37	0.60	0.67	0.73	0.76	0.80	0.82	0.85	1.17	1.25	2.92	3.30	3.55	3.72	3.90	4.02	4.19	5.58	5.96
38	0.61	0.70	0.75	0.79	0.83	0.85	0.89	1.21	1.30	3.01	3.41	3.68	3.86	4.05	4.17	4.34	5.79	6.18
39	0.63	0.72	0.78	0.82	0.86	0.88	0.92	1.26	1.35	3.10	3.53	3.82	4.01	4.20	4.33	4.51	6.01	6.42
40	0.65	0.75	0.81	0.85	0.89	0.92	0.95	1.31	1.40	3.20	3.66	3.96	4.16	4.36	4.49	4.68	6.23	6.66
41	0.68	0.79	0.85	0.90	0.94	0.97	1.01	1.38	1.48	3.25	3.75	4.07	4.28	4.49	4.63	4.82	6.42	6.86
42	0.71	0.83	0.90	0.95	1.00	1.03	1.07	1.47	1.57	3.31	3.85	4.19	4.42	4.63	4.77	4.97	6.62	7.07
43	0.74	0.87	0.95	1.01	1.06	1.09	1.13	1.55	1.66	3.37	3.95	4.31	4.55	4.77	4.91	5.12	6.82	7.29
44	0.78	0.92	1.01	1.07	1.12	1.15	1.20	1.64	1.75	3.42	4.05	4.43	4.69	4.91	5.06	5.28	7.03	7.51
45	0.81	0.97	1.06	1.13	1.18	1.22	1.27	1.74	1.86	3.48	4.16	4.56	4.83	5.07	5.22	5.44	7.25	7.74
46	0.87	1.03	1.13	1.20	1.26	1.30	1.35	1.85	1.98	3.62	4.31	4.74	5.02	5.27	5.43	5.65	7.53	8.05
47	0.92	1.10	1.21	1.28	1.34	1.38	1.44	1.97	2.11	3.76	4.47	4.92	5.22	5.47	5.64	5.88	7.83	8.37
48	0.98	1.16	1.28	1.36	1.43	1.47	1.53	2.10	2.24	3.91	4.64	5.11	5.43	5.69	5.87	6.11	8.14	8.70
49	1.05	1.24	1.37	1.45	1.52	1.57	1.63	2.24	2.39	4.07	4.81	5.31	5.65	5.92	6.10	6.35	8.46	9.04
50	1.11	1.31	1.45	1.55	1.62	1.67	1.74	2.38	2.55	4.23	4.99	5.52	5.87	6.15	6.34	6.60	8.80	9.40
51	1.19	1.40	1.55	1.66	1.73	1.79	1.86	2.55	2.72	4.41	5.22	5.78	6.16	6.45	6.65	6.93	9.23	9.86
52	1.26	1.50	1.66	1.77	1.86	1.91	1.99	2.73	2.92	4.60	5.46	6.06	6.46	6.77	6.97	7.26	9.68	10.34
53	1.34	1.60	1.78	1.90	1.99	2.05	2.13	2.92	3.12	4.79	5.71	6.35	6.77	7.10	7.31	7.62	10.15	10.84
54	1.43	1.71	1.90	2.03	2.13	2.19	2.28	3.13	3.34	5.00	5.98	6.65	7.10	7.44	7.67	7.99	10.47	11.19
55	1.52	1.82	2.03	2.17	2.28	2.35	2.44	3.35	3.58	5.21	6.26	6.97	7.45	7.81	8.04	8.38	10.74	11.48
56	1.65	1.99	2.22	2.37	2.48	2.56	2.66	3.65	3.90	5.58	6.70	7.48	8.00	8.38	8.64	9.00	11.28	12.06
57	1.80	2.16	2.41	2.58	2.71	2.79	2.91	3.98	4.25	5.98	7.18	8.03	8.59	9.01	9.28	9.67	11.85	12.66
58	1.95	2.35	2.63	2.82	2.95	3.04	3.17	4.34	4.63	6.41	7.70	8.62	9.23	9.68	9.97	10.39	12.43	13.28
59	2.12	2.55	2.86	3.07	3.22	3.32	3.45	4.73	5.05	6.86	8.25	9.25	9.92	10.39	10.71	11.16	13.03	13.93
60	2.31	2.78	3.12	3.35	3.51	3.62	3.77	5.16	5.51	7.29	8.84	9.93	10.65	11.10	11.51	11.99	13.66	14.60
61	2.53	3.06	3.44	3.69	3.87	3.99	4.15	5.65	6.04	7.56	9.32	10.43	11.13	11.51	12.16	12.67	14.08	15.04
62	2.78	3.36	3.79	4.07	4.27	4.40	4.58	6.07	6.49	7.83	9.73	10.87	11.54	11.95	12.81	13.38	14.49	15.48
63	3.04	3.70	4.17	4.49	4.71	4.85	5.05	6.52	6.96	8.13	10.10	11.28	11.97	12.42	13.28	14.14	14.91	15.93
64	3.34	4.07	4.60	4.95	5.19	5.35	5.57	7.00	7.47	8.43	10.48	11.72	12.44	12.88	13.81	14.74	15.33	16.38
65	3.66	4.48	5.07	5.46	5.72	5.90	6.14	7.50	8.01	8.77	10.88	12.21	12.91	13.37	14.33	15.15	15.75	16.83
66	4.00	4.92	5.59	6.02	6.23	6.51	6.78	8.05	8.60	9.15	11.40	12.76	13.59	14.17	15.09	15.75	16.38	17.50
67	4.38	5.41	6.11	6.52	6.77	7.19	7.49	8.62	9.21	9.57	11.82	13.33	14.30	15.01	15.72	16.37	17.03	18.19
68	4.72	5.88	6.60	7.08	7.38	7.86	8.27	9.23	9.87	9.85	12.21	13.95	15.04	15.84	16.32	17.00	17.68	18.89
69	5.05	6.37	7.14	7.69	8.00	8.53	9.14	9.88	10.55	10.12	12.60	14.44	15.67	16.43	16.93	17.63	18.34	19.59
70	5.40	6.88	7.72	8.33	8.72	9.24	10.09	10.56	11.28	10.39	12.99	14.94	16.24	17.02	17.54	18.27	19.00	20.30
71	6.02	7.67	8.62	9.39	9.93	10.39	10.83	11.26	12.03	10.81	13.61	15.65	17.01	17.82	18.37	19.13	19.90	21.26
72	6.48	8.20	9.43	10.25	10.74	11.07	11.53	11.99	12.81	11.24	14.23	16.37	17.79	18.64	19.21	20.01	20.81	22.24
73	6.84	8.72	10.03	10.90	11.43	11.78	12.27	12.76	13.63	11.66	14.87	17.10	18.58	19.47	20.07	20.90	21.74	23.23
74	7.22	9.27	10.66	11.58	12.14	12.51	13.03	13.55	14.48	12.09	15.51	17.83	19.38	20.31	20.93	21.81	22.68	24.23
75	7.61	9.83	11.30	12.29	12.88	13.27	13.82	14.38	15.36	12.51	16.15	18.58	20.19	21.16	21.81	22.71	23.62	25.24
76	8.01	10.41	11.97	13.01	13.64	14.05	14.64	15.23	16.27	12.93	16.80	19.32	21.00	22.01	22.68	23.62	24.57	26.25
77	8.42	11.01	12.66	13.76	14.42	14.86	15.48	16.10	17.20	13.33	17.44	20.05	21.80	22.84	23.54	24.52	25.50	27.25
78	8.82	11.62	13.36	14.52	15.22	15.68	16.33	16.99	18.15	13.73	18.07	20.78	22.59	23.67	24.39	25.41	26.43	28.23
79	9.23	12.23	14.07	15.29	16.02	16.51	17.20	17.89	19.11	14.10	18.69	21.49	23.36	24.48	25.22	26.28	27.33	29.20
80	9.64	12.85	14.78	16.06	16.84	17.35	18.07	18.80	20.08	14.46	19.28	22.17	24.10	25.25	26.02	27.11	28.19	30.12
81	10.60	14.14	16.26	17.67	18.52	19.08	19.88	20.68	22.09	15.90	21.21	24.39	26.51	27.78	28.63	29.82	31.01	33.13
82	11.57	15.42	17.74	19.28	20.20	20.82	21.69	22.55	24.10	17.35	23.13	26.60	28.92	30.30	31.23	32.53	33.83	36.15
83	12.82	17.09	19.66	21.37	22.39	23.08	24.04	25.00	26.71	19.23	25.64	29.48	32.05	33.59	34.61	36.05	37.50	40.06
84	14.07	18.76	21.58	23.45	24.58	25.33	26.39	27.44	29.32	21.11	28.15	32.37	35.18	36.87	38.00	39.58	41.16	43.98

# Appendix C

## John Hancock Life Insurance Company

### P-FACE (2002-2)

Rates to be used with Inflation Decrease Option Only

Rates per \$5 of Monthly Benefit - 90 Day Elimination Period

75% HHC benefit

Issue Age	ABI Option: (3.0% Compound Inflation) Benefit Period						
	2	3	4	5	6	7	8
18-29	1.29	1.42	1.51	1.58	1.65	1.70	1.77
30	1.29	1.42	1.51	1.58	1.65	1.70	1.77
31	1.33	1.47	1.57	1.63	1.71	1.76	1.84
32	1.37	1.52	1.63	1.70	1.78	1.83	1.91
33	1.42	1.57	1.68	1.76	1.84	1.90	1.98
34	1.46	1.63	1.75	1.83	1.91	1.97	2.05
35	1.51	1.69	1.81	1.89	1.98	2.05	2.13
36	1.55	1.74	1.88	1.97	2.06	2.12	2.21
37	1.60	1.81	1.95	2.04	2.14	2.20	2.29
38	1.65	1.87	2.02	2.12	2.22	2.28	2.38
39	1.70	1.94	2.09	2.20	2.30	2.37	2.47
40	1.75	2.00	2.17	2.28	2.39	2.46	2.56
41	1.78	2.06	2.23	2.35	2.46	2.54	2.64
42	1.81	2.11	2.30	2.42	2.54	2.61	2.72
43	1.84	2.16	2.36	2.49	2.61	2.69	2.80
44	1.88	2.22	2.43	2.57	2.69	2.78	2.89
45	1.91	2.28	2.50	2.65	2.78	2.86	2.98
46	1.98	2.36	2.60	2.75	2.89	2.97	3.10
47	2.06	2.45	2.70	2.86	3.00	3.09	3.22
48	2.14	2.54	2.80	2.98	3.12	3.21	3.35
49	2.23	2.64	2.91	3.09	3.24	3.34	3.48
50	2.32	2.73	3.02	3.22	3.37	3.47	3.62
51	2.42	2.86	3.17	3.37	3.54	3.64	3.79
52	2.52	2.99	3.32	3.54	3.71	3.82	3.98
53	2.63	3.13	3.48	3.71	3.89	4.01	4.17
54	2.74	3.28	3.65	3.89	4.08	4.20	4.38
55	2.86	3.43	3.82	4.08	4.28	4.41	4.59
56	3.06	3.67	4.10	4.38	4.59	4.73	4.93
57	3.28	3.94	4.40	4.71	4.94	5.09	5.30
58	3.51	4.22	4.72	5.06	5.30	5.46	5.69
59	3.76	4.52	5.07	5.43	5.70	5.87	6.11
60	4.03	4.85	5.44	5.84	6.12	6.31	6.57
61	4.23	5.11	5.74	6.17	6.47	6.66	6.94
62	4.45	5.38	6.07	6.52	6.83	7.04	7.33
63	4.67	5.68	6.40	6.89	7.22	7.44	7.75
64	4.91	5.98	6.76	7.28	7.63	7.86	8.19
65	5.15	6.31	7.14	7.69	8.06	8.31	8.65
66	5.47	6.72	7.63	8.24	8.63	8.90	9.27
67	5.80	7.16	8.16	8.82	9.24	9.53	9.92
68	6.16	7.63	8.72	9.44	9.90	10.20	10.62
69	6.53	8.13	9.32	10.11	10.60	10.92	11.38
70	6.93	8.66	9.96	10.83	11.35	11.69	12.18
71	7.46	9.38	10.79	11.73	12.29	12.67	13.20
72	8.03	10.16	11.69	12.71	13.32	13.72	14.29
73	8.64	11.01	12.66	13.76	14.42	14.87	15.48
74	9.30	11.93	13.72	14.91	15.63	16.10	16.77
75	10.01	12.92	14.86	16.15	16.93	17.44	18.17
76	10.77	14.00	16.10	17.50	18.34	18.90	19.69
77	11.60	15.16	17.44	18.96	19.87	20.47	21.32
78	12.48	16.43	18.89	20.53	21.52	22.18	23.10
79	13.43	17.80	20.46	22.24	23.31	24.02	25.02
80	14.46	19.28	22.17	24.10	25.25	26.02	27.11
81	15.90	21.21	24.39	26.51	27.78	28.63	29.82
82	17.35	23.13	26.60	28.92	30.30	31.23	32.53
83	19.23	25.64	29.48	32.05	33.59	34.61	36.05
84	21.11	28.15	32.37	35.18	36.87	38.00	39.58

**Appendix C**  
**John Hancock Life Insurance Company**  
**P-FACE (2002-2)**

Rates to be used with Inflation Decrease Option Only

**Rates per \$5 of Monthly Benefit - 90 Day Elimination Period**  
**75% HHC benefit**

Issue Age	ABI Option (1.7% Compound Inflation)	
	10	Life
18-29	1.84	1.97
30	1.84	1.97
31	1.91	2.04
32	1.98	2.12
33	2.06	2.20
34	2.14	2.28
35	2.22	2.37
36	2.30	2.46
37	2.39	2.55
38	2.48	2.64
39	2.57	2.74
40	2.66	2.85
41	2.75	2.93
42	2.83	3.02
43	2.92	3.12
44	3.01	3.21
45	3.10	3.31
46	3.22	3.44
47	3.35	3.58
48	3.48	3.72
49	3.62	3.87
50	3.76	4.02
51	3.95	4.22
52	4.14	4.42
53	4.34	4.64
54	4.55	4.86
55	4.77	5.10
56	5.13	5.48
57	5.51	5.89
58	5.92	6.32
59	6.36	6.79
60	6.83	7.30
61	7.22	7.71
62	7.63	8.15
63	8.06	8.61
64	8.52	9.10
65	9.00	9.62
66	9.64	10.30
67	10.32	11.02
68	11.05	11.80
69	11.83	12.64
70	12.67	13.53
71	13.72	14.66
72	14.87	15.88
73	16.10	17.21
74	17.45	18.64
75	18.90	20.19
76	20.47	21.87
77	22.18	23.69
78	24.02	25.67
79	26.03	27.81
80	28.19	30.12
81	31.01	33.13
82	33.83	36.15
83	37.50	40.06
84	41.16	43.98

<b>State:</b>	Connecticut	<b>Filing Company:</b>	John Hancock Life Insurance Company (USA)
<b>TOI/Sub-TOI:</b>	LTC03G Group Long Term Care/LTC03G.001 Qualified		
<b>Product Name:</b>	CT rerate filing, group-long-term care insurance		
<b>Project Name/Number:</b>	CT rerate filing, group long-term care insurance/		

## Supporting Document Schedules

<b>Satisfied - Item:</b>	Actuarial Memorandum
<b>Comments:</b>	
<b>Attachment(s):</b>	Connecticut Care Choice Memo.pdf
<b>Item Status:</b>	
<b>Status Date:</b>	

<b>Satisfied - Item:</b>	Cover Letter
<b>Comments:</b>	
<b>Attachment(s):</b>	Cover Letter.pdf
<b>Item Status:</b>	
<b>Status Date:</b>	

<b>Satisfied - Item:</b>	Response to 6/19/13 objection
<b>Comments:</b>	
<b>Attachment(s):</b>	Response to 6.19 obj.pdf GLTC 2002 LR Exh II - CT.pdf
<b>Item Status:</b>	
<b>Status Date:</b>	



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<u>Product Name</u>	<u>Form Number</u>	<u>Issue Date Range</u>
Care Choice	P-FACE(2002-2)	3/2003 to 1/2010

**These policy form rates were originally priced with a margin for moderately adverse experience in accordance with the NAIC model rate stability regulations which were being implemented on a State by State basis during the time of our initial rate filing.**

## **1. Scope & Purpose**

This memorandum consists of materials which support the development of new premium rates for the above captioned Policy series form. The purpose of this memorandum is to demonstrate that the requirements of this State in regards to an inforce rate increase request and new business rates have been met. This rate filing is not intended to be used for any other purpose.

## **2. Benefit Description**

A brief policy description for the certificate form:

### P-FACE(2002-2)

This is a Group Long-Term care plan that pays benefits to the certificate holder insured for the following covered care or services provided to the insured:

- Confinement in a Nursing Home or Alternate Care Facility for room, board and care services
- Home Health Care; Hospice Care, Respite Care; or
- Attendance at an Adult Day Care Center providing Adult Day Care

It is intended to be a Qualified Long-Term Care Insurance contract under the Federal Internal Revenue Code.

The Benefit trigger is determined based on the insured's cognitive impairment or his requiring substantial assistance to perform two out of six activities of daily living (ADLs) of bathing, dressing, eating, toileting, transferring and maintaining continence. The insured must be certified to be chronically ill by a licensed health care practitioner.

Long-Term Care Benefits are paid at 100% of the actual charges for each day of care after the qualification period up to:

### Nursing Home (NH):

- (a) the Nursing Home Daily Maximum Benefit (NH DMB) elected for care received in a NH, or

### Community Based Professional Care (CBPC):

- (b) the CBPC DMB elected for covered services received in a community setting including (including home health care, adult day care and hospice care provided outside a NH, hospice facility or alternate care facility) or

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Alternate Care Facility (ACF):

(c) the ACF DMB elected for covered services received in an ACF, or

Informal Care:

(d) the Informal Care DMB elected up to the number of days per calendar year elected for covered Informal Care services (custodial or homemaker services provided by a person without professional skills).

Benefits are payable until the Lifetime Maximum Benefit (LMB) is reached. Benefits are coordinated with Medicare as well as with any other Group certificate coverages.

**3. Renewability**

Certificates under this policy form have a guaranteed renewable clause.

**4. Applicability**

This filing is applicable to inforce policies and to new certificates enrolling in this policy series. The premium changes will apply to the base forms as well as all applicable optional benefits upon the expiration of any applicable group policy rate guarantees.

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**5. Morbidity**

The morbidity assumptions are derived from our own experience, following a comprehensive claim study recently completed. The study has been peer reviewed both internally as well as by an Independent third party. A summary of the findings from the morbidity study is included in this filing as a separate document.

Our claims projections include 12 years of future morbidity improvements at 1.1% per year, as well as a 5.0% margin for moderately adverse experience, consistent with the margin originally anticipated in our original pricing loss ratio.

Below are currently expected sample annual claim costs for a P-FACE(2002-2) policy, \$10 daily benefit, and 5yr LMB which include a 5.0% margin for moderately adverse experience:

Age	Issue Age 45	
	FPO	ABI
45	4.43	5.78
50	4.36	7.08
55	5.57	11.12
60	6.84	15.82
65	11.24	32.42
70	23.00	83.66
75	67.17	311.21
80	164.57	959.54
85	320.23	2,282.15
90	398.74	3,491.23

Age	Issue Age 50	
	FPO	ABI
50	5.27	6.86
55	6.19	10.01
60	8.22	15.56
65	15.27	35.72
70	36.10	105.76
75	103.56	384.54
80	239.50	1,118.48
85	390.82	2,239.91
90	475.75	3,362.48

Age	Issue Age 60	
	FPO	ABI
60	7.72	9.71
65	14.97	23.16
70	39.23	73.85
75	115.07	269.49
80	271.36	793.00
85	440.84	1,575.38
90	538.53	2,354.59

*Original Pricing Assumption for Morbidity:*

In developing claim cost assumptions, reference was made to data published by the National Center for Health Statistics National Nursing Home Survey (1985 and 1995), the National Health Interview Survey (1984), the National Long-Term Care Survey (1982, 1984, 1989, 1994 and 1999), Medicare data; internal experience and other experience furnished to us by consultants. The claim costs were adjusted due to the impact of underwriting, inflation options, elected options, anti-selection considerations, and the savings incurred because the daily maximum benefit will not always be paid.

Below are the original sample annual claim costs for a P-FACE(2002-2) policy, \$10 daily benefit, and 5yr LMB which include a 5.0% margin for moderately adverse experience:

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Issue Age 45		
Age	FPO	ABI
45	3.21	3.43
50	4.26	5.15
55	7.09	10.29
60	10.37	18.87
65	18.36	42.64
70	33.85	101.49
75	65.14	252.15
80	129.08	645.33
85	223.42	1,440.03
90	318.61	2,641.72

Issue Age 50		
Age	FPO	ABI
50	3.97	4.23
55	5.96	7.22
60	10.61	15.54
65	19.02	34.96
70	35.25	82.99
75	64.96	196.70
80	128.74	502.61
85	222.56	1,119.37
90	316.36	2,046.26

Issue Age 60		
Age	FPO	ABI
60	5.46	5.83
65	16.07	19.69
70	37.49	55.98
75	70.24	131.87
80	134.18	321.43
85	223.01	684.88
90	319.28	1,258.20

As part of the inforce management of the business, the company monitored the performance of the business by completing periodic analysis for morbidity, voluntary lapse rates and mortality. The findings from these analyses were used in projecting the inforce business to determine the effect of experience on the projected lifetime loss ratio. These studies have indicated that actual morbidity experience, lapse, and mortality experience have deteriorated since original assumptions were developed, and the deterioration does not appear to be temporary.

At the time of the initial premium rate development of these forms, there was very little industry insured data or company data available for morbidity at the later durations and older ages, and since that time, the volume of experience has increased dramatically. For our Group LTC business we now have over twice the company experience data at ages 85+ and durations 10+ compared to just 3 years ago. In developing our new assumptions we also reference our retail block of business, which has over 8 times the volume of experience on similar policies. These data have indicated that our original pricing assumptions for older ages and later durations were too low. This is consistent with the comparison of our above original assumptions against our current morbidity assumptions where it can be seen that the claim cost increases are greatest at the later durations and older ages.

The following tables show how our new best estimate (excluding the moderately adverse margin) assumptions compare to our actual observed experience:

Experience period: Inception through 2009 for incidence, inception through 2008 for claim terminations, and 2006-2008 for salvage

Claim Counts (incidence)	A/E
Dur 1-4	95%
Dur 5-8	96%
Dur 9-12	97%
Dur 13+	100%
<b>TOTAL</b>	<b>98%</b>

Claim Terminations (continuance)	A/E
<b>Total</b>	<b>88%</b>

Amount Paid (salvage)	A/E
<b>Total</b>	<b>86%</b>

Our new best estimate incidence rates reflect the deterioration observed in our latest experience study. Our claim termination and salvage assumptions are still based on our prior experience study. The A/Es are largely

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offsetting (it can be seen that claimants are lasting longer but claiming less than we expected), so we chose not to update assumptions at this time.

**6. Mortality**

The mortality rates have also been derived based on our own experience within our retail and group long-term care block of business.

The base mortality table is the unloaded 1994 Group Annuity Mortality Table, sex-distinct, with 16 years of improvements based on scale AA, and the following selection factors which vary by underwriting class:

Policy Duration	Fully Underwritten				Guaranteed Issue
	Issue Ages				Issue Ages
	≤ 55	65	75	≥ 82	All
1	21.7%	16.4%	18.8%	22.1%	103.6%
2	29.2%	21.7%	24.3%	29.0%	103.6%
3	35.9%	27.2%	31.5%	37.0%	103.6%
4	39.4%	30.4%	38.1%	45.2%	103.6%
5	42.1%	38.2%	45.6%	54.6%	103.6%
6	44.1%	44.6%	53.3%	56.1%	103.6%
7	46.8%	47.3%	61.2%	62.0%	103.6%
8	50.3%	50.1%	66.2%	70.0%	103.6%
9	52.7%	54.3%	70.5%	78.2%	103.6%
10	56.3%	58.6%	75.7%	86.5%	103.6%
11	59.9%	62.9%	81.1%	94.3%	103.6%
12	63.6%	64.3%	87.6%	100.0%	103.6%
13	64.9%	66.6%	94.1%	100.0%	103.6%
14	67.1%	68.9%	97.1%	100.0%	103.6%
15	69.4%	70.3%	100.0%	100.0%	103.6%
16	71.5%	71.7%	100.0%	100.0%	103.6%
17	74.3%	73.1%	100.0%	100.0%	103.6%
18	77.1%	76.5%	100.0%	100.0%	103.6%
19	79.9%	80.0%	100.0%	100.0%	103.6%
20	82.7%	83.6%	100.0%	100.0%	103.6%
21	85.6%	87.2%	100.0%	100.0%	103.6%
22	88.5%	90.8%	100.0%	100.0%	103.6%
23	91.4%	94.4%	100.0%	100.0%	103.6%
24	94.4%	98.1%	100.0%	100.0%	103.6%
25+	100.0%	100.0%	100.0%	100.0%	103.6%

Factors for ages not listed above are interpolated.

We are also projecting 12 years of future mortality improvement based on scale AA, consistent with the 12 years of future morbidity improvement in our future claim projections.

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*Original Pricing Assumption for Mortality:*

Our mortality decrement was based on the unloaded 1994 Group Annuity Mortality Table weighted 40% males and 60% females, with the following selection factors:

Policy Duration	Selection Factor	Policy Duration	Selection Factor
1	20.0%	7	80.0%
2	30.0%	8	85.0%
3	40.0%	9	90.0%
4	50.0%	10	95.0%
5	60.0%	11+	100.0%
6	70.0%		

In addition, future improvements of 1% per year were reflected.

At the time of the initial premium rate development of these forms, there was little insured industry data available for mortality (for Long-Term Care purchasers), and we have still observed lower mortality than expected. Furthermore, mortality improvements have been observed throughout the LTC and Life Insurance industries, consistent with our observations. We have also observed that our underwriting risk classification impacts mortality as well as morbidity and we have refined our assumption accordingly.

The following tables show how our new best estimate assumption compares to our actual observed experience:

Experience period: 3 year study 6/30/2006-6/30/2009

Duration	Mortality A/E	
	UW	GI
1-5	108%	93%
6-10	98%	110%
11+	109%	100%
<b>Total</b>	<b>106%</b>	<b>100%</b>

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**7. Persistency**

The voluntary lapse rates are also based on own experience within our group long-term care block of business:

**Guaranteed Issue**

Duration	Issue Age								
	30	40	45	50	55	60	65	70	80
1	16.3%	9.4%	7.7%	6.5%	5.9%	6.1%	6.1%	6.1%	6.1%
2	13.8%	8.1%	6.4%	5.1%	4.7%	4.7%	4.7%	4.7%	4.7%
3	12.2%	6.9%	6.4%	4.8%	3.9%	3.7%	3.7%	3.7%	3.7%
4	10.3%	6.2%	5.6%	4.2%	3.4%	3.0%	3.0%	3.0%	3.0%
5	8.8%	5.5%	4.9%	3.7%	2.9%	2.4%	2.4%	2.4%	2.4%
6	7.4%	4.9%	4.3%	3.3%	2.6%	1.9%	1.9%	1.9%	1.9%
7	6.3%	4.4%	3.8%	2.9%	2.2%	1.5%	1.5%	1.5%	1.5%
8	5.3%	4.0%	3.3%	2.5%	1.9%	1.2%	1.2%	1.2%	1.2%
9	4.7%	3.5%	2.9%	2.2%	1.7%	0.9%	0.9%	0.9%	0.9%
10	4.5%	3.2%	2.5%	2.0%	1.5%	0.8%	0.8%	0.8%	0.8%
11	4.1%	2.8%	2.2%	1.7%	1.3%	0.6%	0.6%	0.6%	0.6%
12	3.5%	2.5%	2.0%	1.5%	1.1%	0.5%	0.5%	0.5%	0.5%
13	3.1%	2.3%	1.7%	1.4%	1.0%	0.4%	0.4%	0.4%	0.4%
14	2.8%	2.0%	1.5%	1.2%	0.8%	0.4%	0.4%	0.4%	0.4%
15	2.5%	1.8%	1.3%	1.0%	0.7%	0.4%	0.4%	0.4%	0.4%
16	2.3%	1.6%	1.1%	0.9%	0.6%	0.4%	0.4%	0.4%	0.4%
17	2.0%	1.4%	1.0%	0.8%	0.5%	0.4%	0.4%	0.4%	0.4%
18	1.8%	1.3%	0.9%	0.7%	0.5%	0.4%	0.4%	0.4%	0.4%
19	1.7%	1.2%	0.8%	0.6%	0.4%	0.4%	0.4%	0.4%	0.4%
20+	1.5%	1.0%	0.8%	0.6%	0.4%	0.4%	0.4%	0.4%	0.4%

**Fully Underwritten**

Duration	Issue Age								
	30	40	45	50	55	60	65	70	80
1	15.8%	8.9%	7.2%	5.2%	4.4%	4.6%	5.7%	4.6%	4.6%
2	13.0%	7.4%	6.2%	4.5%	3.7%	3.2%	3.6%	2.8%	2.8%
3	11.1%	7.1%	5.2%	4.2%	3.1%	2.6%	2.2%	2.1%	2.1%
4	9.6%	6.2%	4.5%	3.6%	2.6%	2.1%	1.7%	1.8%	1.8%
5	8.2%	5.4%	3.9%	3.0%	2.2%	1.6%	1.4%	1.5%	1.5%
6	7.1%	4.7%	3.3%	2.6%	1.9%	1.3%	1.1%	1.3%	1.3%
7	6.1%	4.1%	2.9%	2.2%	1.6%	1.0%	0.6%	1.1%	1.1%
8	5.2%	3.5%	2.5%	1.8%	1.3%	0.8%	0.6%	0.8%	0.8%
9	4.5%	3.1%	2.1%	1.5%	1.1%	0.6%	0.6%	0.8%	0.8%
10	4.2%	2.6%	1.9%	1.3%	0.9%	0.6%	0.6%	0.8%	0.8%
11	3.7%	2.2%	1.6%	1.2%	0.8%	0.6%	0.6%	0.8%	0.8%
12	3.5%	2.0%	1.3%	1.0%	0.7%	0.6%	0.6%	0.8%	0.8%
13	3.2%	1.8%	1.1%	0.8%	0.6%	0.6%	0.6%	0.8%	0.8%
14	3.0%	1.6%	0.9%	0.7%	0.6%	0.6%	0.6%	0.8%	0.8%
15	2.8%	1.4%	0.7%	0.6%	0.6%	0.6%	0.6%	0.8%	0.8%
16	2.6%	1.3%	0.6%	0.6%	0.6%	0.6%	0.6%	0.8%	0.8%
17	2.4%	1.1%	0.6%	0.6%	0.6%	0.6%	0.6%	0.8%	0.8%
18	2.2%	1.0%	0.6%	0.6%	0.6%	0.6%	0.6%	0.8%	0.8%
19	2.0%	0.9%	0.6%	0.6%	0.6%	0.6%	0.6%	0.8%	0.8%
20+	1.9%	0.9%	0.6%	0.6%	0.6%	0.6%	0.6%	0.8%	0.8%

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*Original Pricing Assumption for Lapses:*

The initial premium schedule was based on the originally filed pricing assumptions which were believed to be appropriate, given company and industry experience available, when the initial rate schedule was developed.

Duration	30	40	45	50	55	60	65	70
1	10.00%	10.00%	7.00%	7.00%	6.50%	6.50%	6.00%	6.00%
2	9.00%	9.00%	6.00%	5.50%	5.50%	5.00%	5.00%	5.00%
3	8.50%	8.50%	5.00%	5.00%	4.00%	4.00%	4.00%	4.00%
4	7.50%	7.50%	4.50%	4.50%	3.50%	3.50%	3.50%	4.00%
5	4.50%	4.00%	3.00%	2.75%	2.75%	2.75%	2.75%	2.75%
6	4.50%	4.00%	3.00%	2.75%	2.75%	2.75%	2.75%	2.75%
7	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
8	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
9	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
10	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%

The following tables show how our new best estimate assumption compares to our actual observed experience:

Experience period: 3 year study 6/30/2006-6/30/2009

Duration	A/E
1	98.8%
2	99.5%
3	96.8%
4	99.6%
5+	102.2%
<b>Total</b>	<b>99.6%</b>

For lapses, our original pricing assumption was set lower at the time of the initial premium rate development than on prior forms, based on company data we were observing at the time. We have since observed generally lower lapse rates in the early durations and much lower lapse rates than expected in durations 10+.

**8. Expenses**

Expenses have not been explicitly projected. It is assumed that the originally filed expense assumptions remain appropriate.

**9. Trend Assumptions**

As this is not medical insurance, we have not included any explicit medical cost trends in the projections.



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**10. Marketing Method**

The employees and other eligibles were marketed through the Employer, Union or Association as part of their corporate sponsored employee benefits package with the support of John Hancock representatives and direct mail.

**11. Underwriting**

Actively at Work employees were generally offered coverage on a Guaranteed Acceptance basis during limited enrollment periods. Other eligibles were underwritten using either simplified (short form) or full underwriting.

**12. Premium Classes**

The base policy premium rates vary by Issue age, LMB, and Inflation Option, as in the initial rate filing.

All premium factors related to the insured elected benefit design options, case size, commissions, or underwriting risk class remain unchanged from the initial rate filing, with the following exception: There was a 20% load on post-issue date optional coverage increases to the insured's DMB. Our current new business rates do not include this load on post-issue date option coverage. To maintain consistency with our current new business pricing, both the past and future optional coverage increases will no longer be loaded by 20%.

**13. Premium Modalization Rules**

Premiums are payable through payroll deduction, direct bill or automatic bank withdrawal.

The following factors are applied to the monthly premium for different billing frequencies.

Every 4 weeks	12/13
Semi-Monthly	12/24
Bi-weekly	12/26
First 4 weeks of month	12/48
Weekly	12/52

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**14. Issue Age Range**

The issue age range is 18+ for all policy forms.

**15. Area Factors**

Area factors are not applicable to any of the policy forms or optional benefits.

**16. Average Annual Premium**

The table below summarizes the average annual premium per certificate before and after the requested increase.

Form	Nationwide prior to rate increase	Connecticut prior to rate increase	Connecticut following the rate increase
P-FACE(2002-2)	\$967	\$1,309	\$2,069

**17. Number of Certificate Holders**

The table below summarizes, as of 12/31/2011, the number of certificates inforce and their 2011 annualized premium that will be affected by this rate increase in your state.

Form	Number of Certificates	2011 Annualized Premium
P-FACE(2002-2)	1,779	\$2,328,281

**18. Reserves**

Active Life Reserves have not been used in this rate increase demonstration. Minimum Statutory Claim reserves as of 12/31/2011 have been discounted to the date of incurrence of each respective claim and included in the historical incurred claims. Incurred But Not Reported claim reserves as of 12/31/2011 have also been allocated to the calendar year of incurrence and included in historic incurred claims.

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**19. Requested Rate Increase**

The company is requesting an average rate increase of 58.1%, which varies by issue age, benefit period, and inflation option, and ranges from 0% to 133.8%. This was derived as follows:

1. The Company first determined the projected lifetime loss ratio for this form based on nationwide actual experience and projected future experience. We then determined the amount of rate increase that would be needed to revert to the original lifetime expected loss ratio for the form. The rate increase amount needed on these forms, by BP and Inflation option, is:
  - a. FPO
    - i. 2 – 8 yr LMB: 49.1%
    - ii. 10+ yr LMB: 96.3%
  - b. ABI
    - i. 2 – 8 yr LMB: 82.5%
    - ii. 10+ yr LMB: 133.8%
2. In order to limit the magnitude of the rate increase, particularly at the older ages, the maximum rate increase grades down from 133.8% to 5% in 5% intervals, and there will be no rate increase for issue ages 80 and above.
3. In addition, the increases were reduced or eliminated if necessary, so that for any insured subject to a rate increase, the premium rates do not exceed the rates that have been filed for new business under our most recently filed LTC-12 CT policy form (this is demonstrated in **Appendix A**).
4. Finally, we ensured that the resulting overall increase in rates satisfies the rate stability rule ensuring no less than an 85% loss ratio on the rate increase portion, while applying the original loss ratio on the rest (as the original loss ratio was higher than 58%). This is demonstrated at the bottom of Exhibit 1 where it can be seen that the sum of past and future projected incurred claims exceeds the sum of (the original premium times the original loss ratio) and (the rate increase premium times the 85% loss ratio requirement).

**Appendix B** contains the new proposed rate tables for all policy forms included with this filing. Please note that the actual rates implemented may vary slightly from those in Appendix B due to implementation rounding algorithms.

Some of our older group clients have certificates inforce under different policy forms, having opted for upgrading their pre-existing employee benefit plan to a new plan covered under a newer policy form. In those situations, we have offered internal replacement (plan upgrade) opportunities to existing certificate holders, whereby a certificate holder may have elected to lapse their original coverage and purchase the new plan coverage as a replacement. In those situations, the insured would be subject to the attained age (at the time of the replacement) premium rates for their new coverage but in some situations we would provide a premium credit to recognize the premium they had paid since their issue age for their original coverage under the prior plan. For these insureds, we will determine their new premium rate from Appendix B based on their historical original issue ages respectively for each layer of coverage. In a situation where the resulting rate increases are greater than those listed in Appendix A for their coverage, we will continue to offer them a premium credit in order to limit their respective rate increases to the amounts listed in Appendix A.

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For those group clients that transferred to us from an external carrier, we will continue to recognize any assets transferred from the prior carrier. We will continue to provide these credits to the insureds within those groups, but the rate increase will be calculated based on the insureds' gross premium rate, prior to any credits, based on the amounts listed in Appendix A.

## **20. Experience – Past & Future**

**Exhibit 1** contains nationwide past premium and claims experience and future premium and claim projections and illustrates that the anticipated lifetime loss ratio with the requested rate increase is 88.4%, well in excess of the minimum loss ratio of 60%. The lifetime loss ratio as of 12/31/11 is calculated as the sum of accumulated past and discounted future claims divided by the sum of accumulated past and discounted future earned premium where accumulation and discounting occur at the maximum statutory valuation discount rate.

In addition, Exhibit 1 contains the original expected loss ratio projections, adjusted for the actual mix of business issued, with the lifetime loss ratio also calculated as stated above.

Furthermore, Exhibit 1 demonstrates that the sum of the accumulated value of incurred claims without the inclusion of active life reserves, and the present value of future projected incurred claims, without the inclusion of active life reserves, will not be less than the sum of the following:

1. Accumulated value of the initial earned premium times the original assumed lifetime loss ratio (which was higher than 58%),
2. 85% of the accumulated value of prior premium rate schedule increases,
3. Present value of future projected initial earned premium times the original assumed lifetime loss ratio, and
4. 85% of the present value of future projected premium in excess of the projected initial earned premium.

**Exhibit 2** contains the same analysis as Exhibit 1, but for Connecticut-only experience. Please note that we did not assign any credibility to the Connecticut experience in determining the requested rate increase, which is based solely on nationwide experience.

Note that rate increases will only apply once the applicable group policy rate guarantee has expired.

## **21. New inflation options that will allow policyholders to avoid the rate increase**

Although we are no longer issuing new policies on these forms we are filing a new inflation option that will allow certificate holders that have 5% Compound Inflation (Automatic Benefit Increase or ABI) coverage the option to completely avoid the rate increase.

Under these new options, the certificate holders get to keep their current accumulated Daily benefit and their current remaining Lifetime Maximum Benefit (LMB) but the future indexation rate will be reduced from an annual rate of 5% to a lower annual rate. For those certificate holders with a LMB less than 10 years this lower annual future indexation rate is 3.0%; for those with a LMB of 10 years or greater this future indexation rate is 1.7%.

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The 3.0% and 1.7% indexations were determined to be actuarially equivalent to the respective requested rate increases in aggregate and therefore these options are only available if the full rate increases requested are accepted.

The premium rate schedules for this option are the current rate schedules for the 5% Compound Inflation coverage option and are included in this filing as **Appendix C**.

**22. History of previous rate revisions**

There have been no prior rate increases on these forms.

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**23. Proposed Effective Date**

These rates will not be effective until after we have satisfied the required 60 days advance notice to the policyholder and to the insureds.

**24. Actuarial Certification**

I am a Fellow of the Society of Actuaries and a Member of the American Academy of Actuaries, and I meet the Academy's qualification standards for rendering this opinion and am familiar with the requirements for filing Long-Term care insurance premiums and filing for increases in Long-Term care insurance premiums. This memorandum has been prepared in conformity with all applicable Actuarial Standards of Practice, including ASOP No. 8.

The preceding Actuarial Memorandum contains:

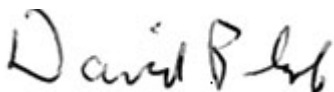
- a) the assumptions on which this certification is based;
- b) the adjustments to prior assumptions with an explanation of the reasons previous assumptions were not realized;
- c) a lifetime projection of the prior premium rate schedules and incurred claims plus future expected premiums and claims which demonstrates that the revised premium rate schedule meets the loss ratio standards and necessary details of this state; and
- d) disclosure of the manner, if any, in which reserves have been recognized.

In my opinion, no further rate increases will be necessary as the revised premium rate schedules are sufficient to cover anticipated costs assuming approvals are granted within three months of the date this memo is filed and that the underlying assumptions are realized.

I have reviewed and taken into consideration the policy design and coverage provided, and our current underwriting and claims adjudication processes.

In forming my opinion, I have used actuarial assumptions and actuarial methods and such tests of the actuarial calculations as I considered necessary. Based on these assumptions or statutory requirements where necessary, the premium rate filing is in compliance with the loss ratio standards of this state.

The basis for contract reserves has been previously filed and there is no anticipation of any changes.



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David Plumb, FSA, MAAA  
Vice President  
John Hancock Life Insurance Company (U.S.A.)

**Exhibit 1 - A: Nationwide Experience  
Care Choice (P-FACE (2002-2))  
All Inflation Options**

Calendar Year	Original Assumptions			Historical & Projected Experience				
	Incurred Claims	Earned Premium	Incurred Loss Ratio*	Incurred Claims	Earned Premium	Incurred Loss Ratio*	With Proposed Rate Increase Earned Premium	With Proposed Rate Increase Incurred Loss Ratio*
2003	480,997	4,826,157	10%	462,462	4,712,324	10%	4,712,324	10%
2004	1,588,551	16,195,211	10%	1,565,537	15,951,014	10%	15,951,014	10%
2005	3,175,502	31,725,639	10%	4,200,955	31,310,098	13%	31,310,098	13%
2006	5,031,288	47,790,473	11%	5,987,848	47,390,191	13%	47,390,191	13%
2007	7,561,233	70,360,803	11%	7,821,786	70,036,302	11%	70,036,302	11%
2008	11,279,396	102,319,479	11%	12,309,627	101,844,719	12%	101,844,719	12%
2009	15,550,371	128,735,069	12%	14,047,473	128,445,839	11%	128,445,839	11%
2010	21,047,179	155,015,195	14%	19,359,238	155,656,506	12%	155,656,506	12%
2011	25,999,376	170,439,038	15%	29,423,657	172,770,165	17%	172,770,165	17%
2012	29,688,135	165,681,200	18%	33,710,234	169,989,664	20%	169,989,664	20%
2013	33,501,158	158,545,062	21%	35,427,228	163,706,762	22%	182,211,563	19%
2014	37,120,158	152,327,581	24%	38,684,686	157,298,528	25%	216,408,019	18%
2015	41,157,797	146,765,337	28%	42,537,543	151,604,630	28%	233,945,225	18%
2016	45,806,547	141,595,913	32%	46,874,678	146,445,268	32%	229,884,577	20%
2017	50,398,233	136,625,022	37%	51,835,422	141,678,933	37%	224,567,816	23%
2018	54,700,328	131,781,302	42%	57,574,187	137,196,524	42%	218,434,731	26%
2019	59,170,050	126,954,196	47%	64,083,488	132,918,520	48%	211,941,518	30%
2020	63,965,680	122,147,549	52%	71,458,091	128,786,850	55%	205,677,137	35%
2021	69,124,837	117,369,944	59%	79,541,504	124,756,521	64%	199,564,233	40%
2022	74,701,405	112,612,252	66%	88,545,438	120,787,605	73%	193,535,682	46%
2023	80,738,361	107,881,652	75%	99,084,171	116,845,811	85%	187,533,923	53%
2024	87,184,425	103,182,891	84%	111,521,990	112,902,813	99%	181,509,210	61%
2025	93,975,792	98,517,528	95%	125,424,207	108,930,038	115%	175,411,550	72%
2026	101,040,940	93,885,145	108%	140,031,123	104,902,144	133%	169,199,322	83%
2027	108,340,796	89,287,094	121%	155,638,308	100,799,862	154%	162,841,741	96%
2028	115,773,276	84,725,375	137%	172,436,282	96,611,172	178%	156,318,603	110%
2029	123,282,135	80,204,936	154%	190,441,916	92,333,998	206%	149,625,438	127%
2030	130,811,854	75,731,060	173%	208,673,980	87,972,349	237%	142,768,730	146%
2031	138,280,128	71,309,816	194%	225,770,887	83,533,497	270%	135,761,780	166%
2032	145,646,388	66,948,216	218%	242,613,574	79,028,294	307%	128,623,541	189%
2033	152,841,029	62,656,029	244%	259,031,078	74,474,490	348%	121,383,599	213%
2034	159,792,889	58,446,349	273%	275,565,464	69,899,407	394%	114,086,476	242%
2035	166,349,579	54,330,305	306%	291,378,934	65,332,166	446%	106,779,586	273%
2036	172,322,582	50,320,112	342%	304,187,091	60,795,488	500%	99,501,290	306%
2037	177,569,530	46,427,627	382%	315,237,343	56,310,440	560%	92,287,553	342%
2038	181,863,837	42,664,930	426%	323,637,073	51,902,110	624%	85,180,053	380%
2039	185,094,885	39,047,193	474%	330,853,615	47,602,655	695%	78,231,271	423%
2040	187,209,311	35,587,132	526%	336,779,096	43,444,789	775%	71,494,862	471%
2041	188,055,976	32,294,777	582%	338,750,482	39,447,637	859%	65,003,975	521%
2042	187,690,159	29,178,233	643%	338,493,481	35,625,254	950%	58,783,919	576%
2043	186,158,492	26,244,249	709%	335,178,345	31,995,963	1048%	52,866,300	634%
2044	183,497,569	23,498,996	781%	330,341,100	28,581,336	1156%	47,287,286	699%
2045	179,717,424	20,946,563	858%	324,393,633	25,398,933	1277%	42,076,561	771%
2046	174,757,329	18,588,116	940%	316,113,153	22,450,868	1408%	37,239,954	849%
2047	168,877,693	16,421,357	1028%	306,045,161	19,734,547	1551%	32,775,491	934%
2048	162,300,682	14,441,178	1124%	292,476,776	17,248,843	1696%	28,682,712	1020%
2049	155,167,866	12,643,197	1227%	276,966,590	14,990,697	1848%	24,957,785	1110%
<b>Value as of 12/31/11*:</b>								
<b>Past</b>	<b>99,776,339</b>	<b>799,870,006</b>	<b>12.5%</b>	<b>103,706,178</b>	<b>800,153,376</b>	<b>13.0%</b>	<b>800,153,376</b>	<b>13.0%</b>
<b>Future</b>	<b>2,154,440,905</b>	<b>1,882,867,286</b>	<b>114.4%</b>	<b>3,299,695,841</b>	<b>2,029,701,652</b>	<b>162.6%</b>	<b>3,049,091,365</b>	<b>108.2%</b>
<b>Lifetime</b>	<b>2,254,217,245</b>	<b>2,682,737,292</b>	<b>84.0%</b>	<b>3,403,402,019</b>	<b>2,829,855,028</b>	<b>120.3%</b>	<b>3,849,244,741</b>	<b>88.4%</b>

\*reflecting maximum statutory valuation rate

**Test: Total Incurred Claims exceeds the Total Initial Premiums x Original Loss Ratio (instead of 58%) + Increased Premiums x 85%**

Accum Value of Past Incurred Claims =	103,706,178	Accum Value of Past Initial Prem x 85.7% =	672,342,963
Present Value of Future Incurred Claims =	3,299,695,841	Present Value of Future Initial Prem x 85.7% =	1,705,492,550
TOTAL =	3,403,402,019	Accum Value of Prior Increases x 85% =	-
		Present Value of Future Increases x 85% =	866,481,256
		TOTAL =	3,244,316,769

**Exhibit 1 - B: Nationwide Experience  
Care Choice (P-FACE (2002-2))  
FPO Inflation**

Calendar Year	Original Assumptions			Historical & Projected Experience				
	Incurred Claims	Earned Premium	Incurred Loss Ratio*	Incurred Claims	Earned Premium	Incurred Loss Ratio*	With Proposed Rate Increase Earned Premium	With Proposed Rate Increase Incurred Loss Ratio*
2003	454,804	4,147,083	11%	462,462	4,073,507	11%	4,073,507	11%
2004	1,473,149	13,229,128	11%	1,271,033	13,109,086	10%	13,109,086	10%
2005	2,803,486	22,711,879	12%	2,493,975	22,730,561	11%	22,730,561	11%
2006	4,303,656	31,303,217	14%	3,932,998	31,706,435	12%	31,706,435	12%
2007	6,297,136	44,556,165	14%	6,313,428	45,340,469	14%	45,340,469	14%
2008	9,303,952	64,431,303	14%	9,667,870	65,661,742	15%	65,661,742	15%
2009	12,855,571	81,257,282	16%	10,698,922	83,318,586	13%	83,318,586	13%
2010	17,573,551	101,194,346	17%	15,221,701	104,396,679	15%	104,396,679	15%
2011	21,812,897	114,396,547	19%	24,663,881	119,052,725	21%	119,052,725	21%
2012	24,849,450	111,161,271	22%	28,740,558	117,392,425	24%	117,392,425	24%
2013	27,902,749	106,215,423	26%	29,557,621	113,104,977	26%	124,085,505	24%
2014	30,617,457	101,856,626	30%	32,094,455	108,581,594	30%	142,916,176	22%
2015	33,633,304	97,912,299	34%	35,062,620	104,526,865	34%	151,443,442	23%
2016	37,144,605	94,214,883	39%	38,323,199	100,819,005	38%	148,022,123	26%
2017	40,507,417	90,639,934	45%	41,974,232	97,362,571	43%	144,250,996	29%
2018	43,473,265	87,151,044	50%	46,132,876	94,084,473	49%	139,914,050	33%
2019	46,439,873	83,666,801	56%	50,773,457	90,933,019	56%	135,452,024	37%
2020	49,528,326	80,200,570	62%	55,946,480	87,871,980	64%	131,113,699	43%
2021	52,754,696	76,765,255	69%	61,419,903	84,874,043	72%	126,854,393	48%
2022	56,152,314	73,356,560	77%	67,349,845	81,914,017	82%	122,634,373	55%
2023	59,747,784	69,982,880	85%	74,244,162	78,970,317	94%	118,419,745	63%
2024	63,477,188	66,648,940	95%	82,276,390	76,027,485	108%	114,184,702	72%
2025	67,270,255	63,356,473	106%	91,024,068	73,070,294	125%	109,904,054	83%
2026	71,047,843	60,104,888	118%	99,736,291	70,084,074	142%	105,556,164	94%
2027	74,765,180	56,895,109	131%	108,592,309	67,057,802	162%	101,125,869	107%
2028	78,333,573	53,728,483	146%	117,924,144	63,986,103	184%	96,605,641	122%
2029	81,704,446	50,608,657	161%	127,689,353	60,870,893	210%	91,998,859	139%
2030	84,834,022	47,539,528	178%	137,140,753	57,717,378	238%	87,314,768	157%
2031	87,643,788	44,525,092	197%	145,073,975	54,531,404	266%	82,564,613	176%
2032	90,109,738	41,569,873	217%	152,039,299	51,320,757	296%	77,762,279	196%
2033	92,201,632	38,680,395	238%	158,327,540	48,098,451	329%	72,929,200	217%
2034	93,880,233	35,865,659	262%	164,272,688	44,885,353	366%	68,098,565	241%
2035	95,079,464	33,133,172	287%	169,549,816	41,703,392	407%	63,305,002	268%
2036	95,734,782	30,490,707	314%	172,424,388	38,567,507	447%	58,572,873	294%
2037	95,808,474	27,945,174	343%	173,513,526	35,490,815	489%	53,923,692	322%
2038	95,210,505	25,503,447	373%	172,779,623	32,490,377	532%	49,384,456	350%
2039	93,934,433	23,174,969	405%	171,274,570	29,589,411	579%	44,991,194	381%
2040	92,013,203	20,967,252	439%	169,579,974	26,810,964	633%	40,779,610	416%
2041	89,420,369	18,885,414	473%	165,791,385	24,165,288	686%	36,766,248	451%
2042	86,255,182	16,932,916	509%	160,665,524	21,658,100	742%	32,960,719	487%
2043	82,639,353	15,111,900	547%	153,844,192	19,299,016	797%	29,378,183	524%
2044	78,671,982	13,424,142	586%	146,204,663	17,101,266	855%	26,039,007	561%
2045	74,395,273	11,870,383	627%	138,996,943	15,075,283	922%	22,959,282	605%
2046	69,788,760	10,449,397	668%	131,303,148	13,218,091	993%	20,134,987	652%
2047	65,016,053	9,157,435	710%	123,150,168	11,523,731	1069%	17,557,494	701%
2048	60,219,709	7,988,726	754%	113,517,840	9,988,956	1136%	15,222,025	746%
2049	55,468,810	6,938,232	799%	103,428,542	8,609,552	1201%	13,122,273	788%
<b>Value as of 12/31/11*:</b>								
<b>Past</b>	<b>83,737,195</b>	<b>525,880,485</b>	<b>15.9%</b>	<b>81,076,635</b>	<b>538,726,318</b>	<b>15.0%</b>	<b>538,726,318</b>	<b>15.0%</b>
<b>Future</b>	<b>1,237,312,067</b>	<b>1,222,441,365</b>	<b>101.2%</b>	<b>1,864,889,193</b>	<b>1,365,609,577</b>	<b>136.6%</b>	<b>1,926,462,120</b>	<b>96.8%</b>
<b>Lifetime</b>	<b>1,321,049,263</b>	<b>1,748,321,850</b>	<b>75.6%</b>	<b>1,945,965,828</b>	<b>1,904,335,895</b>	<b>102.2%</b>	<b>2,465,188,438</b>	<b>78.9%</b>

\*reflecting maximum statutory valuation rate

**Test: Total Incurred Claims exceeds the Total Initial Premiums x Original Loss Ratio (instead of 58%) + Increased Premiums x 85%**

Accum Value of Past Incurred Claims =	81,076,635	Accum Value of Past Initial Prem x 77.1% =	407,066,929
Present Value of Future Incurred Claims =	1,864,889,193	Present Value of Future Initial Prem x 77.1% =	1,031,868,088
TOTAL =	1,945,965,828	Accum Value of Prior Increases x 85% =	-
		Present Value of Future Increases x 85% =	476,724,662
		TOTAL =	1,915,659,678



**Exhibit 1 - C: Nationwide Experience  
Care Choice (P-FACE (2002-2))  
ABI Inflation**

Calendar Year	Original Assumptions			Historical & Projected Experience				
	Incurred Claims	Earned Premium	Incurred Loss Ratio*	Incurred Claims	Earned Premium	Incurred Loss Ratio*	Before Proposed Increase Earned Premium	With Proposed Rate Increase Incurred Loss Ratio*
2003	26,193	679,074	4%	-	638,817	0%	638,817	0%
2004	115,402	2,966,082	4%	294,504	2,841,928	10%	2,841,928	10%
2005	372,016	9,013,760	4%	1,706,980	8,579,537	20%	8,579,537	20%
2006	727,632	16,487,256	4%	2,054,850	15,683,756	13%	15,683,756	13%
2007	1,264,098	25,804,638	5%	1,508,358	24,695,833	6%	24,695,833	6%
2008	1,975,444	37,888,176	5%	2,641,757	36,182,977	7%	36,182,977	7%
2009	2,694,800	47,477,787	6%	3,348,551	45,127,253	7%	45,127,253	7%
2010	3,473,629	53,820,849	6%	4,137,537	51,259,827	8%	51,259,827	8%
2011	4,186,479	56,042,491	7%	4,759,776	53,717,440	9%	53,717,440	9%
2012	4,838,686	54,519,929	9%	4,969,676	52,597,239	9%	52,597,239	9%
2013	5,598,409	52,329,640	11%	5,869,608	50,601,785	12%	58,126,058	10%
2014	6,502,701	50,470,954	13%	6,590,231	48,716,933	14%	73,491,843	9%
2015	7,524,493	48,853,039	15%	7,474,923	47,077,765	16%	82,501,784	9%
2016	8,661,942	47,381,030	18%	8,551,479	45,626,263	19%	81,862,454	10%
2017	9,890,816	45,985,089	22%	9,861,190	44,316,362	22%	80,316,820	12%
2018	11,227,063	44,630,259	25%	11,441,310	43,112,052	27%	78,520,681	15%
2019	12,730,177	43,287,395	29%	13,310,031	41,985,501	32%	76,489,494	17%
2020	14,437,354	41,946,978	34%	15,511,611	40,914,870	38%	74,563,439	21%
2021	16,370,141	40,604,689	40%	18,121,601	39,882,478	45%	72,709,840	25%
2022	18,549,091	39,255,692	47%	21,195,594	38,873,588	55%	70,901,309	30%
2023	20,990,577	37,898,772	55%	24,840,009	37,875,493	66%	69,114,178	36%
2024	23,707,237	36,533,951	65%	29,245,600	36,875,328	79%	67,324,509	43%
2025	26,705,537	35,161,055	76%	34,400,139	35,859,744	96%	65,507,495	53%
2026	29,993,098	33,780,258	89%	40,294,832	34,818,070	116%	63,643,158	63%
2027	33,575,616	32,391,985	104%	47,045,999	33,742,060	139%	61,715,872	76%
2028	37,439,703	30,996,892	121%	54,512,138	32,625,070	167%	59,712,962	91%
2029	41,577,689	29,596,278	140%	62,752,563	31,463,105	199%	57,626,579	109%
2030	45,977,833	28,191,532	163%	71,533,227	30,254,970	236%	55,453,962	129%
2031	50,636,340	26,784,724	189%	80,696,913	29,002,093	278%	53,197,168	152%
2032	55,536,650	25,378,343	219%	90,574,275	27,707,537	327%	50,861,262	178%
2033	60,639,396	23,975,634	253%	100,703,538	26,376,039	382%	48,454,400	208%
2034	65,912,656	22,580,690	292%	111,292,776	25,014,054	445%	45,987,911	242%
2035	71,270,115	21,197,132	336%	121,829,118	23,628,774	516%	43,474,583	280%
2036	76,587,800	19,829,404	386%	131,762,703	22,227,981	593%	40,928,417	322%
2037	81,761,055	18,482,453	442%	141,723,817	20,819,625	681%	38,363,861	369%
2038	86,653,333	17,161,482	505%	150,857,450	19,411,733	777%	35,795,596	421%
2039	91,160,452	15,872,224	574%	159,579,044	18,013,244	886%	33,240,077	480%
2040	95,196,108	14,619,880	651%	167,199,122	16,633,825	1005%	30,715,252	544%
2041	98,635,607	13,409,363	736%	172,959,098	15,282,348	1132%	28,237,727	613%
2042	101,434,977	12,245,317	828%	177,827,958	13,967,154	1273%	25,823,200	689%
2043	103,519,140	11,132,348	930%	181,334,153	12,696,948	1428%	23,488,117	772%
2044	104,825,587	10,074,854	1040%	184,136,436	11,480,069	1604%	21,248,279	867%
2045	105,322,151	9,076,180	1160%	185,396,690	10,323,649	1796%	19,117,280	970%
2046	104,968,569	8,138,719	1290%	184,810,004	9,232,777	2002%	17,104,967	1080%
2047	103,861,640	7,263,922	1430%	182,894,993	8,210,816	2227%	15,217,997	1202%
2048	102,080,973	6,452,453	1582%	178,958,936	7,259,887	2465%	13,460,688	1329%
2049	99,699,057	5,704,965	1748%	173,538,048	6,381,145	2720%	11,835,513	1466%
<b>Value as of 12/31/11*:</b>								
<b>Past</b>	<b>16,039,144</b>	<b>273,989,522</b>	<b>5.9%</b>	<b>22,629,543</b>	<b>261,427,058</b>	<b>8.7%</b>	<b>261,427,058</b>	<b>8.7%</b>
<b>Future</b>	<b>917,128,838</b>	<b>660,425,921</b>	<b>138.9%</b>	<b>1,434,806,648</b>	<b>664,092,075</b>	<b>216.1%</b>	<b>1,122,629,245</b>	<b>127.8%</b>
<b>Lifetime</b>	<b>933,167,982</b>	<b>934,415,442</b>	<b>99.9%</b>	<b>1,457,436,191</b>	<b>925,519,133</b>	<b>157.5%</b>	<b>1,384,056,303</b>	<b>105.3%</b>

\*reflecting maximum statutory valuation rate

**Test: Total Incurred Claims exceeds the Total Initial Premiums x Original Loss Ratio (instead of 58%) + Increased Premiums x 85%**

Accum Value of Past Incurred Claims =	22,629,543	Accum Value of Past Initial Prem x 99.7% =	261,078,049
Present Value of Future Incurred Claims =	1,434,806,648	Present Value of Future Initial Prem x 99.7% =	663,205,501
TOTAL =	1,457,436,191	Accum Value of Prior Increases x 85% =	-
		Present Value of Future Increases x 85% =	389,756,594
		TOTAL =	1,314,040,144





**Appendix B**  
**John Hancock Life Insurance Company**  
**P-FACE (2002-2)**

**Rates per \$5 of Monthly Benefit - 90 Day Elimination Period**  
**75% HHC benefit**

Issue Age	Future Purchase Option Benefit Period									ABI Option: (5% Compound Inflation) Benefit Period								
	2	3	4	5	6	7	8	10	Life	2	3	4	5	6	7	8	10	Life
18-29	0.48	0.53	0.56	0.59	0.62	0.63	0.66	0.90	0.97	2.36	2.59	2.76	2.87	3.01	3.10	3.23	4.31	4.60
30	0.48	0.53	0.56	0.59	0.62	0.63	0.66	0.90	0.97	2.36	2.59	2.76	2.87	3.01	3.10	3.23	4.31	4.60
31	0.50	0.55	0.58	0.61	0.64	0.66	0.69	0.94	1.00	2.43	2.68	2.86	2.98	3.13	3.22	3.36	4.47	4.78
32	0.51	0.57	0.61	0.63	0.66	0.68	0.71	0.97	1.04	2.51	2.77	2.97	3.09	3.24	3.34	3.48	4.64	4.96
33	0.53	0.59	0.63	0.66	0.69	0.71	0.74	1.01	1.08	2.58	2.87	3.07	3.21	3.36	3.47	3.61	4.81	5.14
34	0.54	0.61	0.65	0.68	0.71	0.73	0.77	1.05	1.12	2.66	2.97	3.19	3.33	3.49	3.60	3.75	4.99	5.34
35	0.56	0.63	0.67	0.71	0.74	0.76	0.79	1.09	1.16	2.75	3.08	3.30	3.46	3.62	3.73	3.89	5.18	5.54
36	0.58	0.65	0.70	0.73	0.77	0.79	0.82	1.13	1.21	2.83	3.18	3.43	3.59	3.76	3.87	4.03	5.38	5.74
37	0.60	0.67	0.73	0.76	0.80	0.82	0.85	1.17	1.25	2.92	3.30	3.55	3.72	3.90	4.02	4.19	5.58	5.96
38	0.61	0.70	0.75	0.79	0.83	0.85	0.89	1.21	1.30	3.01	3.41	3.68	3.86	4.05	4.17	4.34	5.79	6.18
39	0.63	0.72	0.78	0.82	0.86	0.88	0.92	1.26	1.35	3.10	3.53	3.82	4.01	4.20	4.33	4.51	6.01	6.42
40	0.65	0.75	0.81	0.85	0.89	0.92	0.95	1.31	1.40	3.20	3.66	3.96	4.16	4.36	4.49	4.68	6.23	6.66
41	0.68	0.79	0.85	0.90	0.94	0.97	1.01	1.38	1.48	3.25	3.75	4.07	4.28	4.49	4.63	4.82	6.42	6.86
42	0.71	0.83	0.90	0.95	1.00	1.03	1.07	1.47	1.57	3.31	3.85	4.19	4.42	4.63	4.77	4.97	6.62	7.07
43	0.74	0.87	0.95	1.01	1.06	1.09	1.13	1.55	1.66	3.37	3.95	4.31	4.55	4.77	4.91	5.12	6.82	7.29
44	0.78	0.92	1.01	1.07	1.12	1.15	1.20	1.64	1.75	3.42	4.05	4.43	4.69	4.91	5.06	5.28	7.03	7.51
45	0.81	0.97	1.06	1.13	1.18	1.22	1.27	1.74	1.86	3.48	4.16	4.56	4.83	5.07	5.22	5.44	7.25	7.74
46	0.87	1.03	1.13	1.20	1.26	1.30	1.35	1.85	1.98	3.62	4.31	4.74	5.02	5.27	5.43	5.65	7.53	8.05
47	0.92	1.10	1.21	1.28	1.34	1.38	1.44	1.97	2.11	3.76	4.47	4.92	5.22	5.47	5.64	5.88	7.83	8.37
48	0.98	1.16	1.28	1.36	1.43	1.47	1.53	2.10	2.24	3.91	4.64	5.11	5.43	5.69	5.87	6.11	8.14	8.70
49	1.05	1.24	1.37	1.45	1.52	1.57	1.63	2.24	2.39	4.07	4.81	5.31	5.65	5.92	6.10	6.35	8.46	9.04
50	1.11	1.31	1.45	1.55	1.62	1.67	1.74	2.38	2.55	4.23	4.99	5.52	5.87	6.15	6.34	6.60	8.80	9.40
51	1.19	1.40	1.55	1.66	1.73	1.79	1.86	2.55	2.72	4.41	5.22	5.78	6.16	6.45	6.65	6.93	9.23	9.86
52	1.26	1.50	1.66	1.77	1.86	1.91	1.99	2.73	2.92	4.60	5.46	6.06	6.46	6.77	6.97	7.26	9.68	10.34
53	1.34	1.60	1.78	1.90	1.99	2.05	2.13	2.92	3.12	4.79	5.71	6.35	6.77	7.10	7.31	7.62	10.15	10.84
54	1.43	1.71	1.90	2.03	2.13	2.19	2.28	3.13	3.34	5.00	5.98	6.65	7.10	7.44	7.67	7.99	10.47	11.19
55	1.52	1.82	2.03	2.17	2.28	2.35	2.44	3.35	3.58	5.21	6.26	6.97	7.45	7.81	8.04	8.38	10.74	11.48
56	1.65	1.99	2.22	2.37	2.48	2.56	2.66	3.65	3.90	5.58	6.70	7.48	8.00	8.38	8.64	9.00	11.28	12.06
57	1.80	2.16	2.41	2.58	2.71	2.79	2.91	3.98	4.25	5.98	7.18	8.03	8.59	9.01	9.28	9.67	11.85	12.66
58	1.95	2.35	2.63	2.82	2.95	3.04	3.17	4.34	4.63	6.41	7.70	8.62	9.23	9.68	9.97	10.39	12.43	13.28
59	2.12	2.55	2.86	3.07	3.22	3.32	3.45	4.73	5.05	6.86	8.25	9.25	9.92	10.39	10.71	11.16	13.03	13.93
60	2.31	2.78	3.12	3.35	3.51	3.62	3.77	5.16	5.51	7.29	8.84	9.93	10.65	11.10	11.51	11.99	13.66	14.60
61	2.53	3.06	3.44	3.69	3.87	3.99	4.15	5.65	6.04	7.56	9.32	10.43	11.13	11.51	12.16	12.67	14.08	15.04
62	2.78	3.36	3.79	4.07	4.27	4.40	4.58	6.07	6.49	7.83	9.73	10.87	11.54	11.95	12.81	13.38	14.49	15.48
63	3.04	3.70	4.17	4.49	4.71	4.85	5.05	6.52	6.96	8.13	10.10	11.28	11.97	12.42	13.28	14.14	14.91	15.93
64	3.34	4.07	4.60	4.95	5.19	5.35	5.57	7.00	7.47	8.43	10.48	11.72	12.44	12.88	13.81	14.74	15.33	16.38
65	3.66	4.48	5.07	5.46	5.72	5.90	6.14	7.50	8.01	8.77	10.88	12.21	12.91	13.37	14.33	15.15	15.75	16.83
66	4.00	4.92	5.59	6.02	6.23	6.51	6.78	8.05	8.60	9.15	11.40	12.76	13.59	14.17	15.09	15.75	16.38	17.50
67	4.38	5.41	6.11	6.52	6.77	7.19	7.49	8.62	9.21	9.57	11.82	13.33	14.30	15.01	15.72	16.37	17.03	18.19
68	4.72	5.88	6.60	7.08	7.38	7.86	8.27	9.23	9.87	9.85	12.21	13.95	15.04	15.84	16.32	17.00	17.68	18.89
69	5.05	6.37	7.14	7.69	8.00	8.53	9.14	9.88	10.55	10.12	12.60	14.44	15.67	16.43	16.93	17.63	18.34	19.59
70	5.40	6.88	7.72	8.33	8.72	9.24	10.09	10.56	11.28	10.39	12.99	14.94	16.24	17.02	17.54	18.27	19.00	20.30
71	6.02	7.67	8.62	9.39	9.93	10.39	10.83	11.26	12.03	10.81	13.61	15.65	17.01	17.82	18.37	19.13	19.90	21.26
72	6.48	8.20	9.43	10.25	10.74	11.07	11.53	11.99	12.81	11.24	14.23	16.37	17.79	18.64	19.21	20.01	20.81	22.24
73	6.84	8.72	10.03	10.90	11.43	11.78	12.27	12.76	13.63	11.66	14.87	17.10	18.58	19.47	20.07	20.90	21.74	23.23
74	7.22	9.27	10.66	11.58	12.14	12.51	13.03	13.55	14.48	12.09	15.51	17.83	19.38	20.31	20.93	21.81	22.68	24.23
75	7.61	9.83	11.30	12.29	12.88	13.27	13.82	14.38	15.36	12.51	16.15	18.58	20.19	21.16	21.81	22.71	23.62	25.24
76	8.01	10.41	11.97	13.01	13.64	14.05	14.64	15.23	16.27	12.93	16.80	19.32	21.00	22.01	22.68	23.62	24.57	26.25
77	8.42	11.01	12.66	13.76	14.42	14.86	15.48	16.10	17.20	13.33	17.44	20.05	21.80	22.84	23.54	24.52	25.50	27.25
78	8.82	11.62	13.36	14.52	15.22	15.68	16.33	16.99	18.15	13.73	18.07	20.78	22.59	23.67	24.39	25.41	26.43	28.23
79	9.23	12.23	14.07	15.29	16.02	16.51	17.20	17.89	19.11	14.10	18.69	21.49	23.36	24.48	25.22	26.28	27.33	29.20
80	9.64	12.85	14.78	16.06	16.84	17.35	18.07	18.80	20.08	14.46	19.28	22.17	24.10	25.25	26.02	27.11	28.19	30.12
81	10.60	14.14	16.26	17.67	18.52	19.08	19.88	20.68	22.09	15.90	21.21	24.39	26.51	27.78	28.63	29.82	31.01	33.13
82	11.57	15.42	17.74	19.28	20.20	20.82	21.69	22.55	24.10	17.35	23.13	26.60	28.92	30.30	31.23	32.53	33.83	36.15
83	12.82	17.09	19.66	21.37	22.39	23.08	24.04	25.00	26.71	19.23	25.64	29.48	32.05	33.59	34.61	36.05	37.50	40.06
84	14.07	18.76	21.58	23.45	24.58	25.33	26.39	27.44	29.32	21.11	28.15	32.37	35.18	36.87	38.00	39.58	41.16	43.98

# Appendix C

## John Hancock Life Insurance Company

### P-FACE (2002-2)

Rates to be used with Inflation Decrease Option Only

Rates per \$5 of Monthly Benefit - 90 Day Elimination Period

75% HHC benefit

Issue Age	ABI Option: (3.0% Compound Inflation) Benefit Period						
	2	3	4	5	6	7	8
18-29	1.29	1.42	1.51	1.58	1.65	1.70	1.77
30	1.29	1.42	1.51	1.58	1.65	1.70	1.77
31	1.33	1.47	1.57	1.63	1.71	1.76	1.84
32	1.37	1.52	1.63	1.70	1.78	1.83	1.91
33	1.42	1.57	1.68	1.76	1.84	1.90	1.98
34	1.46	1.63	1.75	1.83	1.91	1.97	2.05
35	1.51	1.69	1.81	1.89	1.98	2.05	2.13
36	1.55	1.74	1.88	1.97	2.06	2.12	2.21
37	1.60	1.81	1.95	2.04	2.14	2.20	2.29
38	1.65	1.87	2.02	2.12	2.22	2.28	2.38
39	1.70	1.94	2.09	2.20	2.30	2.37	2.47
40	1.75	2.00	2.17	2.28	2.39	2.46	2.56
41	1.78	2.06	2.23	2.35	2.46	2.54	2.64
42	1.81	2.11	2.30	2.42	2.54	2.61	2.72
43	1.84	2.16	2.36	2.49	2.61	2.69	2.80
44	1.88	2.22	2.43	2.57	2.69	2.78	2.89
45	1.91	2.28	2.50	2.65	2.78	2.86	2.98
46	1.98	2.36	2.60	2.75	2.89	2.97	3.10
47	2.06	2.45	2.70	2.86	3.00	3.09	3.22
48	2.14	2.54	2.80	2.98	3.12	3.21	3.35
49	2.23	2.64	2.91	3.09	3.24	3.34	3.48
50	2.32	2.73	3.02	3.22	3.37	3.47	3.62
51	2.42	2.86	3.17	3.37	3.54	3.64	3.79
52	2.52	2.99	3.32	3.54	3.71	3.82	3.98
53	2.63	3.13	3.48	3.71	3.89	4.01	4.17
54	2.74	3.28	3.65	3.89	4.08	4.20	4.38
55	2.86	3.43	3.82	4.08	4.28	4.41	4.59
56	3.06	3.67	4.10	4.38	4.59	4.73	4.93
57	3.28	3.94	4.40	4.71	4.94	5.09	5.30
58	3.51	4.22	4.72	5.06	5.30	5.46	5.69
59	3.76	4.52	5.07	5.43	5.70	5.87	6.11
60	4.03	4.85	5.44	5.84	6.12	6.31	6.57
61	4.23	5.11	5.74	6.17	6.47	6.66	6.94
62	4.45	5.38	6.07	6.52	6.83	7.04	7.33
63	4.67	5.68	6.40	6.89	7.22	7.44	7.75
64	4.91	5.98	6.76	7.28	7.63	7.86	8.19
65	5.15	6.31	7.14	7.69	8.06	8.31	8.65
66	5.47	6.72	7.63	8.24	8.63	8.90	9.27
67	5.80	7.16	8.16	8.82	9.24	9.53	9.92
68	6.16	7.63	8.72	9.44	9.90	10.20	10.62
69	6.53	8.13	9.32	10.11	10.60	10.92	11.38
70	6.93	8.66	9.96	10.83	11.35	11.69	12.18
71	7.46	9.38	10.79	11.73	12.29	12.67	13.20
72	8.03	10.16	11.69	12.71	13.32	13.72	14.29
73	8.64	11.01	12.66	13.76	14.42	14.87	15.48
74	9.30	11.93	13.72	14.91	15.63	16.10	16.77
75	10.01	12.92	14.86	16.15	16.93	17.44	18.17
76	10.77	14.00	16.10	17.50	18.34	18.90	19.69
77	11.60	15.16	17.44	18.96	19.87	20.47	21.32
78	12.48	16.43	18.89	20.53	21.52	22.18	23.10
79	13.43	17.80	20.46	22.24	23.31	24.02	25.02
80	14.46	19.28	22.17	24.10	25.25	26.02	27.11
81	15.90	21.21	24.39	26.51	27.78	28.63	29.82
82	17.35	23.13	26.60	28.92	30.30	31.23	32.53
83	19.23	25.64	29.48	32.05	33.59	34.61	36.05
84	21.11	28.15	32.37	35.18	36.87	38.00	39.58

**Appendix C**  
**John Hancock Life Insurance Company**  
**P-FACE (2002-2)**

Rates to be used with Inflation Decrease Option Only

**Rates per \$5 of Monthly Benefit - 90 Day Elimination Period**  
**75% HHC benefit**

Issue Age	ABI Option (1.7% Compound Inflation)	
	10	Life
18-29	1.84	1.97
30	1.84	1.97
31	1.91	2.04
32	1.98	2.12
33	2.06	2.20
34	2.14	2.28
35	2.22	2.37
36	2.30	2.46
37	2.39	2.55
38	2.48	2.64
39	2.57	2.74
40	2.66	2.85
41	2.75	2.93
42	2.83	3.02
43	2.92	3.12
44	3.01	3.21
45	3.10	3.31
46	3.22	3.44
47	3.35	3.58
48	3.48	3.72
49	3.62	3.87
50	3.76	4.02
51	3.95	4.22
52	4.14	4.42
53	4.34	4.64
54	4.55	4.86
55	4.77	5.10
56	5.13	5.48
57	5.51	5.89
58	5.92	6.32
59	6.36	6.79
60	6.83	7.30
61	7.22	7.71
62	7.63	8.15
63	8.06	8.61
64	8.52	9.10
65	9.00	9.62
66	9.64	10.30
67	10.32	11.02
68	11.05	11.80
69	11.83	12.64
70	12.67	13.53
71	13.72	14.66
72	14.87	15.88
73	16.10	17.21
74	17.45	18.64
75	18.90	20.19
76	20.47	21.87
77	22.18	23.69
78	24.02	25.67
79	26.03	27.81
80	28.19	30.12
81	31.01	33.13
82	33.83	36.15
83	37.50	40.06
84	41.16	43.98

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**John Hancock Financial Services**

Long Term Care  
200 Berkeley Street  
Boston Massachusetts 02116-5022

(617) 663-2571  
(617) 572-0803 fax  
[hgao@ihancock.com](mailto:hgao@ihancock.com)

**Chunhong Gao, FSA, MAAA**  
**Actuary**  
**LTC Product & Risk Management**



May 8, 2013

Paul Lombardo  
Connecticut Insurance Department

Re: John Hancock Life Insurance Company (U.S.A.)  
2012 GLTC Inforce Rate Increase Filing  
SERFF Tracking Number: MULF-127134149

Dear Mr. Lombardo,

We are re-filing for the rate increases for our P-FACE(2002) policy series in the above mentioned filing. We would like you to reconsider your disposition on March 3, 2011, regarding SERFF Tracking # 126947414 and subsequent June 23, 2011 and January 27, 2012 dispositions regarding SERFF Tracking # 127134149. We also intend to re-submit the rate increase filings for our remaining Group LTC products (which we have previously filed) when we have completed updating their Exhibits with our latest experience.

For our P-FACE(2002) policy series, we have added one additional year (2011) of experience to the data and determined new rate increases as well as applicable landing spots. The additional data further demonstrates that experience to date continues to be worse than our original expectation and further validates our lifetime projections.

We continue to believe that comparing projected results, over the life of the business (actual experience projected with future expected assumptions), to original pricing expectations, also over the life of the business, is the appropriate approach for determining the adequacy of Long-Term Care insurance premium rates.

While we appreciate the intent of the Department in trying to limit rate increases on policyholders until the experience clearly warrants an increase, we believe that it is important to address the adverse experience deviations early on in order to prevent much larger necessary rate increases at a later time. And we believe that the volume of data that underlies our projection assumptions is credible enough to give full weight to our lifetime projections for this purpose.

We look forward to discussing this rate increase filing with you in greater detail. Please do not hesitate to contact me if you require further information in the meantime.

Sincerely,

Chunhong Gao, FSA, MAAA

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**John Hancock Financial Services**

Long Term Care  
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(617) 572-0803 fax  
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**Chunhong Gao, FSA, MAAA**  
**Actuary**  
**LTC Product & Risk Management**



June 20, 2013

Paul Lombardo  
Connecticut Insurance Department

Re: John Hancock Life Insurance Company (U.S.A.)  
2010 GLTC Inforce Rate Increase Filing  
SERFF Tracking Number: MULF-129019410

Dear Mr. Lombardo,

We apologize for not including the Connecticut specific experience in our filing dated 5/9/2013. Please find attached the required exhibit in the same format as the nationwide loss ratio exhibit.

We strongly encourage you to consider the nationwide experience as it is more credible. The Connecticut experience alone varies notably period over period due to low volume of incurred claims and changes in claim status and reserves.

Please do not hesitate to contact me if you require further clarification on the above.

Sincerely,

A handwritten signature in cursive script, appearing to read "Chunhong Gao".

Chunhong Gao, FSA, MAAA  
Actuary



**Exhibit 2: Connecticut Experience  
Care Choice P-FACE(2002-2)  
All Inflation Options**

Calendar Year	Original Assumptions			Historical & Projected Experience					
	Incurred Claims	Earned Premium	Incurred Loss Ratio*	Before Proposed Increase			With Proposed Rate Increase		
				Incurred Claims	Earned Premium	Incurred Loss Ratio*	Earned Premium	Incurred Loss Ratio*	
2003	18,115	151,957	12%	-	148,903	0%	148,903	0%	
2004	42,395	379,044	11%	-	369,953	0%	369,953	0%	
2005	63,786	536,575	12%	-	522,881	0%	522,881	0%	
2006	87,367	698,807	13%	3,078	684,714	0%	684,714	0%	
2007	123,629	1,073,100	12%	3,078	1,058,893	0%	1,058,893	0%	
2008	179,571	1,596,679	11%	186,660	1,579,106	12%	1,579,106	12%	
Historical Experience 2009	243,529	1,922,403	13%	205,681	1,902,747	11%	1,902,747	11%	
2010	314,369	2,163,215	15%	21,133	2,141,403	1%	2,141,403	1%	
2011	373,062	2,346,012	16%	167,094	2,334,761	7%	2,334,761	7%	
Projected Future Experience 2012	425,218	2,332,668	18%	401,447	2,351,348	17%	2,351,348	17%	
2013	485,468	2,236,667	22%	498,499	2,273,329	22%	2,546,346	20%	
2014	546,039	2,153,815	25%	553,297	2,192,005	25%	3,010,355	18%	
2015	608,338	2,079,937	29%	615,440	2,120,138	29%	3,231,403	19%	
2016	681,575	2,011,488	34%	688,691	2,055,323	34%	3,181,740	22%	
2017	757,799	1,945,954	39%	775,691	1,995,547	39%	3,103,501	25%	
2018	831,547	1,882,252	44%	875,242	1,939,307	45%	3,019,627	29%	
2019	908,627	1,819,054	50%	987,302	1,885,493	52%	2,937,214	34%	
2020	992,167	1,755,746	57%	1,113,744	1,833,205	61%	2,857,337	39%	
2021	1,082,849	1,692,419	64%	1,249,039	1,781,745	70%	2,778,866	45%	
2022	1,180,775	1,628,902	72%	1,402,012	1,730,614	81%	2,700,963	52%	
2023	1,285,603	1,565,129	82%	1,587,954	1,679,359	95%	2,622,885	61%	
2024	1,396,597	1,501,162	93%	1,806,269	1,627,495	111%	2,543,866	71%	
2025	1,513,306	1,437,033	105%	2,051,276	1,574,501	130%	2,463,073	83%	
2026	1,634,607	1,372,753	119%	2,299,597	1,519,986	151%	2,379,860	97%	
2027	1,759,348	1,308,387	134%	2,561,089	1,463,717	175%	2,293,816	112%	
2028	1,886,132	1,244,035	152%	2,851,245	1,405,545	203%	2,204,679	129%	
2029	2,014,894	1,179,818	171%	3,155,475	1,345,447	235%	2,112,401	149%	
2030	2,144,964	1,115,828	192%	3,463,888	1,283,517	270%	2,017,120	172%	
2031	2,273,554	1,052,192	216%	3,746,955	1,219,955	307%	1,919,143	195%	
2032	2,399,507	989,111	243%	4,029,972	1,155,065	349%	1,818,937	222%	
2033	2,523,913	926,794	272%	4,332,727	1,089,243	398%	1,717,112	252%	
2034	2,645,302	865,454	306%	4,628,484	1,022,929	452%	1,614,344	287%	
2035	2,758,965	805,274	343%	4,888,171	956,554	511%	1,511,306	323%	
2036	2,862,370	746,465	383%	5,097,386	890,503	572%	1,408,612	362%	
2037	2,955,395	689,234	429%	5,299,109	825,139	642%	1,306,835	405%	
2038	3,034,234	633,775	479%	5,486,277	760,804	721%	1,206,506	455%	
2039	3,094,421	580,317	533%	5,643,942	697,895	809%	1,108,241	509%	
2040	3,132,847	529,057	592%	5,717,323	636,902	898%	1,012,794	565%	
2041	3,148,720	480,149	656%	5,720,381	578,182	989%	920,726	621%	
2042	3,145,457	433,739	725%	5,733,710	521,979	1098%	832,443	689%	
2043	3,120,469	389,963	800%	5,710,096	468,519	1219%	748,316	763%	
2044	3,070,952	348,928	880%	5,652,184	418,058	1352%	668,757	845%	
2045	2,999,551	310,690	965%	5,507,450	370,892	1485%	594,233	927%	
2046	2,908,592	275,257	1057%	5,325,267	327,129	1628%	524,941	1014%	
2047	2,803,511	242,630	1155%	5,139,945	286,757	1792%	460,886	1115%	
2048	2,684,608	212,789	1262%	4,865,615	249,751	1948%	402,051	1210%	
2049	2,550,416	185,686	1374%	4,571,684	216,075	2116%	348,402	1312%	
2050	2,404,944	161,217	1492%	4,266,687	185,698	2298%	299,902	1423%	
<b>Value as of 12/31/11*:</b>									
<b>Past</b>	<b>1,590,444</b>	<b>12,054,654</b>	<b>13.2%</b>	<b>633,885</b>	<b>11,913,165</b>	<b>5.3%</b>	<b>11,913,165</b>	<b>5.3%</b>	
<b>Future</b>	<b>34,511,171</b>	<b>27,099,378</b>	<b>127.4%</b>	<b>53,548,441</b>	<b>28,850,157</b>	<b>185.6%</b>	<b>42,520,496</b>	<b>125.9%</b>	
<b>Lifetime</b>	<b>36,101,614</b>	<b>39,154,032</b>	<b>92.2%</b>	<b>54,182,326</b>	<b>40,763,322</b>	<b>132.9%</b>	<b>54,433,661</b>	<b>99.5%</b>	

\*reflecting maximum statutory valuation rate

**Test: Total Incurred Claims exceeds the Total Initial Premiums x Original Loss Ratio (instead of 58%) + Increased Premiums x 85%**

Accum Value of Past Incurred Claims =	633,885	Accum Value of Past Initial Prem x 92.2% =	10,539,587
Present Value of Future Incurred Claims =	53,548,441	Present Value of Future Initial Prem x 92.2% =	26,601,021
<b>TOTAL =</b>	<b>54,182,326</b>	Accum Value of Prior Increases x 85% =	410,081
		Present Value of Future Increases x 85% =	11,619,788
		<b>TOTAL =</b>	<b>49,170,477</b>

<b>State:</b>	Connecticut	<b>Filing Company:</b>	John Hancock Life Insurance Company (USA)
<b>TOI/Sub-TOI:</b>	LTC03G Group Long Term Care/LTC03G.001 Qualified		
<b>Product Name:</b>	CT rerate filing, group-long-term care insurance		
<b>Project Name/Number:</b>	CT rerate filing, group long-term care insurance/		

## Superseded Schedule Items

Please note that all items on the following pages are items, which have been replaced by a newer version. The newest version is located with the appropriate schedule on previous pages. These items are in date order with most recent first.

Creation Date	Schedule Item Status	Schedule	Schedule Item Name	Replacement Creation Date	Attached Document(s)
05/08/2013		Supporting Document	Actuarial Memorandum	05/09/2013	Connecticut Care Choice Memo.pdf (Superceded)

**John Hancock Life Insurance Company (U.S.A.)  
Group Long-Term Care Insurance Policy and Certificate  
Actuarial Memorandum for Inforce Rate Increase**

**Policy Series P-FACE(2002-2), et al  
May 7, 2013**

<u>Product Name</u>	<u>Form Number</u>	<u>Issue Date Range</u>
Care Choice	P-FACE(2002-2)	3/2003 to 1/2010

**These policy form rates were originally priced with a margin for moderately adverse experience in accordance with the NAIC model rate stability regulations which were being implemented on a State by State basis during the time of our initial rate filing.**

## **1. Scope & Purpose**

This memorandum consists of materials which support the development of new premium rates for the above captioned Policy series form. The purpose of this memorandum is to demonstrate that the requirements of this State in regards to an inforce rate increase request and new business rates have been met. This rate filing is not intended to be used for any other purpose.

## **2. Benefit Description**

A brief policy description for the certificate form:

### P-FACE(2002-2)

This is a Group Long-Term care plan that pays benefits to the certificate holder insured for the following covered care or services provided to the insured:

- Confinement in a Nursing Home or Alternate Care Facility for room, board and care services
- Home Health Care; Hospice Care, Respite Care; or
- Attendance at an Adult Day Care Center providing Adult Day Care

It is intended to be a Qualified Long-Term Care Insurance contract under the Federal Internal Revenue Code.

The Benefit trigger is determined based on the insured's cognitive impairment or his requiring substantial assistance to perform two out of six activities of daily living (ADLs) of bathing, dressing, eating, toileting, transferring and maintaining continence. The insured must be certified to be chronically ill by a licensed health care practitioner.

Long-Term Care Benefits are paid at 100% of the actual charges for each day of care after the qualification period up to:

### Nursing Home (NH):

- (a) the Nursing Home Daily Maximum Benefit (NH DMB) elected for care received in a NH, or

### Community Based Professional Care (CBPC):

- (b) the CBPC DMB elected for covered services received in a community setting including (including home health care, adult day care and hospice care provided outside a NH, hospice facility or alternate care facility) or

**John Hancock Life Insurance Company (U.S.A.)  
Group Long-Term Care Insurance Policy and Certificate  
Actuarial Memorandum for Inforce Rate Increase**

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Alternate Care Facility (ACF):

(c) the ACF DMB elected for covered services received in an ACF, or

Informal Care:

(d) the Informal Care DMB elected up to the number of days per calendar year elected for covered Informal Care services (custodial or homemaker services provided by a person without professional skills).

Benefits are payable until the Lifetime Maximum Benefit (LMB) is reached. Benefits are coordinated with Medicare as well as with any other Group certificate coverages.

**3. Renewability**

Certificates under this policy form have a guaranteed renewable clause.

**4. Applicability**

This filing is applicable to inforce policies and to new certificates enrolling in this policy series. The premium changes will apply to the base forms as well as all applicable optional benefits upon the expiration of any applicable group policy rate guarantees.

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**5. Morbidity**

The morbidity assumptions are derived from our own experience, following a comprehensive claim study recently completed. The study has been peer reviewed both internally as well as by an Independent third party. A summary of the findings from the morbidity study is included in this filing as a separate document.

Our claims projections include 12 years of future morbidity improvements at 1.1% per year, as well as a 5.0% margin for moderately adverse experience, consistent with the margin originally anticipated in our original pricing loss ratio.

Below are currently expected sample annual claim costs for a P-FACE(2002-2) policy, \$10 daily benefit, and 5yr LMB which include a 5.0% margin for moderately adverse experience:

Age	Issue Age 45	
	FPO	ABI
45	4.43	5.78
50	4.36	7.08
55	5.57	11.12
60	6.84	15.82
65	11.24	32.42
70	23.00	83.66
75	67.17	311.21
80	164.57	959.54
85	320.23	2,282.15
90	398.74	3,491.23

Age	Issue Age 50	
	FPO	ABI
50	5.27	6.86
55	6.19	10.01
60	8.22	15.56
65	15.27	35.72
70	36.10	105.76
75	103.56	384.54
80	239.50	1,118.48
85	390.82	2,239.91
90	475.75	3,362.48

Age	Issue Age 60	
	FPO	ABI
60	7.72	9.71
65	14.97	23.16
70	39.23	73.85
75	115.07	269.49
80	271.36	793.00
85	440.84	1,575.38
90	538.53	2,354.59

*Original Pricing Assumption for Morbidity:*

In developing claim cost assumptions, reference was made to data published by the National Center for Health Statistics National Nursing Home Survey (1985 and 1995), the National Health Interview Survey (1984), the National Long-Term Care Survey (1982, 1984, 1989, 1994 and 1999), Medicare data; internal experience and other experience furnished to us by consultants. The claim costs were adjusted due to the impact of underwriting, inflation options, elected options, anti-selection considerations, and the savings incurred because the daily maximum benefit will not always be paid.

Below are the original sample annual claim costs for a P-FACE(2002-2) policy, \$10 daily benefit, and 5yr LMB which include a 5.0% margin for moderately adverse experience:

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Issue Age 45		
Age	FPO	ABI
45	3.21	3.43
50	4.26	5.15
55	7.09	10.29
60	10.37	18.87
65	18.36	42.64
70	33.85	101.49
75	65.14	252.15
80	129.08	645.33
85	223.42	1,440.03
90	318.61	2,641.72

Issue Age 50		
Age	FPO	ABI
50	3.97	4.23
55	5.96	7.22
60	10.61	15.54
65	19.02	34.96
70	35.25	82.99
75	64.96	196.70
80	128.74	502.61
85	222.56	1,119.37
90	316.36	2,046.26

Issue Age 60		
Age	FPO	ABI
60	5.46	5.83
65	16.07	19.69
70	37.49	55.98
75	70.24	131.87
80	134.18	321.43
85	223.01	684.88
90	319.28	1,258.20

As part of the inforce management of the business, the company monitored the performance of the business by completing periodic analysis for morbidity, voluntary lapse rates and mortality. The findings from these analyses were used in projecting the inforce business to determine the effect of experience on the projected lifetime loss ratio. These studies have indicated that actual morbidity experience, lapse, and mortality experience have deteriorated since original assumptions were developed, and the deterioration does not appear to be temporary.

At the time of the initial premium rate development of these forms, there was very little industry insured data or company data available for morbidity at the later durations and older ages, and since that time, the volume of experience has increased dramatically. For our Group LTC business we now have over twice the company experience data at ages 85+ and durations 10+ compared to just 3 years ago. In developing our new assumptions we also reference our retail block of business, which has over 8 times the volume of experience on similar policies. These data have indicated that our original pricing assumptions for older ages and later durations were too low. This is consistent with the comparison of our above original assumptions against our current morbidity assumptions where it can be seen that the claim cost increases are greatest at the later durations and older ages.

The following tables show how our new best estimate (excluding the moderately adverse margin) assumptions compare to our actual observed experience:

Experience period: Inception through 2009 for incidence, inception through 2008 for claim terminations, and 2006-2008 for salvage

Claim Counts (incidence)	A/E
Dur 1-4	95%
Dur 5-8	96%
Dur 9-12	97%
Dur 13+	100%
<b>TOTAL</b>	<b>98%</b>

Claim Terminations (continuance)	A/E
<b>Total</b>	<b>88%</b>

Amount Paid (salvage)	A/E
<b>Total</b>	<b>86%</b>

Our new best estimate incidence rates reflect the deterioration observed in our latest experience study. Our claim termination and salvage assumptions are still based on our prior experience study. The A/Es are largely

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offsetting (it can be seen that claimants are lasting longer but claiming less than we expected), so we chose not to update assumptions at this time.

**6. Mortality**

The mortality rates have also been derived based on our own experience within our retail and group long-term care block of business.

The base mortality table is the unloaded 1994 Group Annuity Mortality Table, sex-distinct, with 16 years of improvements based on scale AA, and the following selection factors which vary by underwriting class:

Policy Duration	Fully Underwritten				Guaranteed Issue
	Issue Ages				Issue Ages
	≤ 55	65	75	≥ 82	All
1	21.7%	16.4%	18.8%	22.1%	103.6%
2	29.2%	21.7%	24.3%	29.0%	103.6%
3	35.9%	27.2%	31.5%	37.0%	103.6%
4	39.4%	30.4%	38.1%	45.2%	103.6%
5	42.1%	38.2%	45.6%	54.6%	103.6%
6	44.1%	44.6%	53.3%	56.1%	103.6%
7	46.8%	47.3%	61.2%	62.0%	103.6%
8	50.3%	50.1%	66.2%	70.0%	103.6%
9	52.7%	54.3%	70.5%	78.2%	103.6%
10	56.3%	58.6%	75.7%	86.5%	103.6%
11	59.9%	62.9%	81.1%	94.3%	103.6%
12	63.6%	64.3%	87.6%	100.0%	103.6%
13	64.9%	66.6%	94.1%	100.0%	103.6%
14	67.1%	68.9%	97.1%	100.0%	103.6%
15	69.4%	70.3%	100.0%	100.0%	103.6%
16	71.5%	71.7%	100.0%	100.0%	103.6%
17	74.3%	73.1%	100.0%	100.0%	103.6%
18	77.1%	76.5%	100.0%	100.0%	103.6%
19	79.9%	80.0%	100.0%	100.0%	103.6%
20	82.7%	83.6%	100.0%	100.0%	103.6%
21	85.6%	87.2%	100.0%	100.0%	103.6%
22	88.5%	90.8%	100.0%	100.0%	103.6%
23	91.4%	94.4%	100.0%	100.0%	103.6%
24	94.4%	98.1%	100.0%	100.0%	103.6%
25+	100.0%	100.0%	100.0%	100.0%	103.6%

Factors for ages not listed above are interpolated.

We are also projecting 12 years of future mortality improvement based on scale AA, consistent with the 12 years of future morbidity improvement in our future claim projections.

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*Original Pricing Assumption for Mortality:*

Our mortality decrement was based on the unloaded 1994 Group Annuity Mortality Table weighted 40% males and 60% females, with the following selection factors:

Policy Duration	Selection Factor	Policy Duration	Selection Factor
1	20.0%	7	80.0%
2	30.0%	8	85.0%
3	40.0%	9	90.0%
4	50.0%	10	95.0%
5	60.0%	11+	100.0%
6	70.0%		

In addition, future improvements of 1% per year were reflected.

At the time of the initial premium rate development of these forms, there was little insured industry data available for mortality (for Long-Term Care purchasers), and we have still observed lower mortality than expected. Furthermore, mortality improvements have been observed throughout the LTC and Life Insurance industries, consistent with our observations. We have also observed that our underwriting risk classification impacts mortality as well as morbidity and we have refined our assumption accordingly.

The following tables show how our new best estimate assumption compares to our actual observed experience:

Experience period: 3 year study 6/30/2006-6/30/2009

Duration	Mortality A/E	
	UW	GI
1-5	108%	93%
6-10	98%	110%
11+	109%	100%
<b>Total</b>	<b>106%</b>	<b>100%</b>



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**7. Persistency**

The voluntary lapse rates are also based on own experience within our group long-term care block of business:

**Guaranteed Issue**

Duration	Issue Age								
	30	40	45	50	55	60	65	70	80
1	16.3%	9.4%	7.7%	6.5%	5.9%	6.1%	6.1%	6.1%	6.1%
2	13.8%	8.1%	6.4%	5.1%	4.7%	4.7%	4.7%	4.7%	4.7%
3	12.2%	6.9%	6.4%	4.8%	3.9%	3.7%	3.7%	3.7%	3.7%
4	10.3%	6.2%	5.6%	4.2%	3.4%	3.0%	3.0%	3.0%	3.0%
5	8.8%	5.5%	4.9%	3.7%	2.9%	2.4%	2.4%	2.4%	2.4%
6	7.4%	4.9%	4.3%	3.3%	2.6%	1.9%	1.9%	1.9%	1.9%
7	6.3%	4.4%	3.8%	2.9%	2.2%	1.5%	1.5%	1.5%	1.5%
8	5.3%	4.0%	3.3%	2.5%	1.9%	1.2%	1.2%	1.2%	1.2%
9	4.7%	3.5%	2.9%	2.2%	1.7%	0.9%	0.9%	0.9%	0.9%
10	4.5%	3.2%	2.5%	2.0%	1.5%	0.8%	0.8%	0.8%	0.8%
11	4.1%	2.8%	2.2%	1.7%	1.3%	0.6%	0.6%	0.6%	0.6%
12	3.5%	2.5%	2.0%	1.5%	1.1%	0.5%	0.5%	0.5%	0.5%
13	3.1%	2.3%	1.7%	1.4%	1.0%	0.4%	0.4%	0.4%	0.4%
14	2.8%	2.0%	1.5%	1.2%	0.8%	0.4%	0.4%	0.4%	0.4%
15	2.5%	1.8%	1.3%	1.0%	0.7%	0.4%	0.4%	0.4%	0.4%
16	2.3%	1.6%	1.1%	0.9%	0.6%	0.4%	0.4%	0.4%	0.4%
17	2.0%	1.4%	1.0%	0.8%	0.5%	0.4%	0.4%	0.4%	0.4%
18	1.8%	1.3%	0.9%	0.7%	0.5%	0.4%	0.4%	0.4%	0.4%
19	1.7%	1.2%	0.8%	0.6%	0.4%	0.4%	0.4%	0.4%	0.4%
20+	1.5%	1.0%	0.8%	0.6%	0.4%	0.4%	0.4%	0.4%	0.4%

**Fully Underwritten**

Duration	Issue Age								
	30	40	45	50	55	60	65	70	80
1	15.8%	8.9%	7.2%	5.2%	4.4%	4.6%	5.7%	4.6%	4.6%
2	13.0%	7.4%	6.2%	4.5%	3.7%	3.2%	3.6%	2.8%	2.8%
3	11.1%	7.1%	5.2%	4.2%	3.1%	2.6%	2.2%	2.1%	2.1%
4	9.6%	6.2%	4.5%	3.6%	2.6%	2.1%	1.7%	1.8%	1.8%
5	8.2%	5.4%	3.9%	3.0%	2.2%	1.6%	1.4%	1.5%	1.5%
6	7.1%	4.7%	3.3%	2.6%	1.9%	1.3%	1.1%	1.3%	1.3%
7	6.1%	4.1%	2.9%	2.2%	1.6%	1.0%	0.6%	1.1%	1.1%
8	5.2%	3.5%	2.5%	1.8%	1.3%	0.8%	0.6%	0.8%	0.8%
9	4.5%	3.1%	2.1%	1.5%	1.1%	0.6%	0.6%	0.8%	0.8%
10	4.2%	2.6%	1.9%	1.3%	0.9%	0.6%	0.6%	0.8%	0.8%
11	3.7%	2.2%	1.6%	1.2%	0.8%	0.6%	0.6%	0.8%	0.8%
12	3.5%	2.0%	1.3%	1.0%	0.7%	0.6%	0.6%	0.8%	0.8%
13	3.2%	1.8%	1.1%	0.8%	0.6%	0.6%	0.6%	0.8%	0.8%
14	3.0%	1.6%	0.9%	0.7%	0.6%	0.6%	0.6%	0.8%	0.8%
15	2.8%	1.4%	0.7%	0.6%	0.6%	0.6%	0.6%	0.8%	0.8%
16	2.6%	1.3%	0.6%	0.6%	0.6%	0.6%	0.6%	0.8%	0.8%
17	2.4%	1.1%	0.6%	0.6%	0.6%	0.6%	0.6%	0.8%	0.8%
18	2.2%	1.0%	0.6%	0.6%	0.6%	0.6%	0.6%	0.8%	0.8%
19	2.0%	0.9%	0.6%	0.6%	0.6%	0.6%	0.6%	0.8%	0.8%
20+	1.9%	0.9%	0.6%	0.6%	0.6%	0.6%	0.6%	0.8%	0.8%

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*Original Pricing Assumption for Lapses:*

The initial premium schedule was based on the originally filed pricing assumptions which were believed to be appropriate, given company and industry experience available, when the initial rate schedule was developed.

Duration	30	40	45	50	55	60	65	70
1	10.00%	10.00%	7.00%	7.00%	6.50%	6.50%	6.00%	6.00%
2	9.00%	9.00%	6.00%	5.50%	5.50%	5.00%	5.00%	5.00%
3	8.50%	8.50%	5.00%	5.00%	4.00%	4.00%	4.00%	4.00%
4	7.50%	7.50%	4.50%	4.50%	3.50%	3.50%	3.50%	4.00%
5	4.50%	4.00%	3.00%	2.75%	2.75%	2.75%	2.75%	2.75%
6	4.50%	4.00%	3.00%	2.75%	2.75%	2.75%	2.75%	2.75%
7	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
8	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
9	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
10	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%

The following tables show how our new best estimate assumption compares to our actual observed experience:

Experience period: 3 year study 6/30/2006-6/30/2009

Duration	A/E
1	98.8%
2	99.5%
3	96.8%
4	99.6%
5+	102.2%
<b>Total</b>	<b>99.6%</b>

For lapses, our original pricing assumption was set lower at the time of the initial premium rate development than on prior forms, based on company data we were observing at the time. We have since observed generally lower lapse rates in the early durations and much lower lapse rates than expected in durations 10+.

**8. Expenses**

Expenses have not been explicitly projected. It is assumed that the originally filed expense assumptions remain appropriate.

**9. Trend Assumptions**

As this is not medical insurance, we have not included any explicit medical cost trends in the projections.

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**10. Marketing Method**

The employees and other eligibles were marketed through the Employer, Union or Association as part of their corporate sponsored employee benefits package with the support of John Hancock representatives and direct mail.

**11. Underwriting**

Actively at Work employees were generally offered coverage on a Guaranteed Acceptance basis during limited enrollment periods. Other eligibles were underwritten using either simplified (short form) or full underwriting.

**12. Premium Classes**

The base policy premium rates vary by Issue age, LMB, and Inflation Option, as in the initial rate filing.

All premium factors related to the insured elected benefit design options, case size, commissions, or underwriting risk class remain unchanged from the initial rate filing, with the following exception: There was a 20% load on post-issue date optional coverage increases to the insured's DMB. Our current new business rates do not include this load on post-issue date option coverage. To maintain consistency with our current new business pricing, both the past and future optional coverage increases will no longer be loaded by 20%.

**13. Premium Modalization Rules**

Premiums are payable through payroll deduction, direct bill or automatic bank withdrawal.

The following factors are applied to the monthly premium for different billing frequencies.

Every 4 weeks	12/13
Semi-Monthly	12/24
Bi-weekly	12/26
First 4 weeks of month	12/48
Weekly	12/52

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**14. Issue Age Range**

The issue age range is 18+ for all policy forms.

**15. Area Factors**

Area factors are not applicable to any of the policy forms or optional benefits.

**16. Average Annual Premium**

The table below summarizes the average annual premium per certificate before and after the requested increase.

Form	Nationwide prior to rate increase	Connecticut prior to rate increase	Connecticut following the rate increase
P-FACE(2002-2)	\$967	\$1,309	\$2,069

**17. Number of Certificate Holders**

The table below summarizes, as of 12/31/2011, the number of certificates inforce and their 2011 annualized premium that will be affected by this rate increase in your state.

Form	Number of Certificates	2011 Annualized Premium
P-FACE(2002-2)	1,779	\$2,328,281

**18. Reserves**

Active Life Reserves have not been used in this rate increase demonstration. Minimum Statutory Claim reserves as of 12/31/2011 have been discounted to the date of incurrence of each respective claim and included in the historical incurred claims. Incurred But Not Reported claim reserves as of 12/31/2011 have also been allocated to the calendar year of incurrence and included in historic incurred claims.

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**19. Requested Rate Increase**

The company is requesting an average rate increase of 58.1%, which varies by issue age, benefit period, and inflation option, and ranges from 0% to 133.8%. This was derived as follows:

1. The Company first determined the projected lifetime loss ratio for this form based on nationwide actual experience and projected future experience. We then determined the amount of rate increase that would be needed to revert to the original lifetime expected loss ratio for the form. The rate increase amount needed on these forms, by BP and Inflation option, is:
  - a. FPO
    - i. 2 – 8 yr LMB: 49.1%
    - ii. 10+ yr LMB: 96.3%
  - b. ABI
    - i. 2 – 8 yr LMB: 82.5%
    - ii. 10+ yr LMB: 133.8%
2. In order to limit the magnitude of the rate increase, particularly at the older ages, the maximum rate increase grades down from 133.8% to 5% in 5% intervals, and there will be no rate increase for issue ages 80 and above.
3. In addition, the increases were reduced or eliminated if necessary, so that for any insured subject to a rate increase, the premium rates do not exceed the rates that have been filed for new business under our most recently filed LTC-12 CT policy form (this is demonstrated in **Appendix A**).
4. Finally, we ensured that the resulting overall increase in rates satisfies the rate stability rule ensuring no less than an 85% loss ratio on the rate increase portion, while applying the original loss ratio on the rest (as the original loss ratio was higher than 58%). This is demonstrated at the bottom of Exhibit 1 where it can be seen that the sum of past and future projected incurred claims exceeds the sum of (the original premium times the original loss ratio) and (the rate increase premium times the 85% loss ratio requirement).

**Appendix B** contains the new proposed rate tables for all policy forms included with this filing. Please note that the actual rates implemented may vary slightly from those in Appendix B due to implementation rounding algorithms.

Some of our older group clients have certificates inforce under different policy forms, having opted for upgrading their pre-existing employee benefit plan to a new plan covered under a newer policy form. In those situations, we have offered internal replacement (plan upgrade) opportunities to existing certificate holders, whereby a certificate holder may have elected to lapse their original coverage and purchase the new plan coverage as a replacement. In those situations, the insured would be subject to the attained age (at the time of the replacement) premium rates for their new coverage but in some situations we would provide a premium credit to recognize the premium they had paid since their issue age for their original coverage under the prior plan. For these insureds, we will determine their new premium rate from Appendix B based on their historical original issue ages respectively for each layer of coverage. In a situation where the resulting rate increases are greater than those listed in Appendix A for their coverage, we will continue to offer them a premium credit in order to limit their respective rate increases to the amounts listed in Appendix A.

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For those group clients that transferred to us from an external carrier, we will continue to recognize any assets transferred from the prior carrier. We will continue to provide these credits to the insureds within those groups, but the rate increase will be calculated based on the insureds' gross premium rate, prior to any credits, based on the amounts listed in Appendix A.

## **20. Experience – Past & Future**

**Exhibit 1** contains nationwide past premium and claims experience and future premium and claim projections and illustrates that the anticipated lifetime loss ratio with the requested rate increase is 88.4%, well in excess of the minimum loss ratio of 60%. The lifetime loss ratio as of 12/31/11 is calculated as the sum of accumulated past and discounted future claims divided by the sum of accumulated past and discounted future earned premium where accumulation and discounting occur at the maximum statutory valuation discount rate.

In addition, Exhibit 1 contains the original expected loss ratio projections, adjusted for the actual mix of business issued, with the lifetime loss ratio also calculated as stated above.

Furthermore, Exhibit 1 demonstrates that the sum of the accumulated value of incurred claims without the inclusion of active life reserves, and the present value of future projected incurred claims, without the inclusion of active life reserves, will not be less than the sum of the following:

1. Accumulated value of the initial earned premium times the original assumed lifetime loss ratio (which was higher than 58%),
2. 85% of the accumulated value of prior premium rate schedule increases,
3. Present value of future projected initial earned premium times the original assumed lifetime loss ratio, and
4. 85% of the present value of future projected premium in excess of the projected initial earned premium.

**Exhibit 2** contains the same analysis as Exhibit 1, but for Connecticut-only experience. Please note that we did not assign any credibility to the Connecticut experience in determining the requested rate increase, which is based solely on nationwide experience.

Note that rate increases will only apply once the applicable group policy rate guarantee has expired.

## **21. New inflation options that will allow policyholders to avoid the rate increase**

Although we are no longer issuing new policies on these forms we are filing a new inflation option that will allow certificate holders that have 5% Compound Inflation (Automatic Benefit Increase or ABI) coverage the option to completely avoid the rate increase.

Under these new options, the certificate holders get to keep their current accumulated Daily benefit and their current remaining Lifetime Maximum Benefit (LMB) but the future indexation rate will be reduced from an annual rate of 5% to a lower annual rate. For those certificate holders with a LMB less than 10 years this lower annual future indexation rate is 3.0%; for those with a LMB of 10 years or greater this future indexation rate is 1.7%.

**John Hancock Life Insurance Company (U.S.A.)  
Group Long-Term Care Insurance Policy and Certificate  
Actuarial Memorandum for Inforce Rate Increase**

**Policy Series P-FACE(2002-2), et al  
May 7, 2013**

The 3.0% and 1.7% indexations were determined to be actuarially equivalent to the respective requested rate increases in aggregate and therefore these options are only available if the full rate increases requested are accepted.

The premium rate schedules for this option are the current rate schedules for the 5% Compound Inflation coverage option and are included in this filing as **Appendix C**.

**22. History of previous rate revisions**

There have been no prior rate increases on these forms.

**John Hancock Life Insurance Company (U.S.A.)  
Group Long-Term Care Insurance Policy and Certificate  
Actuarial Memorandum for Inforce Rate Increase**

**Policy Series P-FACE(2002-2), et al  
May 7, 2013**

**23. Proposed Effective Date**

These rates will not be effective until after we have satisfied the required 60 days advance notice to the policyholder and to the insureds.

**24. Actuarial Certification**

I am a Fellow of the Society of Actuaries and a Member of the American Academy of Actuaries, and I meet the Academy's qualification standards for rendering this opinion and am familiar with the requirements for filing Long-Term care insurance premiums and filing for increases in Long-Term care insurance premiums. This memorandum has been prepared in conformity with all applicable Actuarial Standards of Practice, including ASOP No. 8.

The preceding Actuarial Memorandum contains:

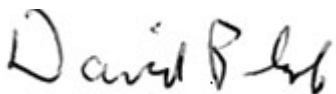
- a) the assumptions on which this certification is based;
- b) the adjustments to prior assumptions with an explanation of the reasons previous assumptions were not realized;
- c) a lifetime projection of the prior premium rate schedules and incurred claims plus future expected premiums and claims which demonstrates that the revised premium rate schedule meets the loss ratio standards and necessary details of this state; and
- d) disclosure of the manner, if any, in which reserves have been recognized.

In my opinion the revised premium rate schedules are sufficient to cover anticipated costs under moderately adverse experience and the premium rate schedules are reasonably expected to be sustainable over the life of the forms with no future premium increases anticipated.

I have reviewed and taken into consideration the policy design and coverage provided, and our current underwriting and claims adjudication processes.

In forming my opinion, I have used actuarial assumptions and actuarial methods and such tests of the actuarial calculations as I considered necessary. Based on these assumptions or statutory requirements where necessary, the premium rate filing is in compliance with the loss ratio standards of this state.

The basis for contract reserves has been previously filed and there is no anticipation of any changes.



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David Plumb, FSA, MAAA  
Vice President  
John Hancock Life Insurance Company (U.S.A.)



**Exhibit 1 - A: Nationwide Experience  
Care Choice (P-FACE (2002-2))  
All Inflation Options**

Calendar Year	Original Assumptions			Historical & Projected Experience				
	Incurred Claims	Earned Premium	Incurred Loss Ratio*	Before Proposed Increase			With Proposed Rate Increase	
				Incurred Claims	Earned Premium	Incurred Loss Ratio*	Earned Premium	Incurred Loss Ratio*
2003	480,997	4,826,157	10%	462,462	4,712,324	10%	4,712,324	10%
2004	1,588,551	16,195,211	10%	1,565,537	15,951,014	10%	15,951,014	10%
2005	3,175,502	31,725,639	10%	4,200,955	31,310,098	13%	31,310,098	13%
2006	5,031,288	47,790,473	11%	5,987,848	47,390,191	13%	47,390,191	13%
2007	7,561,233	70,360,803	11%	7,821,786	70,036,302	11%	70,036,302	11%
2008	11,279,396	102,319,479	11%	12,309,627	101,844,719	12%	101,844,719	12%
2009	15,550,371	128,735,069	12%	14,047,473	128,445,839	11%	128,445,839	11%
2010	21,047,179	155,015,195	14%	19,359,238	155,656,506	12%	155,656,506	12%
2011	25,999,376	170,439,038	15%	29,423,657	172,770,165	17%	172,770,165	17%
2012	29,688,135	165,681,200	18%	33,710,234	169,989,664	20%	169,989,664	20%
2013	33,501,158	158,545,062	21%	35,427,228	163,706,762	22%	182,211,563	19%
2014	37,120,158	152,327,581	24%	38,684,686	157,298,528	25%	216,408,019	18%
2015	41,157,797	146,765,337	28%	42,537,543	151,604,630	28%	233,945,225	18%
2016	45,806,547	141,595,913	32%	46,874,678	146,445,268	32%	229,884,577	20%
2017	50,398,233	136,625,022	37%	51,835,422	141,678,933	37%	224,567,816	23%
2018	54,700,328	131,781,302	42%	57,574,187	137,196,524	42%	218,434,731	26%
2019	59,170,050	126,954,196	47%	64,083,488	132,918,520	48%	211,941,518	30%
2020	63,965,680	122,147,549	52%	71,458,091	128,786,850	55%	205,677,137	35%
2021	69,124,837	117,369,944	59%	79,541,504	124,756,521	64%	199,564,233	40%
2022	74,701,405	112,612,252	66%	88,545,438	120,787,605	73%	193,535,682	46%
2023	80,738,361	107,881,652	75%	99,084,171	116,845,811	85%	187,533,923	53%
2024	87,184,425	103,182,891	84%	111,521,990	112,902,813	99%	181,509,210	61%
2025	93,975,792	98,517,528	95%	125,424,207	108,930,038	115%	175,411,550	72%
2026	101,040,940	93,885,145	108%	140,031,123	104,902,144	133%	169,199,322	83%
2027	108,340,796	89,287,094	121%	155,638,308	100,799,862	154%	162,841,741	96%
2028	115,773,276	84,725,375	137%	172,436,282	96,611,172	178%	156,318,603	110%
2029	123,282,135	80,204,936	154%	190,441,916	92,333,998	206%	149,625,438	127%
2030	130,811,854	75,731,060	173%	208,673,980	87,972,349	237%	142,768,730	146%
2031	138,280,128	71,309,816	194%	225,770,887	83,533,497	270%	135,761,780	166%
2032	145,646,388	66,948,216	218%	242,613,574	79,028,294	307%	128,623,541	189%
2033	152,841,029	62,656,029	244%	259,031,078	74,474,490	348%	121,383,599	213%
2034	159,792,889	58,446,349	273%	275,565,464	69,899,407	394%	114,086,476	242%
2035	166,349,579	54,330,305	306%	291,378,934	65,332,166	446%	106,779,586	273%
2036	172,322,582	50,320,112	342%	304,187,091	60,795,488	500%	99,501,290	306%
2037	177,569,530	46,427,627	382%	315,237,343	56,310,440	560%	92,287,553	342%
2038	181,863,837	42,664,930	426%	323,637,073	51,902,110	624%	85,180,053	380%
2039	185,094,885	39,047,193	474%	330,853,615	47,602,655	695%	78,231,271	423%
2040	187,209,311	35,587,132	526%	336,779,096	43,444,789	775%	71,494,862	471%
2041	188,055,976	32,294,777	582%	338,750,482	39,447,637	859%	65,003,975	521%
2042	187,690,159	29,178,233	643%	338,493,481	35,625,254	950%	58,783,919	576%
2043	186,158,492	26,244,249	709%	335,178,345	31,995,963	1048%	52,866,300	634%
2044	183,497,569	23,498,996	781%	330,341,100	28,581,336	1156%	47,287,286	699%
2045	179,717,424	20,946,563	858%	324,393,633	25,398,933	1277%	42,076,561	771%
2046	174,757,329	18,588,116	940%	316,113,153	22,450,868	1408%	37,239,954	849%
2047	168,877,693	16,421,357	1028%	306,045,161	19,734,547	1551%	32,775,491	934%
2048	162,300,682	14,441,178	1124%	292,476,776	17,248,843	1696%	28,682,712	1020%
2049	155,167,866	12,643,197	1227%	276,966,590	14,990,697	1848%	24,957,785	1110%
<b>Value as of 12/31/11*:</b>								
<b>Past</b>	<b>99,776,339</b>	<b>799,870,006</b>	<b>12.5%</b>	<b>103,706,178</b>	<b>800,153,376</b>	<b>13.0%</b>	<b>800,153,376</b>	<b>13.0%</b>
<b>Future</b>	<b>2,154,440,905</b>	<b>1,882,867,286</b>	<b>114.4%</b>	<b>3,299,695,841</b>	<b>2,029,701,652</b>	<b>162.6%</b>	<b>3,049,091,365</b>	<b>108.2%</b>
<b>Lifetime</b>	<b>2,254,217,245</b>	<b>2,682,737,292</b>	<b>84.0%</b>	<b>3,403,402,019</b>	<b>2,829,855,028</b>	<b>120.3%</b>	<b>3,849,244,741</b>	<b>88.4%</b>

\*reflecting maximum statutory valuation rate

**Test: Total Incurred Claims exceeds the Total Initial Premiums x Original Loss Ratio (instead of 58%) + Increased Premiums x 85%**

Accum Value of Past Incurred Claims =	103,706,178	Accum Value of Past Initial Prem x 85.7% =	672,342,963
Present Value of Future Incurred Claims =	3,299,695,841	Present Value of Future Initial Prem x 85.7% =	1,705,492,550
TOTAL =	3,403,402,019	Accum Value of Prior Increases x 85% =	-
		Present Value of Future Increases x 85% =	866,481,256
		TOTAL =	3,244,316,769

**Exhibit 1 - B: Nationwide Experience  
Care Choice (P-FACE (2002-2))  
FPO Inflation**

Calendar Year	Original Assumptions			Historical & Projected Experience				
	Incurred Claims	Earned Premium	Incurred Loss Ratio*	Incurred Claims	Earned Premium	Incurred Loss Ratio*	With Proposed Rate Increase Earned Premium	With Proposed Rate Increase Incurred Loss Ratio*
2003	454,804	4,147,083	11%	462,462	4,073,507	11%	4,073,507	11%
2004	1,473,149	13,229,128	11%	1,271,033	13,109,086	10%	13,109,086	10%
2005	2,803,486	22,711,879	12%	2,493,975	22,730,561	11%	22,730,561	11%
2006	4,303,656	31,303,217	14%	3,932,998	31,706,435	12%	31,706,435	12%
2007	6,297,136	44,556,165	14%	6,313,428	45,340,469	14%	45,340,469	14%
2008	9,303,952	64,431,303	14%	9,667,870	65,661,742	15%	65,661,742	15%
2009	12,855,571	81,257,282	16%	10,698,922	83,318,586	13%	83,318,586	13%
2010	17,573,551	101,194,346	17%	15,221,701	104,396,679	15%	104,396,679	15%
2011	21,812,897	114,396,547	19%	24,663,881	119,052,725	21%	119,052,725	21%
2012	24,849,450	111,161,271	22%	28,740,558	117,392,425	24%	117,392,425	24%
2013	27,902,749	106,215,423	26%	29,557,621	113,104,977	26%	124,085,505	24%
2014	30,617,457	101,856,626	30%	32,094,455	108,581,594	30%	142,916,176	22%
2015	33,633,304	97,912,299	34%	35,062,620	104,526,865	34%	151,443,442	23%
2016	37,144,605	94,214,883	39%	38,323,199	100,819,005	38%	148,022,123	26%
2017	40,507,417	90,639,934	45%	41,974,232	97,362,571	43%	144,250,996	29%
2018	43,473,265	87,151,044	50%	46,132,876	94,084,473	49%	139,914,050	33%
2019	46,439,873	83,666,801	56%	50,773,457	90,933,019	56%	135,452,024	37%
2020	49,528,326	80,200,570	62%	55,946,480	87,871,980	64%	131,113,699	43%
2021	52,754,696	76,765,255	69%	61,419,903	84,874,043	72%	126,854,393	48%
2022	56,152,314	73,356,560	77%	67,349,845	81,914,017	82%	122,634,373	55%
2023	59,747,784	69,982,880	85%	74,244,162	78,970,317	94%	118,419,745	63%
2024	63,477,188	66,648,940	95%	82,276,390	76,027,485	108%	114,184,702	72%
2025	67,270,255	63,356,473	106%	91,024,068	73,070,294	125%	109,904,054	83%
2026	71,047,843	60,104,888	118%	99,736,291	70,084,074	142%	105,556,164	94%
2027	74,765,180	56,895,109	131%	108,592,309	67,057,802	162%	101,125,869	107%
2028	78,333,573	53,728,483	146%	117,924,144	63,986,103	184%	96,605,641	122%
2029	81,704,446	50,608,657	161%	127,689,353	60,870,893	210%	91,998,859	139%
2030	84,834,022	47,539,528	178%	137,140,753	57,717,378	238%	87,314,768	157%
2031	87,643,788	44,525,092	197%	145,073,975	54,531,404	266%	82,564,613	176%
2032	90,109,738	41,569,873	217%	152,039,299	51,320,757	296%	77,762,279	196%
2033	92,201,632	38,680,395	238%	158,327,540	48,098,451	329%	72,929,200	217%
2034	93,880,233	35,865,659	262%	164,272,688	44,885,353	366%	68,098,565	241%
2035	95,079,464	33,133,172	287%	169,549,816	41,703,392	407%	63,305,002	268%
2036	95,734,782	30,490,707	314%	172,424,388	38,567,507	447%	58,572,873	294%
2037	95,808,474	27,945,174	343%	173,513,526	35,490,815	489%	53,923,692	322%
2038	95,210,505	25,503,447	373%	172,779,623	32,490,377	532%	49,384,456	350%
2039	93,934,433	23,174,969	405%	171,274,570	29,589,411	579%	44,991,194	381%
2040	92,013,203	20,967,252	439%	169,579,974	26,810,964	633%	40,779,610	416%
2041	89,420,369	18,885,414	473%	165,791,385	24,165,288	686%	36,766,248	451%
2042	86,255,182	16,932,916	509%	160,665,524	21,658,100	742%	32,960,719	487%
2043	82,639,353	15,111,900	547%	153,844,192	19,299,016	797%	29,378,183	524%
2044	78,671,982	13,424,142	586%	146,204,663	17,101,266	855%	26,039,007	561%
2045	74,395,273	11,870,383	627%	138,996,943	15,075,283	922%	22,959,282	605%
2046	69,788,760	10,449,397	668%	131,303,148	13,218,091	993%	20,134,987	652%
2047	65,016,053	9,157,435	710%	123,150,168	11,523,731	1069%	17,557,494	701%
2048	60,219,709	7,988,726	754%	113,517,840	9,988,956	1136%	15,222,025	746%
2049	55,468,810	6,938,232	799%	103,428,542	8,609,552	1201%	13,122,273	788%
<b>Value as of 12/31/11*:</b>								
<b>Past</b>	<b>83,737,195</b>	<b>525,880,485</b>	<b>15.9%</b>	<b>81,076,635</b>	<b>538,726,318</b>	<b>15.0%</b>	<b>538,726,318</b>	<b>15.0%</b>
<b>Future</b>	<b>1,237,312,067</b>	<b>1,222,441,365</b>	<b>101.2%</b>	<b>1,864,889,193</b>	<b>1,365,609,577</b>	<b>136.6%</b>	<b>1,926,462,120</b>	<b>96.8%</b>
<b>Lifetime</b>	<b>1,321,049,263</b>	<b>1,748,321,850</b>	<b>75.6%</b>	<b>1,945,965,828</b>	<b>1,904,335,895</b>	<b>102.2%</b>	<b>2,465,188,438</b>	<b>78.9%</b>

\*reflecting maximum statutory valuation rate

**Test: Total Incurred Claims exceeds the Total Initial Premiums x Original Loss Ratio (instead of 58%) + Increased Premiums x 85%**

Accum Value of Past Incurred Claims =	81,076,635	Accum Value of Past Initial Prem x 77.1% =	407,066,929
Present Value of Future Incurred Claims =	1,864,889,193	Present Value of Future Initial Prem x 77.1% =	1,031,868,088
TOTAL =	1,945,965,828	Accum Value of Prior Increases x 85% =	-
		Present Value of Future Increases x 85% =	476,724,662
		TOTAL =	1,915,659,678

**Exhibit 1 - C: Nationwide Experience  
Care Choice (P-FACE (2002-2))  
ABI Inflation**

Calendar Year	Original Assumptions			Historical & Projected Experience				
	Incurred Claims	Earned Premium	Incurred Loss Ratio*	Incurred Claims	Earned Premium	Incurred Loss Ratio*	Before Proposed Increase Earned Premium	With Proposed Rate Increase Incurred Loss Ratio*
2003	26,193	679,074	4%	-	638,817	0%	638,817	0%
2004	115,402	2,966,082	4%	294,504	2,841,928	10%	2,841,928	10%
2005	372,016	9,013,760	4%	1,706,980	8,579,537	20%	8,579,537	20%
2006	727,632	16,487,256	4%	2,054,850	15,683,756	13%	15,683,756	13%
2007	1,264,098	25,804,638	5%	1,508,358	24,695,833	6%	24,695,833	6%
2008	1,975,444	37,888,176	5%	2,641,757	36,182,977	7%	36,182,977	7%
2009	2,694,800	47,477,787	6%	3,348,551	45,127,253	7%	45,127,253	7%
2010	3,473,629	53,820,849	6%	4,137,537	51,259,827	8%	51,259,827	8%
2011	4,186,479	56,042,491	7%	4,759,776	53,717,440	9%	53,717,440	9%
2012	4,838,686	54,519,929	9%	4,969,676	52,597,239	9%	52,597,239	9%
2013	5,598,409	52,329,640	11%	5,869,608	50,601,785	12%	58,126,058	10%
2014	6,502,701	50,470,954	13%	6,590,231	48,716,933	14%	73,491,843	9%
2015	7,524,493	48,853,039	15%	7,474,923	47,077,765	16%	82,501,784	9%
2016	8,661,942	47,381,030	18%	8,551,479	45,626,263	19%	81,862,454	10%
2017	9,890,816	45,985,089	22%	9,861,190	44,316,362	22%	80,316,820	12%
2018	11,227,063	44,630,259	25%	11,441,310	43,112,052	27%	78,520,681	15%
2019	12,730,177	43,287,395	29%	13,310,031	41,985,501	32%	76,489,494	17%
2020	14,437,354	41,946,978	34%	15,511,611	40,914,870	38%	74,563,439	21%
2021	16,370,141	40,604,689	40%	18,121,601	39,882,478	45%	72,709,840	25%
2022	18,549,091	39,255,692	47%	21,195,594	38,873,588	55%	70,901,309	30%
2023	20,990,577	37,898,772	55%	24,840,009	37,875,493	66%	69,114,178	36%
2024	23,707,237	36,533,951	65%	29,245,600	36,875,328	79%	67,324,509	43%
2025	26,705,537	35,161,055	76%	34,400,139	35,859,744	96%	65,507,495	53%
2026	29,993,098	33,780,258	89%	40,294,832	34,818,070	116%	63,643,158	63%
2027	33,575,616	32,391,985	104%	47,045,999	33,742,060	139%	61,715,872	76%
2028	37,439,703	30,996,892	121%	54,512,138	32,625,070	167%	59,712,962	91%
2029	41,577,689	29,596,278	140%	62,752,563	31,463,105	199%	57,626,579	109%
2030	45,977,833	28,191,532	163%	71,533,227	30,254,970	236%	55,453,962	129%
2031	50,636,340	26,784,724	189%	80,696,913	29,002,093	278%	53,197,168	152%
2032	55,536,650	25,378,343	219%	90,574,275	27,707,537	327%	50,861,262	178%
2033	60,639,396	23,975,634	253%	100,703,538	26,376,039	382%	48,454,400	208%
2034	65,912,656	22,580,690	292%	111,292,776	25,014,054	445%	45,987,911	242%
2035	71,270,115	21,197,132	336%	121,829,118	23,628,774	516%	43,474,583	280%
2036	76,587,800	19,829,404	386%	131,762,703	22,227,981	593%	40,928,417	322%
2037	81,761,055	18,482,453	442%	141,723,817	20,819,625	681%	38,363,861	369%
2038	86,653,333	17,161,482	505%	150,857,450	19,411,733	777%	35,795,596	421%
2039	91,160,452	15,872,224	574%	159,579,044	18,013,244	886%	33,240,077	480%
2040	95,196,108	14,619,880	651%	167,199,122	16,633,825	1005%	30,715,252	544%
2041	98,635,607	13,409,363	736%	172,959,098	15,282,348	1132%	28,237,727	613%
2042	101,434,977	12,245,317	828%	177,827,958	13,967,154	1273%	25,823,200	689%
2043	103,519,140	11,132,348	930%	181,334,153	12,696,948	1428%	23,488,117	772%
2044	104,825,587	10,074,854	1040%	184,136,436	11,480,069	1604%	21,248,279	867%
2045	105,322,151	9,076,180	1160%	185,396,690	10,323,649	1796%	19,117,280	970%
2046	104,968,569	8,138,719	1290%	184,810,004	9,232,777	2002%	17,104,967	1080%
2047	103,861,640	7,263,922	1430%	182,894,993	8,210,816	2227%	15,217,997	1202%
2048	102,080,973	6,452,453	1582%	178,958,936	7,259,887	2465%	13,460,688	1329%
2049	99,699,057	5,704,965	1748%	173,538,048	6,381,145	2720%	11,835,513	1466%
<b>Value as of 12/31/11*:</b>								
<b>Past</b>	<b>16,039,144</b>	<b>273,989,522</b>	<b>5.9%</b>	<b>22,629,543</b>	<b>261,427,058</b>	<b>8.7%</b>	<b>261,427,058</b>	<b>8.7%</b>
<b>Future</b>	<b>917,128,838</b>	<b>660,425,921</b>	<b>138.9%</b>	<b>1,434,806,648</b>	<b>664,092,075</b>	<b>216.1%</b>	<b>1,122,629,245</b>	<b>127.8%</b>
<b>Lifetime</b>	<b>933,167,982</b>	<b>934,415,442</b>	<b>99.9%</b>	<b>1,457,436,191</b>	<b>925,519,133</b>	<b>157.5%</b>	<b>1,384,056,303</b>	<b>105.3%</b>

\*reflecting maximum statutory valuation rate

**Test: Total Incurred Claims exceeds the Total Initial Premiums x Original Loss Ratio (instead of 58%) + Increased Premiums x 85%**

Accum Value of Past Incurred Claims =	22,629,543	Accum Value of Past Initial Prem x 99.7% =	261,078,049
Present Value of Future Incurred Claims =	1,434,806,648	Present Value of Future Initial Prem x 99.7% =	663,205,501
TOTAL =	1,457,436,191	Accum Value of Prior Increases x 85% =	-
		Present Value of Future Increases x 85% =	389,756,594
		TOTAL =	1,314,040,144

**Appendix A - Comparison to New Business Rates (Care Choice P-FACE (2002-2))**

Rates shown are for a 90-day EP, 75% HHC benefit, and are per \$5 monthly benefit

**Inflation Option: Future Purchase Option**

Current New Business Rates (LTC-12 CT policy)*:										New Business Rates reflecting Benefit Differences*:										P-FACE (2002-2) Rates after requested Rate Increase:										P-FACE (2002-2) Rate Increase %:									
Issue Age	Benefit Period									Issue Age	Benefit Period									Issue Age	Benefit Period									Issue Age	Benefit Period								
	2	3	4	5	6	7	8	10	Life		2	3	4	5	6	7	8	10	Life		2	3	4	5	6	7	8	10	Life		2	3	4	5	6	7	8	10	Life
18-29	1.40	1.59	1.74	1.78	1.88	1.98	2.29	2.56	2.89	18-29	0.96	1.08	1.18	1.21	1.27	1.34	1.55	1.74	1.96	18-29	0.48	0.53	0.56	0.59	0.62	0.63	0.66	0.90	0.97	18-29	49%	49%	49%	49%	49%	49%	49%	96%	96%
30	1.48	1.67	1.81	1.85	1.95	2.06	2.38	2.67	3.00	30	0.96	1.08	1.18	1.21	1.27	1.34	1.55	1.74	1.96	30	0.48	0.53	0.56	0.59	0.62	0.63	0.66	0.90	0.97	30	49%	49%	49%	49%	49%	49%	49%	96%	96%
31	1.52	1.71	1.88	1.93	2.03	2.14	2.47	2.76	3.12	31	0.99	1.11	1.23	1.25	1.32	1.39	1.61	1.80	2.03	31	0.50	0.55	0.58	0.61	0.64	0.66	0.69	0.94	1.00	31	49%	49%	49%	49%	49%	49%	49%	96%	96%
32	1.55	1.78	1.93	2.00	2.10	2.22	2.57	2.86	3.24	32	1.01	1.16	1.25	1.30	1.37	1.44	1.67	1.86	2.11	32	0.51	0.57	0.61	0.63	0.66	0.68	0.71	0.97	1.04	32	49%	49%	49%	49%	49%	49%	49%	96%	96%
33	1.59	1.83	2.02	2.06	2.19	2.29	2.65	2.95	3.34	33	1.04	1.19	1.31	1.34	1.42	1.49	1.73	1.92	2.18	33	0.53	0.59	0.63	0.66	0.69	0.71	0.74	1.01	1.08	33	49%	49%	49%	49%	49%	49%	49%	96%	96%
34	1.64	1.87	2.09	2.13	2.23	2.37	2.74	3.10	3.46	34	1.07	1.22	1.36	1.39	1.45	1.54	1.79	2.02	2.25	34	0.54	0.61	0.65	0.68	0.71	0.73	0.77	1.05	1.12	34	49%	49%	49%	49%	49%	49%	49%	96%	96%
35	1.68	1.94	2.16	2.21	2.33	2.45	2.83	3.21	3.57	35	1.10	1.27	1.41	1.44	1.52	1.59	1.85	2.09	2.33	35	0.56	0.63	0.67	0.71	0.74	0.76	0.79	1.09	1.16	35	49%	49%	49%	49%	49%	49%	49%	96%	96%
36	1.73	1.99	2.25	2.32	2.42	2.58	2.98	3.33	3.76	36	1.13	1.30	1.47	1.51	1.58	1.68	1.94	2.17	2.45	36	0.58	0.65	0.70	0.73	0.77	0.79	0.82	1.13	1.21	36	49%	49%	49%	49%	49%	49%	49%	96%	96%
37	1.76	2.06	2.32	2.39	2.49	2.66	3.08	3.45	3.88	37	1.14	1.34	1.51	1.56	1.62	1.73	2.00	2.25	2.53	37	0.60	0.67	0.73	0.76	0.80	0.82	0.85	1.17	1.25	37	49%	49%	49%	49%	49%	49%	49%	96%	96%
38	1.80	2.15	2.41	2.48	2.58	2.76	3.19	3.56	4.02	38	1.17	1.40	1.57	1.62	1.68	1.80	2.08	2.32	2.62	38	0.61	0.70	0.75	0.79	0.83	0.85	0.89	1.21	1.30	38	49%	49%	49%	49%	49%	49%	49%	96%	96%
39	1.85	2.20	2.48	2.58	2.68	2.87	3.32	3.70	4.18	39	1.20	1.43	1.62	1.68	1.75	1.87	2.16	2.41	2.73	39	0.63	0.72	0.78	0.82	0.86	0.88	0.92	1.26	1.35	39	49%	49%	49%	49%	49%	49%	49%	96%	96%
40	1.89	2.27	2.57	2.67	2.77	2.97	3.43	3.82	4.33	40	1.23	1.48	1.68	1.74	1.81	1.93	2.24	2.49	2.82	40	0.65	0.75	0.81	0.85	0.89	0.92	0.95	1.31	1.40	40	49%	49%	49%	49%	49%	49%	49%	96%	96%
41	1.94	2.34	2.65	2.75	2.84	3.05	3.53	3.93	4.45	41	1.26	1.52	1.72	1.79	1.85	1.98	2.30	2.56	2.90	41	0.68	0.79	0.85	0.90	0.94	0.97	1.01	1.38	1.48	41	49%	49%	49%	49%	49%	49%	49%	96%	96%
42	2.01	2.39	2.72	2.82	2.92	3.13	3.62	4.03	4.56	42	1.31	1.55	1.77	1.84	1.90	2.04	2.36	2.63	2.97	42	0.71	0.83	0.90	0.95	1.00	1.03	1.07	1.47	1.57	42	49%	49%	49%	49%	49%	49%	49%	96%	96%
43	2.03	2.46	2.76	2.89	3.02	3.21	3.71	4.15	4.68	43	1.33	1.60	1.80	1.88	1.96	2.09	2.42	2.70	3.05	43	0.74	0.87	0.95	1.01	1.06	1.09	1.13	1.55	1.66	43	49%	49%	49%	49%	49%	49%	49%	96%	96%
44	2.11	2.53	2.84	2.96	3.09	3.29	3.80	4.25	4.80	44	1.37	1.65	1.85	1.93	2.01	2.14	2.48	2.77	3.12	44	0.78	0.92	1.01	1.07	1.12	1.15	1.20	1.64	1.75	44	49%	49%	49%	49%	49%	49%	49%	96%	96%
45	2.15	2.57	2.91	3.09	3.20	3.43	3.97	4.41	5.00	45	1.40	1.68	1.89	2.01	2.09	2.23	2.58	2.87	3.26	45	0.81	0.97	1.06	1.13	1.18	1.22	1.27	1.74	1.86	45	49%	49%	49%	49%	49%	49%	49%	96%	96%
46	2.22	2.65	2.98	3.16	3.28	3.51	4.06	4.53	5.12	46	1.45	1.72	1.94	2.06	2.13	2.28	2.64	2.95	3.33	46	0.87	1.03	1.13	1.20	1.26	1.30	1.35	1.85	1.98	46	49%	49%	49%	49%	49%	49%	49%	96%	96%
47	2.30	2.72	3.08	3.23	3.35	3.59	4.15	4.65	5.23	47	1.50	1.77	2.01	2.10	2.18	2.34	2.70	3.03	3.41	47	0.92	1.10	1.21	1.28	1.34	1.38	1.44	1.97	2.11	47	49%	49%	49%	49%	49%	49%	49%	96%	96%
48	2.34	2.81	3.18	3.35	3.47	3.72	4.30	4.77	5.42	48	1.52	1.83	2.07	2.18	2.26	2.42	2.80	3.11	3.53	48	0.98	1.16	1.28	1.36	1.43	1.47	1.53	2.10	2.24	48	49%	49%	49%	49%	49%	49%	49%	96%	96%
49	2.41	2.88	3.25	3.42	3.54	3.80	4.39	4.91	5.54	49	1.57	1.88	2.12	2.23	2.30	2.47	2.86	3.20	3.61	49	1.05	1.24	1.37	1.45	1.52	1.57	1.63	2.24	2.39	49	49%	49%	49%	49%	49%	49%	49%	96%	96%
50	2.48	2.95	3.32	3.52	3.64	3.91	4.52	5.09	5.70	50	1.62	1.92	2.16	2.29	2.37	2.54	2.95	3.31	3.71	50	1.11	1.31	1.45	1.55	1.62	1.67	1.74	2.38	2.55	50	49%	49%	49%	49%	49%	49%	49%	96%	96%
51	2.60	3.12	3.48	3.68	3.80	4.09	4.73	5.32	5.96	51	1.69	2.03	2.27	2.40	2.47	2.66	3.08	3.47	3.88	51	1.19	1.40	1.55	1.66	1.73	1.79	1.86	2.55	2.72	51	49%	49%	49%	49%	49%	49%	49%	96%	96%
52	2.72	3.26	3.63	3.85	3.97	4.28	4.95	5.58	6.24	52	1.77	2.12	2.36	2.51	2.59	2.79	3.22	3.64	4.07	52	1.26	1.50	1.66	1.77	1.86	1.91	1.99	2.73	2.92	52	49%	49%	49%	49%	49%	49%	49%	96%	96%
53	2.84	3.40	3.82	4.04	4.16	4.49	5.19	5.86	6.55	53	1.85	2.22	2.49	2.63	2.71	2.92	3.38	3.82	4.26	53	1.34	1.60	1.78	1.90	1.99	2.05	2.13	2.92	3.12	53	49%	49%	49%	49%	49%	49%	49%	96%	96%
54	2.97	3.57	3.98	4.23	4.35	4.70	5.44	6.12	6.85	54	1.93	2.33	2.59	2.76	2.83	3.06	3.54	3.99	4.46	54	1.43	1.71	1.90	2.03	2.13	2.19	2.28	3.13	3.34	54	49%	49%	49%	49%	49%	49%	49%	96%	96%
55	3.11	3.74	4.17	4.42	4.54	4.91	5.68	6.43	7.16	55	2.03	2.43	2.71	2.88	2.95	3.20	3.70	4.19	4.66	55	1.52	1.82	2.03	2.17	2.28	2.35	2.44	3.35	3.58	55	49%	49%	49%	49%	49%	49%	49%	96%	96%
56	3.28	3.97	4.43	4.70	4.82	5.21	6.04	6.78	7.61	56	2.13	2.59	2.88	3.06	3.14	3.40	3.93	4.41	4.96	56	1.65	1.99	2.22	2.37	2.48	2.56	2.66	3.65	3.90	56	49%	49%	49%	49%	49%	49%	49%	96%	96%
57	3.47	4.20	4.70	5.00	5.15	5.55	6.43	7.18	8.11	57	2.26	2.74	3.06	3.26	3.35	3.62	4.19	4.68	5.28	57	1.80	2.16	2.41	2.58	2.71	2.79	2.91	3.98	4.25	57	49%	49%	49%	49%	49%	49%	49%	96%	96%
58	3.67	4.46	5.03	5.28	5.45	5.86	6.79	7.60	8.56	58	2.39	2.90	3.28	3.44	3.55	3.82	4.42	4.95	5.58	58	1.95	2.35	2.63	2.82	2.95	3.04	3.17	4.34	4.63	58	49%	49%	49%	49%	49%	49%	49%	96%	96%
59	3.86	4.73	5.34	5.59	5.76	6.20	7.18	8.02	9.05	59	2.52	3.08	3.48	3.64	3.75	4.04	4.68	5.22	5.90	59	2.12	2.55	2.86	3.07	3.22	3.32	3.45	4.73	5.05	59	49%	49%	49%	49%	49%	49%	49%	96%	96%
60	4.07	5.04	5.66	5.91	6.11	6.56	7.60	8.47	9.58	60	2.65	3.28	3.69	3.85	3.98	4.28	4.95	5.52	6.24	60	2.31	2.78	3.12	3.35	3.51	3.62	3.77	5.16	5.51	60	49%	49%	49%	49%	49%	49%	49%	96%	96%
61	4.38	5.41	6.06	6.34	6.58	7.03	8.14	9.13	10.26	61	2.86	3.52	3.95	4.13	4.29	4.58	5.30	5.95	6.69	61	2.53	3.06	3.44	3.69	3.87	3.99	4.15	5.65	6.04	61	49%	49%	49%	49%	49%	49%	49%	95%	95%
62	4.71	5.81	6.48	6.83	7.07	7.58	8.78	9.78	11.07	62	3.07	3.78	4.22	4.45	4.61	4.94	5.72	6.37	7.21	62	2.78	3.36	3.79	4.07	4.27	4.40	4.58	6.07	6.49	62	49%	49%	49%	49%	49%	49%	49%	90%	90%
63	5.08	6.23	6.98	7.37	7.61	8.18	9.47	10.49	11.94	63	3.31	4.06	4.54	4.80	4.96	5.33	6.17	6.83	7.78	63	3.04	3.70																	

**Appendix A - Comparison to New Business Rates (Care Choice P-FACE (2002-2))**

Rates shown are for a 90-day EP, 75% HHC benefit, and are per \$5 monthly benefit

**Inflation Option: ABI (5% Compound Inflation)**

Current New Business Rates (LTC-12 CT policy)*:												New Business Rates reflecting Benefit Differences*:												P-FACE (2002-2) Rates after requested Rate Increase:												P-FACE (2002-2) Rate Increase %:											
Issue Age	Benefit Period											Issue Age	Benefit Period											Issue Age	Benefit Period											Issue Age	Benefit Period										
	2	3	4	5	6	7	8	10	Life		2	3	4	5	6	7	8	10	Life		2	3	4	5	6	7	8	10	Life		2	3	4	5	6	7	8	10	Life								
18-29	9.95	12.56	14.05	15.01	15.63	16.66	19.29	21.42	24.32	18-29	6.54	8.27	9.26	9.87	10.29	10.96	12.69	14.11	15.99	18-29	2.36	2.59	2.76	2.87	3.01	3.10	3.23	4.31	4.60	18-29	83%	83%	83%	83%	83%	83%	83%	134%	134%								
30	10.04	12.70	14.21	15.16	15.80	16.82	19.48	21.58	24.55	30	6.54	8.27	9.26	9.87	10.29	10.96	12.69	14.11	15.99	30	2.36	2.59	2.76	2.87	3.01	3.10	3.23	4.31	4.60	30	83%	83%	83%	83%	83%	83%	83%	134%	134%								
31	10.07	12.73	14.26	15.20	15.84	16.87	19.53	21.64	24.63	31	6.56	8.29	9.29	9.90	10.32	10.99	12.72	14.15	16.04	31	2.43	2.68	2.86	2.98	3.13	3.22	3.36	4.47	4.78	31	83%	83%	83%	83%	83%	83%	83%	134%	134%								
32	10.12	12.80	14.31	15.26	15.89	16.93	19.60	21.69	24.71	32	6.59	8.34	9.32	9.94	10.35	11.03	12.77	14.20	16.10	32	2.51	2.77	2.97	3.09	3.24	3.34	3.48	4.64	4.96	32	83%	83%	83%	83%	83%	83%	83%	134%	134%								
33	10.14	12.83	14.36	15.30	15.94	16.98	19.66	21.77	24.79	33	6.61	8.35	9.35	9.97	10.38	11.06	12.81	14.26	16.15	33	2.58	2.87	3.07	3.21	3.36	3.47	3.61	4.81	5.14	33	83%	83%	83%	83%	83%	83%	83%	134%	134%								
34	10.19	12.87	14.38	15.33	15.97	17.01	19.70	21.83	24.83	34	6.64	8.38	9.37	9.98	10.40	11.08	12.83	14.31	16.18	34	2.66	2.97	3.19	3.33	3.49	3.60	3.75	4.99	5.34	34	83%	83%	83%	83%	83%	83%	83%	134%	134%								
35	10.22	12.90	14.43	15.37	16.01	17.06	19.75	21.88	24.90	35	6.65	8.40	9.40	10.01	10.43	11.12	12.87	14.36	16.22	35	2.75	3.08	3.30	3.46	3.62	3.73	3.89	5.18	5.54	35	83%	83%	83%	83%	83%	83%	83%	134%	134%								
36	10.26	12.97	14.50	15.44	16.08	17.14	19.85	21.93	25.02	36	6.68	8.45	9.45	10.06	10.48	11.17	12.93	14.42	16.30	36	2.83	3.18	3.43	3.59	3.76	3.87	4.03	5.38	5.74	36	83%	83%	83%	83%	83%	83%	83%	134%	134%								
37	10.29	13.00	14.55	15.47	16.11	17.17	19.88	21.99	25.06	37	6.70	8.47	9.48	10.08	10.49	11.19	12.95	14.48	16.33	37	2.92	3.30	3.55	3.72	3.90	4.02	4.19	5.58	5.96	37	83%	83%	83%	83%	83%	83%	83%	134%	134%								
38	10.33	13.04	14.60	15.53	16.16	17.24	19.96	22.10	25.17	38	6.73	8.50	9.51	10.12	10.52	11.23	13.00	14.56	16.39	38	3.01	3.41	3.68	3.86	4.05	4.17	4.34	5.79	6.18	38	83%	83%	83%	83%	83%	83%	83%	134%	134%								
39	10.36	13.07	14.65	15.59	16.21	17.30	20.03	22.15	25.25	39	6.75	8.51	9.55	10.15	10.56	11.27	13.05	14.60	16.45	39	3.10	3.53	3.82	4.01	4.20	4.33	4.51	6.01	6.42	39	83%	83%	83%	83%	83%	83%	83%	134%	134%								
40	10.42	13.11	14.70	15.63	16.25	17.35	20.09	22.20	25.33	40	6.79	8.54	9.57	10.18	10.59	11.30	13.09	14.65	16.50	40	3.20	3.66	3.96	4.16	4.36	4.49	4.68	6.23	6.66	40	83%	83%	83%	83%	83%	83%	83%	134%	134%								
41	10.42	13.11	14.70	15.63	16.25	17.35	20.09	22.23	25.33	41	6.79	8.54	9.57	10.18	10.59	11.30	13.09	14.65	16.50	41	3.25	3.75	4.07	4.28	4.49	4.63	4.82	6.42	6.86	41	83%	83%	83%	83%	83%	83%	83%	134%	134%								
42	10.47	13.16	14.74	15.68	16.33	17.40	20.15	22.26	25.40	42	6.82	8.57	9.60	10.21	10.64	11.34	13.12	14.72	16.55	42	3.31	3.85	4.19	4.42	4.63	4.77	4.97	6.62	7.07	42	83%	83%	83%	83%	83%	83%	83%	134%	134%								
43	10.47	13.16	14.74	15.68	16.33	17.40	20.15	22.28	25.40	43	6.82	8.57	9.60	10.21	10.64	11.34	13.12	14.75	16.55	43	3.37	3.95	4.31	4.55	4.77	4.91	5.12	6.82	7.29	43	83%	83%	83%	83%	83%	83%	83%	134%	134%								
44	10.51	13.22	14.81	15.72	16.39	17.45	20.20	22.31	25.47	44	6.85	8.61	9.64	10.24	10.68	11.37	13.16	14.80	16.59	44	3.42	4.05	4.43	4.69	4.91	5.06	5.28	7.03	7.51	44	83%	83%	83%	83%	83%	83%	83%	134%	134%								
45	10.51	13.22	14.81	15.72	16.39	17.45	20.20	22.34	25.47	45	6.85	8.61	9.64	10.24	10.68	11.37	13.16	14.83	16.59	45	3.48	4.16	4.56	4.83	5.07	5.22	5.44	7.25	7.74	45	83%	83%	83%	83%	83%	83%	83%	134%	134%								
46	10.56	13.27	14.85	15.77	16.43	17.50	20.26	22.37	25.54	46	6.88	8.64	9.67	10.27	10.71	11.40	13.20	14.87	16.64	46	3.62	4.31	4.74	5.02	5.27	5.43	5.65	7.53	8.05	46	83%	83%	83%	83%	83%	83%	83%	134%	134%								
47	10.56	13.27	14.85	15.77	16.43	17.50	20.26	22.39	25.54	47	6.88	8.64	9.67	10.27	10.71	11.40	13.20	14.90	16.64	47	3.76	4.47	4.92	5.22	5.47	5.64	5.88	7.83	8.37	47	83%	83%	83%	83%	83%	83%	83%	134%	134%								
48	10.60	13.31	14.90	15.81	16.48	17.55	20.32	22.42	25.62	48	6.91	8.67	9.70	10.30	10.74	11.43	13.24	14.94	16.69	48	3.91	4.64	5.11	5.43	5.69	5.87	6.11	8.14	8.70	48	83%	83%	83%	83%	83%	83%	83%	134%	134%								
49	10.60	13.31	14.90	15.81	16.48	17.55	20.32	22.45	25.62	49	6.91	8.67	9.70	10.30	10.74	11.43	13.24	14.97	16.69	49	4.07	4.81	5.31	5.65	5.92	6.10	6.35	8.46	9.04	49	83%	83%	83%	83%	83%	83%	83%	134%	134%								
50	10.65	13.36	14.94	15.86	16.52	17.60	20.38	22.47	25.69	50	6.94	8.70	9.73	10.33	10.76	11.47	13.27	15.03	16.74	50	4.23	4.99	5.52	5.87	6.15	6.34	6.60	8.80	9.40	50	83%	83%	83%	83%	83%	83%	83%	134%	134%								
51	10.69	13.40	14.99	15.90	16.57	17.65	20.44	22.50	25.76	51	6.97	8.73	9.76	10.36	10.79	11.50	13.31	15.06	16.78	51	4.41	5.22	5.78	6.16	6.45	6.65	6.93	9.23	9.86	51	83%	83%	83%	83%	83%	83%	83%	134%	134%								
52	10.74	13.45	15.03	15.95	16.61	17.70	20.49	22.53	25.84	52	6.99	8.76	9.79	10.39	10.82	11.53	13.35	15.09	16.83	52	4.60	5.46	6.06	6.46	6.77	6.97	7.26	9.68	10.34	52	83%	83%	83%	83%	83%	83%	83%	134%	134%								
53	10.80	13.49	15.08	16.01	16.66	17.77	20.57	22.55	25.94	53	7.04	8.79	9.82	10.43	10.85	11.58	13.40	15.11	16.90	53	4.79	5.71	6.35	6.77	7.10	7.31	7.62	10.15	10.84	53	83%	83%	83%	83%	83%	83%	83%	134%	134%								
54	10.85	13.54	15.12	16.06	16.70	17.82	20.63	22.58	26.01	54	7.06	8.82	9.85	10.46	10.88	11.61	13.44	15.14	16.94	54	5.00	5.98	6.65	7.10	7.44	7.67	7.99	10.47	11.19	54	83%	83%	83%	83%	83%	83%	83%	130%	130%								
55	10.89	13.58	15.18	16.10	16.77	17.87	20.69	22.61	26.08	55	7.09	8.85	9.89	10.49	10.92	11.64	13.48	15.17	16.99	55	5.21	6.26	6.97	7.45	7.81	8.04	8.38	10.74	11.48	55	83%	83%	83%	83%	83%	83%	83%	125%	125%								
56	10.94	13.64	15.23	16.17	16.81	17.95	20.78	22.72	26.20	56	7.12	8.89	9.92	10.54	10.95	11.69	13.54	15.26	17.07	56	5.58	6.70	7.48	8.00	8.38	8.64	9.00	11.28	12.06	56	83%	83%	83%	83%	83%	83%	83%	120%	120%								
57	11.01	13.69	15.27	16.22	16.88	18.00	20.84	22.80	26.27	57	7.17	8.92	9.95	10.57	11.00	11.73	13.58	15.33	17.12	57	5.98	7.18	8.03	8.59	9.01	9.28	9.67	11.85	12.66	57	83%	83%	83%	83%	83%	83%	83%	115%	115%								
58	11.05	13.76	15.32	16.29	16.93	18.08	20.93	22.91	26.39	58	7.20	8.96	9.98	10.61	11.03	11.78	13.64	15.41	17.19	58	6.41	7.70	8.62	9.23	9.68	9.97	10.39	12.43	13.28	58	83%	83%	83%	83%	83%	83%	83%	110%	110%								
59	11.15	13.81	15.36	16.34	17.00	18.13	20.99	22.99	26.46	59	7.26	8.99	10.01	10.64	11.08	11.81	13.67	15.48	17.24	59	6.86	8.25	9.25	9.92	10.39	10.71	11.16	13.03	13.93	59	83%	83%	83%	83%	83%	83%	83%	105%	105%								
60	11.20	13.85	15.41	16.41	17.05	18.21	21.08	23.09	26.58	60	7.29	9.02	10.04	10.69	11.10	11.86	13.73	15.56	17.32	60	7.29	8.84	9.93	10.65	11.10	11.51	11.99	13.66	14.60	60	81%	83%	83%	83%	81%	83%	83%	100%	100%								
61	11.61	14.38	16.01	17.08	17.68	18.96	21.95	23.77	27.67	61	7.56	9.37	10.43	11.13	11.51	12.35	14.30	16.20	18.03	61	7.56	9.32	10.43	11.13	11.51	12.16	12.67	14.08	15.04	61	79%																

**Appendix B**  
**John Hancock Life Insurance Company**  
**P-FACE (2002-2)**

**Rates per \$5 of Monthly Benefit - 90 Day Elimination Period**  
**75% HHC benefit**

Issue Age	Future Purchase Option Benefit Period									ABI Option: (5% Compound Inflation) Benefit Period								
	2	3	4	5	6	7	8	10	Life	2	3	4	5	6	7	8	10	Life
18-29	0.48	0.53	0.56	0.59	0.62	0.63	0.66	0.90	0.97	2.36	2.59	2.76	2.87	3.01	3.10	3.23	4.31	4.60
30	0.48	0.53	0.56	0.59	0.62	0.63	0.66	0.90	0.97	2.36	2.59	2.76	2.87	3.01	3.10	3.23	4.31	4.60
31	0.50	0.55	0.58	0.61	0.64	0.66	0.69	0.94	1.00	2.43	2.68	2.86	2.98	3.13	3.22	3.36	4.47	4.78
32	0.51	0.57	0.61	0.63	0.66	0.68	0.71	0.97	1.04	2.51	2.77	2.97	3.09	3.24	3.34	3.48	4.64	4.96
33	0.53	0.59	0.63	0.66	0.69	0.71	0.74	1.01	1.08	2.58	2.87	3.07	3.21	3.36	3.47	3.61	4.81	5.14
34	0.54	0.61	0.65	0.68	0.71	0.73	0.77	1.05	1.12	2.66	2.97	3.19	3.33	3.49	3.60	3.75	4.99	5.34
35	0.56	0.63	0.67	0.71	0.74	0.76	0.79	1.09	1.16	2.75	3.08	3.30	3.46	3.62	3.73	3.89	5.18	5.54
36	0.58	0.65	0.70	0.73	0.77	0.79	0.82	1.13	1.21	2.83	3.18	3.43	3.59	3.76	3.87	4.03	5.38	5.74
37	0.60	0.67	0.73	0.76	0.80	0.82	0.85	1.17	1.25	2.92	3.30	3.55	3.72	3.90	4.02	4.19	5.58	5.96
38	0.61	0.70	0.75	0.79	0.83	0.85	0.89	1.21	1.30	3.01	3.41	3.68	3.86	4.05	4.17	4.34	5.79	6.18
39	0.63	0.72	0.78	0.82	0.86	0.88	0.92	1.26	1.35	3.10	3.53	3.82	4.01	4.20	4.33	4.51	6.01	6.42
40	0.65	0.75	0.81	0.85	0.89	0.92	0.95	1.31	1.40	3.20	3.66	3.96	4.16	4.36	4.49	4.68	6.23	6.66
41	0.68	0.79	0.85	0.90	0.94	0.97	1.01	1.38	1.48	3.25	3.75	4.07	4.28	4.49	4.63	4.82	6.42	6.86
42	0.71	0.83	0.90	0.95	1.00	1.03	1.07	1.47	1.57	3.31	3.85	4.19	4.42	4.63	4.77	4.97	6.62	7.07
43	0.74	0.87	0.95	1.01	1.06	1.09	1.13	1.55	1.66	3.37	3.95	4.31	4.55	4.77	4.91	5.12	6.82	7.29
44	0.78	0.92	1.01	1.07	1.12	1.15	1.20	1.64	1.75	3.42	4.05	4.43	4.69	4.91	5.06	5.28	7.03	7.51
45	0.81	0.97	1.06	1.13	1.18	1.22	1.27	1.74	1.86	3.48	4.16	4.56	4.83	5.07	5.22	5.44	7.25	7.74
46	0.87	1.03	1.13	1.20	1.26	1.30	1.35	1.85	1.98	3.62	4.31	4.74	5.02	5.27	5.43	5.65	7.53	8.05
47	0.92	1.10	1.21	1.28	1.34	1.38	1.44	1.97	2.11	3.76	4.47	4.92	5.22	5.47	5.64	5.88	7.83	8.37
48	0.98	1.16	1.28	1.36	1.43	1.47	1.53	2.10	2.24	3.91	4.64	5.11	5.43	5.69	5.87	6.11	8.14	8.70
49	1.05	1.24	1.37	1.45	1.52	1.57	1.63	2.24	2.39	4.07	4.81	5.31	5.65	5.92	6.10	6.35	8.46	9.04
50	1.11	1.31	1.45	1.55	1.62	1.67	1.74	2.38	2.55	4.23	4.99	5.52	5.87	6.15	6.34	6.60	8.80	9.40
51	1.19	1.40	1.55	1.66	1.73	1.79	1.86	2.55	2.72	4.41	5.22	5.78	6.16	6.45	6.65	6.93	9.23	9.86
52	1.26	1.50	1.66	1.77	1.86	1.91	1.99	2.73	2.92	4.60	5.46	6.06	6.46	6.77	6.97	7.26	9.68	10.34
53	1.34	1.60	1.78	1.90	1.99	2.05	2.13	2.92	3.12	4.79	5.71	6.35	6.77	7.10	7.31	7.62	10.15	10.84
54	1.43	1.71	1.90	2.03	2.13	2.19	2.28	3.13	3.34	5.00	5.98	6.65	7.10	7.44	7.67	7.99	10.47	11.19
55	1.52	1.82	2.03	2.17	2.28	2.35	2.44	3.35	3.58	5.21	6.26	6.97	7.45	7.81	8.04	8.38	10.74	11.48
56	1.65	1.99	2.22	2.37	2.48	2.56	2.66	3.65	3.90	5.58	6.70	7.48	8.00	8.38	8.64	9.00	11.28	12.06
57	1.80	2.16	2.41	2.58	2.71	2.79	2.91	3.98	4.25	5.98	7.18	8.03	8.59	9.01	9.28	9.67	11.85	12.66
58	1.95	2.35	2.63	2.82	2.95	3.04	3.17	4.34	4.63	6.41	7.70	8.62	9.23	9.68	9.97	10.39	12.43	13.28
59	2.12	2.55	2.86	3.07	3.22	3.32	3.45	4.73	5.05	6.86	8.25	9.25	9.92	10.39	10.71	11.16	13.03	13.93
60	2.31	2.78	3.12	3.35	3.51	3.62	3.77	5.16	5.51	7.29	8.84	9.93	10.65	11.10	11.51	11.99	13.66	14.60
61	2.53	3.06	3.44	3.69	3.87	3.99	4.15	5.65	6.04	7.56	9.32	10.43	11.13	11.51	12.16	12.67	14.08	15.04
62	2.78	3.36	3.79	4.07	4.27	4.40	4.58	6.07	6.49	7.83	9.73	10.87	11.54	11.95	12.81	13.38	14.49	15.48
63	3.04	3.70	4.17	4.49	4.71	4.85	5.05	6.52	6.96	8.13	10.10	11.28	11.97	12.42	13.28	14.14	14.91	15.93
64	3.34	4.07	4.60	4.95	5.19	5.35	5.57	7.00	7.47	8.43	10.48	11.72	12.44	12.88	13.81	14.74	15.33	16.38
65	3.66	4.48	5.07	5.46	5.72	5.90	6.14	7.50	8.01	8.77	10.88	12.21	12.91	13.37	14.33	15.15	15.75	16.83
66	4.00	4.92	5.59	6.02	6.23	6.51	6.78	8.05	8.60	9.15	11.40	12.76	13.59	14.17	15.09	15.75	16.38	17.50
67	4.38	5.41	6.11	6.52	6.77	7.19	7.49	8.62	9.21	9.57	11.82	13.33	14.30	15.01	15.72	16.37	17.03	18.19
68	4.72	5.88	6.60	7.08	7.38	7.86	8.27	9.23	9.87	9.85	12.21	13.95	15.04	15.84	16.32	17.00	17.68	18.89
69	5.05	6.37	7.14	7.69	8.00	8.53	9.14	9.88	10.55	10.12	12.60	14.44	15.67	16.43	16.93	17.63	18.34	19.59
70	5.40	6.88	7.72	8.33	8.72	9.24	10.09	10.56	11.28	10.39	12.99	14.94	16.24	17.02	17.54	18.27	19.00	20.30
71	6.02	7.67	8.62	9.39	9.93	10.39	10.83	11.26	12.03	10.81	13.61	15.65	17.01	17.82	18.37	19.13	19.90	21.26
72	6.48	8.20	9.43	10.25	10.74	11.07	11.53	11.99	12.81	11.24	14.23	16.37	17.79	18.64	19.21	20.01	20.81	22.24
73	6.84	8.72	10.03	10.90	11.43	11.78	12.27	12.76	13.63	11.66	14.87	17.10	18.58	19.47	20.07	20.90	21.74	23.23
74	7.22	9.27	10.66	11.58	12.14	12.51	13.03	13.55	14.48	12.09	15.51	17.83	19.38	20.31	20.93	21.81	22.68	24.23
75	7.61	9.83	11.30	12.29	12.88	13.27	13.82	14.38	15.36	12.51	16.15	18.58	20.19	21.16	21.81	22.71	23.62	25.24
76	8.01	10.41	11.97	13.01	13.64	14.05	14.64	15.23	16.27	12.93	16.80	19.32	21.00	22.01	22.68	23.62	24.57	26.25
77	8.42	11.01	12.66	13.76	14.42	14.86	15.48	16.10	17.20	13.33	17.44	20.05	21.80	22.84	23.54	24.52	25.50	27.25
78	8.82	11.62	13.36	14.52	15.22	15.68	16.33	16.99	18.15	13.73	18.07	20.78	22.59	23.67	24.39	25.41	26.43	28.23
79	9.23	12.23	14.07	15.29	16.02	16.51	17.20	17.89	19.11	14.10	18.69	21.49	23.36	24.48	25.22	26.28	27.33	29.20
80	9.64	12.85	14.78	16.06	16.84	17.35	18.07	18.80	20.08	14.46	19.28	22.17	24.10	25.25	26.02	27.11	28.19	30.12
81	10.60	14.14	16.26	17.67	18.52	19.08	19.88	20.68	22.09	15.90	21.21	24.39	26.51	27.78	28.63	29.82	31.01	33.13
82	11.57	15.42	17.74	19.28	20.20	20.82	21.69	22.55	24.10	17.35	23.13	26.60	28.92	30.30	31.23	32.53	33.83	36.15
83	12.82	17.09	19.66	21.37	22.39	23.08	24.04	25.00	26.71	19.23	25.64	29.48	32.05	33.59	34.61	36.05	37.50	40.06
84	14.07	18.76	21.58	23.45	24.58	25.33	26.39	27.44	29.32	21.11	28.15	32.37	35.18	36.87	38.00	39.58	41.16	43.98

# Appendix C

## John Hancock Life Insurance Company

### P-FACE (2002-2)

Rates to be used with Inflation Decrease Option Only

Rates per \$5 of Monthly Benefit - 90 Day Elimination Period

75% HHC benefit

Issue Age	ABI Option: (3.0% Compound Inflation) Benefit Period						
	2	3	4	5	6	7	8
18-29	1.29	1.42	1.51	1.58	1.65	1.70	1.77
30	1.29	1.42	1.51	1.58	1.65	1.70	1.77
31	1.33	1.47	1.57	1.63	1.71	1.76	1.84
32	1.37	1.52	1.63	1.70	1.78	1.83	1.91
33	1.42	1.57	1.68	1.76	1.84	1.90	1.98
34	1.46	1.63	1.75	1.83	1.91	1.97	2.05
35	1.51	1.69	1.81	1.89	1.98	2.05	2.13
36	1.55	1.74	1.88	1.97	2.06	2.12	2.21
37	1.60	1.81	1.95	2.04	2.14	2.20	2.29
38	1.65	1.87	2.02	2.12	2.22	2.28	2.38
39	1.70	1.94	2.09	2.20	2.30	2.37	2.47
40	1.75	2.00	2.17	2.28	2.39	2.46	2.56
41	1.78	2.06	2.23	2.35	2.46	2.54	2.64
42	1.81	2.11	2.30	2.42	2.54	2.61	2.72
43	1.84	2.16	2.36	2.49	2.61	2.69	2.80
44	1.88	2.22	2.43	2.57	2.69	2.78	2.89
45	1.91	2.28	2.50	2.65	2.78	2.86	2.98
46	1.98	2.36	2.60	2.75	2.89	2.97	3.10
47	2.06	2.45	2.70	2.86	3.00	3.09	3.22
48	2.14	2.54	2.80	2.98	3.12	3.21	3.35
49	2.23	2.64	2.91	3.09	3.24	3.34	3.48
50	2.32	2.73	3.02	3.22	3.37	3.47	3.62
51	2.42	2.86	3.17	3.37	3.54	3.64	3.79
52	2.52	2.99	3.32	3.54	3.71	3.82	3.98
53	2.63	3.13	3.48	3.71	3.89	4.01	4.17
54	2.74	3.28	3.65	3.89	4.08	4.20	4.38
55	2.86	3.43	3.82	4.08	4.28	4.41	4.59
56	3.06	3.67	4.10	4.38	4.59	4.73	4.93
57	3.28	3.94	4.40	4.71	4.94	5.09	5.30
58	3.51	4.22	4.72	5.06	5.30	5.46	5.69
59	3.76	4.52	5.07	5.43	5.70	5.87	6.11
60	4.03	4.85	5.44	5.84	6.12	6.31	6.57
61	4.23	5.11	5.74	6.17	6.47	6.66	6.94
62	4.45	5.38	6.07	6.52	6.83	7.04	7.33
63	4.67	5.68	6.40	6.89	7.22	7.44	7.75
64	4.91	5.98	6.76	7.28	7.63	7.86	8.19
65	5.15	6.31	7.14	7.69	8.06	8.31	8.65
66	5.47	6.72	7.63	8.24	8.63	8.90	9.27
67	5.80	7.16	8.16	8.82	9.24	9.53	9.92
68	6.16	7.63	8.72	9.44	9.90	10.20	10.62
69	6.53	8.13	9.32	10.11	10.60	10.92	11.38
70	6.93	8.66	9.96	10.83	11.35	11.69	12.18
71	7.46	9.38	10.79	11.73	12.29	12.67	13.20
72	8.03	10.16	11.69	12.71	13.32	13.72	14.29
73	8.64	11.01	12.66	13.76	14.42	14.87	15.48
74	9.30	11.93	13.72	14.91	15.63	16.10	16.77
75	10.01	12.92	14.86	16.15	16.93	17.44	18.17
76	10.77	14.00	16.10	17.50	18.34	18.90	19.69
77	11.60	15.16	17.44	18.96	19.87	20.47	21.32
78	12.48	16.43	18.89	20.53	21.52	22.18	23.10
79	13.43	17.80	20.46	22.24	23.31	24.02	25.02
80	14.46	19.28	22.17	24.10	25.25	26.02	27.11
81	15.90	21.21	24.39	26.51	27.78	28.63	29.82
82	17.35	23.13	26.60	28.92	30.30	31.23	32.53
83	19.23	25.64	29.48	32.05	33.59	34.61	36.05
84	21.11	28.15	32.37	35.18	36.87	38.00	39.58

**Appendix C**  
**John Hancock Life Insurance Company**  
**P-FACE (2002-2)**

Rates to be used with Inflation Decrease Option Only

**Rates per \$5 of Monthly Benefit - 90 Day Elimination Period**  
**75% HHC benefit**

Issue Age	ABI Option (1.7% Compound Inflation)	
	10	Life
18-29	1.84	1.97
30	1.84	1.97
31	1.91	2.04
32	1.98	2.12
33	2.06	2.20
34	2.14	2.28
35	2.22	2.37
36	2.30	2.46
37	2.39	2.55
38	2.48	2.64
39	2.57	2.74
40	2.66	2.85
41	2.75	2.93
42	2.83	3.02
43	2.92	3.12
44	3.01	3.21
45	3.10	3.31
46	3.22	3.44
47	3.35	3.58
48	3.48	3.72
49	3.62	3.87
50	3.76	4.02
51	3.95	4.22
52	4.14	4.42
53	4.34	4.64
54	4.55	4.86
55	4.77	5.10
56	5.13	5.48
57	5.51	5.89
58	5.92	6.32
59	6.36	6.79
60	6.83	7.30
61	7.22	7.71
62	7.63	8.15
63	8.06	8.61
64	8.52	9.10
65	9.00	9.62
66	9.64	10.30
67	10.32	11.02
68	11.05	11.80
69	11.83	12.64
70	12.67	13.53
71	13.72	14.66
72	14.87	15.88
73	16.10	17.21
74	17.45	18.64
75	18.90	20.19
76	20.47	21.87
77	22.18	23.69
78	24.02	25.67
79	26.03	27.81
80	28.19	30.12
81	31.01	33.13
82	33.83	36.15
83	37.50	40.06
84	41.16	43.98