

Actuarial Work-Products, Inc.

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Carlton Harker, FSA, MAAA
Principal
www.self-fundhealth.com
www.actuarialworkproducts.com
www.ifebp.org/lharker
www.awpse.com

TO: Addressee No. 1	Addressee No. 2	Addressee No. 3
Administrators, Inc.	Self-Funding Actuarial Service	ABC Manufacturing Co.
414 Main Street	8025 North Point Blvd Ste 207W	1841 Bypass Road
Portland, OR 97114	Winston-Salem, NC 27106	Tupelo, MS 37116
Tel. 601-414-8888	Tel. 336-759-2035	Tel. 614-160-1425
Fax 601-516-1414	Fax 336-896-0392	Fax 614-280-8416

RE: Health Care Plan: ABC Medical Plan

Benefits Include: Medical, Rx, Dental

Engager is Addressee No. 1

Eligible User is Addressee No. 2

This Certification provides an actuarial opinion with respect to the subject plan which consists of the following parts:

- Part 1 - Claims Fluctuations - Without Specific
- Part 2 - Claims Fluctuations - With Specific
- Part 3 - Economic Value of Stop-loss - Specific Only
- Part 4 - Economic Value of Stop-loss - Aggregate Only
- Part 5 - Economic Value of Stop-loss - Variable Aggregate

This certification consists of three sections:

- Statement of Actuarial Opinion
- Submitted Data and Computation Parameters
- Comments of the Actuary.

Sincerely,

Carlton Harker, FSA, MAAA
Actuarial Work-Products, Inc.

STATEMENT OF ACTUARIAL OPINION

OF THE PLAN BENEFIT CALCULATION FOR THE HEALTH CARE PLAN OF THE PLAN SPONSOR

I, Carlton Harker, am a principal of Actuarial Work-Products, Inc., am a Fellow of the Society of Actuaries and am a member of the American Academy of Actuaries. My firm has been retained by the Engager to provide calculations of certain actuarial items for the above-cited Health Care Plan.

I relied upon such Eligible User of the subject Health Care Plan as to the accuracy and completeness of underlying information used in the computation of such items.

In other aspects, my examination included such review of the actuarial assumptions and methods and such tests of actuarial calculations as I considered necessary under the circumstances.

Part 1 Opinion - Claims Fluctuations - Without Specific

Based upon the data and documentation set forth in this Work-Product, the projected plan sponsor-paid claims, including claims above the specific stop-loss limit for the indicated twelve month plan period and the statistical variance associated therewith are as follows:

- Projected claims \$4,447,402

• Statistical variance	<u>Degree of Confidence</u>	<u>Confidence Limits</u>	
		<u>Low</u>	<u>High</u>
	60%	\$3,782,736	\$5,112,069
	75%	\$3,537,443	\$5,357,362
	90%	\$3,141,808	\$5,752,997

Part 2 Opinion - Claims Fluctuations - With Specific

Based upon the data and documentation set forth in this Work-Product, the projected plan sponsor-paid claims, including claims above the specific stop-loss limit for the indicated twelve month plan period and the statistical variance associated therewith are as follows:

- Projected claims \$3,576,268

• Statistical variance	<u>Degree of Confidence</u>	<u>Confidence Limits</u>	
		<u>Low</u>	<u>High</u>
	60%	\$3,205,606	\$3,946,930
	75%	\$3,068,814	\$4,083,722
	90%	\$2,848,182	\$4,304,354

Actuarial Work-Products
Monte Carlo I Simulations
Claims Fluctuations and Economic
Value Stop-loss

Part 3 Opinion - Economic Value of Stop-loss - Specific-Only

Based upon the data and documentation set forth in this Work-Product, the economic value of the specific-only stop-loss when applied to the projected plan sponsor-paid claims, including claims above such specific stop-loss for the indicated twelve month plan period is as follows:

• Specific stop-loss limit	\$50,000
• Expected subject paid claims without specific-only stop-loss	\$4,447,402
• Expected subject paid claims with specific-only stop-loss	\$3,576,268
• Difference is the economic value of such specific-only stop-loss	\$871,134
• Estimated specific-only stop-loss gross premium	\$390,000

Part 4 Opinion - Economic Value of Stop-loss - Aggregate-Only

Based upon the data and documentation set forth in this Work-Product, the economic value of the aggregate stop-loss when applied to the projected plan sponsor-paid claims, excluding claims above such specific stop-loss for the indicated twelve month plan period is as follows:

• Aggregate stop-loss limit	\$5,000,000
• Expected subject paid claims with specific stop-loss	\$3,576,268
• Expected subject paid claims with specific and aggregate stop-loss	\$3,576,268
• Difference is the economic value of such aggregate stop-loss	\$0
• Estimated aggregate-only stop-loss gross premium	\$6,000

Part 5 Opinion - Economic Value of Stop-loss - Variable Aggregate

Based upon the data and documentation set forth in this Work-Product, the economic value of the aggregate-only stop-loss when applied to the projected plan sponsor-paid claims, excluding claims above the specific stop-loss (if any), for various corridor levels, are as follows:

<u>Aggregate Limit</u>		<u>Without</u>	<u>With</u>	<u>Economic</u>	<u>Monthly Cost</u>
<u>Percent</u>	<u>Amount</u>	<u>Aggregate</u>	<u>Aggregate</u>	<u>Value</u>	<u>for Covered</u>
		<u>Stop-loss</u>	<u>Stop-loss</u>	<u>Difference</u>	<u>Person</u>
90%	\$3,218,641	\$3,576,268	\$3,212,764	\$363,504	\$33
95	\$3,397,455	\$3,576,268	\$3,359,480	\$216,787	\$20
100	\$3,576,268	\$3,576,268	\$3,470,883	\$105,385	\$9
105	\$3,755,081	\$3,576,268	\$3,538,735	\$37,532	\$3
110	\$3,933,895	\$3,576,268	\$3,567,646	\$8,621	\$0
115	\$4,112,708	\$3,576,268	\$3,575,923	\$345	\$0
120	\$4,291,522	\$3,576,268	\$3,576,268	\$0	\$0
125	\$4,470,335	\$3,576,268	\$3,576,268	\$0	\$0
130	\$4,649,148	\$3,576,268	\$3,576,268	\$0	\$0

Conditions and Terms of Opinion

1. That this Work-Product is an actuarial opinion as contemplated by the American Academy of Actuaries.
2. That he is qualified to offer such opinion by reason of his meeting the requisite examination, experience and continuing education requirements of the American Academy of Actuaries.
3. That this Actuarial Work-Product is the result of a mathematical computer program processing inputted data and documentation as summarized herein.
4. That he is independent of and has no conflicted interest with any party with respects to this Work-Product.
5. That the Work-Product was prepared at the request of the Eligible User, who is identified herein, and who may or may not be the ultimate user of such Work-Product.
6. That he has been engaged, as contemplated by the relevant American Academy of Actuaries, by the Engager identified herein.
7. No specific audit/review of the accuracy of the submitted data was made.
8. The actuary intends to be a fiduciary with respect to this Work-Product and will act accordingly, striving to meet any and all standards of conduct necessary to meet this end.
9. The professional liability for this Work-Product is assumed by Self-Funding Actuarial Services, Inc. which has in place an appropriate professional liability insurance policy. A PDF of the summary page of this policy is available at: www.awpse.com/eando.pdf.

09/11/2009

Date

Carlton Harker, FSA, MAAA
Actuarial Work Products, Inc.
AAA Number 5293

SUBMITTED DATA AND COMPUTATION PARAMETERS

Addressee No. 1

Administrators, Inc.
414 Main Street
Portland, OR 97114
Tel. 601-414-8888
Fax 601-516-1414
ID T0001
Contact John Smith
Email jsmith@admin.com

Addressee No. 2

Self-Funding Actuarial Service
8025 North Point Blvd Ste 207W
Winston-Salem, NC 27106
Tel. 336-759-2035
Fax 336-896-0392
ID E0001
Contact Carlton Harker
Email harker2@earthlink.net

Addressee No. 3

ABC Manufacturing Co.
1841 Bypass Road
Tupelo, MS 37116
Tel. 614-160-1425
Fax 614-280-8416
ID P0006
Contact Bill Owner
Email bowner@abcco.com

Requested Work-Products

1. Claims Fluctuations - Without Specific
2. Claims Fluctuations - With Specific
3. Economic Value of Stop-loss - Specific Only
4. Economic Value of Stop-loss - Aggregate Only
5. Economic Value of Stop-loss - Variable Aggregate

General Information

Plan Name: ABC Medical Plan

No. 001

Plan Year: 01/01/2010 to 12/31/2010

Engager: None specified

Eligible User: Self-Funding Actuarial Service

Plan Sponsor: ABC Manufacturing Co.

Plan Parameters

Census	Individual	100	P/Children	0
	P/Child	100	P/Children	0
	P/Spouse	100	Family	100
	P/One	0	Total	400
	P/Two	0		

Benefits Included in Analyses (Aggregate Purposes Only)

Projected Claims	M yes	Rx yes	D yes	Y no	STD no
Aggregate Stop-loss	M yes	Rx yes	D yes	Y no	STD no

Annual Estimated/Projected Paid Benefits as Defined by the Plan

Payer	Claims Above Specific	
	Excluded	Included
Plan Sponsor	\$4,013,000	\$4,433,000
Plan Participant	\$0	\$0
Total	\$4,013,000	\$4,433,000

Stop-Loss Terms

Specific	Amount	\$50,000
	Annualized Premiums	\$390,000
	Terms:	Paid
Aggregate	Amount	\$5,000,000
	Annualized Premiums	\$6,000
	Terms:	Paid

Calculation Parameters

Number of Trials	100
Log normal Dispersal Index	4.3
Percent of Covered Persons Filing At least One Claim	83%
Economic Value of Stop-loss - Variable Aggregate (Part 5)	Requested

Notes

1. Individual includes child-only and surviving spouse.
2. Stop-loss paid includes 15/12, 12/15, e.g..
3. The ELIGIBLE USER is the party responsible for data input and report preparation.
4. The ENGAGER is the party responsible for the bill.
5. The PLAN SPONSOR is self-explanatory.
6. Aggregate, as a stand-alone benefit, is not contemplated.

COMMENTS OF THE ACTUARY

1. Elaborative explanatory comments may be found in this appropriate Sub-Site under these headings:
 - Description of Work-Products
 - Discussion of Manner of Production
 - Fees and Terms
 - Background Reading
2. This Work-Product is the property of the Engager who has the fee responsibility and is the party engaging the Actuary. Such Engager must be approved for such Work-Product module and retains such user rights solely at the pleasure/discretion of Actuarial Work-Products, Inc.

Plan Name: ABC Medical Plan

Valuation Date: 12/31/2009

Produced by: Actuarial-Work Products, Inc.

USER CODE: 063 USER NAME: sampleuser COMPUTER: 6481 SERV VERSION: v20090625
VAL CODE: 00101 REQUESTED: 09/11/2009 10:40:23 AM PRINTED: 09/11/2009 10:47:25 AM NUMBER: 1
STATUS: TRANSFER COMPLE REQUEST: REQUESTXX BROWSER: Mozilla/4.0 (compati IP ADDRESS: 64.129.139.84

ADDRESSEE 1 ID: T0001
ADDRESSEE 2 ID: E0001
ADDRESSEE 3 ID: P0006

PLAN ID: 001

VAL NUMBER: 01
COMPUTATION DATE: 12/31/2009
PROJECTED RANGE: 01/01/2010 TO 12/31/2010