



2017

ANNUAL REPORT

PENNSYLVANIA INSURANCE DEPARTMENT
Medical Care Availability and
Reduction of Error Fund



February 28, 2018

Honorable Donald White, Chair
Banking and Insurance Committee
Senate of Pennsylvania
286 Main Capitol
Harrisburg, PA 17120

Honorable Sharif Street, Minority Chair
Banking and Insurance Committee
Senate of Pennsylvania
535 Main Capitol
Harrisburg, PA 17120

Honorable Tina Pickett, Chair
Insurance Committee
Pennsylvania House of Representatives
315-A Main Capitol
Harrisburg, PA 17120

Honorable Anthony DeLuca, Minority Chair
Insurance Committee
Pennsylvania House of Representatives
115 Irvis Office Building
Harrisburg, PA 17120

Dear Senators and Representatives:

We are pleased to provide this Annual Report on the Medical Care Availability and Reduction of Error Fund which includes information on Pennsylvania's patient compensation fund from inception through December 31, 2017.

Newly opened excess claims during the claims year 2017 were 2,889 compared to 3,005 in 2016. Total payments for claims finalized during claims year 2017 were \$181 million as compared to \$174 million for claims finalized in claims year 2016.

The annual actuarial study, prepared by an outside actuarial firm, concludes that an unfunded liability of \$975 million exists as of December 31, 2016. This amount is a decrease over the prior year's estimate of \$1.0 billion.

If you have any questions about this report, please feel free to contact me, Deputy Insurance Commissioner Laura Slaymaker at 717-783-8761 or Mcare Executive Director Theodore Otto at 717-783-7657.

Sincerely,

A handwritten signature in blue ink that reads "Jessica K. Altman".

Jessica K. Altman
Acting Insurance Commissioner

Enclosure

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I. Executive Summary

During 2017, Mcare continued to serve the Commonwealth health care provider community and injured persons by providing coverage and claims payments for medical malpractice. Mcare paid out \$181 million in covered medical malpractice claims. Mcare also communicated with insurers, self-insureds, and health care providers (HCPs), providing them information about Mcare operations as well as other items of interest to those in the medical malpractice insurance market in Pennsylvania.

Key Accomplishments for 2017

Successful final implementation of the assessment calculation settlement

In late 2014, Mcare entered into a settlement with the Pennsylvania Medical Society (PAMED), the Hospital and Healthsystem Association of Pennsylvania (HAP) and the Pennsylvania Podiatric Medical Association (PPMA) regarding the calculation of the Mcare assessment. The settlement required Mcare to calculate refunds for over 63,000 HCPs over a five-year period. During 2015 and 2016, Mcare worked closely with the parties and issued checks valued at over \$138 million.

In 2017, Mcare completed the check issuance process. Then, as agreed to in the settlement, Mcare escheated \$624,303.98 to the Treasury Bureau of Unclaimed Property. These refunds are available to be claimed by health

care providers. The remaining refund amount of \$6.92 was applied to reduce the amount collected by the 2018 assessment. Thus, by the end of 2017, Mcare had returned the entire \$139,012,919.00 as agreed to in the settlement agreement.

Support for use of alternative dispute resolution techniques

Medical malpractice litigation is stressful for all parties involved. Mcare continued to be effective in its support for medical malpractice cases to be resolved by alternative dispute resolution techniques such as mediation and arbitration rather than trial if that is what the parties want. Mcare provides a neutral, unbiased, and standardized platform for parties. This improves efficiency, removes unpredictability, reduces costs, and allows all parties a forum for effective resolution.

Efficiency Initiatives

Mcare continues to look for efficiencies in its operations. For 2017, Mcare automated the calculation of the prevailing primary premium for the assessment calculation. Also automated was the calculation of the hospital experience modification factors.

Mcare can be reached at 717-783-3770, via e-mail at ra-in-mcare-exec-web@pa.gov, or by visiting our website at www.insurance.pa.gov.

II. Mcare Background

A patient compensation fund has been part of the Commonwealth's medical malpractice insurance landscape since 1975. At that time, when private carriers were seeking triple-digit rate increases or leaving the medical professional liability insurance market, the legislature developed a solution that required participating HCPs to purchase \$1.2 million of medical malpractice coverage. This consisted of insurance from the private market and excess coverage from the Medical Professional Liability Catastrophe Loss Fund (CAT Fund).

Due to issues in the medical malpractice environment in 1995, Act 135 of 1996 made significant revisions to how the CAT Fund operated. For example, the basis of the assessment collected from HCPs changed from the actual amount they paid for their private medical malpractice insurance to one that was based on uniformity by specialty and territory. This provided the Fund with significantly more predictability in the funds raised by the assessment. Also, the insurance limits written by the private market increased from \$200,000 per occurrence to \$500,000 per occurrence over a number of years in

\$100,000 increments. The overall mandatory insurance coverage requirement remained at \$1.2 million.

In late 2001 and into 2002, there was again turmoil in the Commonwealth's medical malpractice market including the rehabilitation and eventual liquidation of the largest Pennsylvania domiciled hospital insurer. This, coupled with other market disruptions, including a key physician insurer closing its doors to new business and others raising their underwriting standards, resulted in executive and legislative branch attention.

The CAT Fund legislation was repealed in 2002 and the Mcare Act ushered in a new approach to addressing medical malpractice in the Commonwealth. The Insurance Department was given responsibility for the administration of the fund. The Mcare Act also provided for the eventual phaseout of Mcare when the timing was right. The Mcare Act included reducing the mandatory insurance coverage to \$1 million per occurrence, which is in line with other states.

III. Mcare Financial Highlights

Appendix A contains Mcare financial information. Appendix A.1 is the Mcare Cash Basis Statement of Operations as of December 31, 2017. The reporting is consistent with the settlement terms of the assessment litigation that required Mcare to separately account for the \$139 million to be returned to certain HCPs. The Reserve Fund included in the settlement is also accounted for separately. Excluding these funds, Mcare ended calendar year 2017 with a positive balance of \$16.5 million. Mcare had projected a year-end balance of \$14 million when calculating the assessment percentage for 2018.

Appendix A.2 is the Mcare Summary of Financials from CY 2008 to 2017.

This document reflects the volatility of Mcare's claims payments with a payment of \$146 million in 2010 and a \$196 million payment in 2012. This experience is to be expected because Mcare provides coverage solely on catastrophic medical malpractice cases.

Mcare is protected from these swings by the 10% buffer which is built into each year's assessment calculation as required by the Mcare Act. Also, Mcare has a \$30 million Reserve Fund as provided for in the settlement of the assessment litigation.

Additional information on Financials can be found in Appendix A.

IV. Mcare Program Review

A. Claims Program

The Mcare Fund adjusts two types of claims. One type is claims submitted by primary insurers on behalf of HCPs for excess coverage. In these claims, the primary insurer is responsible for securing the defense and the first \$500,000 of indemnity. The other type is claims submitted to Mcare for both defense and "first dollar" indemnity coverage under Section 715 of the Mcare Act.

Mcare claims staff includes examiners, geographic territory managers, and support personnel. It also uses physician reviewers.

Excess Claims Opened/Closed

Mcare opened 2,889 claims reported by primary insurers between September 1, 2016 and August 31, 2017 (Mcare's claims period as defined in the Mcare Act). This compares to 3,005 claims opened in the prior claims period. Mcare closed 3,268 claims in 2017 compared to 2,980 claims closed in 2016. These numbers include claims closed with and without indemnity payment. A total of 91 primary insurers reported claims to Mcare in the 2017 claims period which is consistent with the prior year.

Section 715 Claims Opened/Closed

Section 715 is a remnant from the original patient compensation fund legislation. The purpose was to insulate primary carriers writing in

Pennsylvania from the impact of claims filed four or more years after the medical care. The Mcare Act provided for an end to these types of claims. It did so by requiring a Section 715 claim to arise from medical malpractice incidents that occurred on or before December 31, 2005. For medical malpractice incidents occurring January 1, 2006 and subsequent, primary insurers and self-insurers are responsible for defense and indemnity as they are for other claims.

In claims period 2017, Mcare opened 32 and closed 57 Section 715 claims.

Alternative Dispute Resolution (ADR)

Claims examiners and managers provide full investigation and disposition of reported claims. Within these functions, Mcare has actively promoted global resolution through settlement, arbitration, and mediation, as appropriate, to the benefit of the involved HCPs and plaintiffs. The unique position of Mcare allows for fair and objective analysis of the entire case and when appropriate, can facilitate bringing parties to consensus. Since the Mcare ADR program's inception in 2003 it has been used in over 1,700 medical malpractice matters.

In the 2017 claims period, 142 ADR processes were completed as agreed to by the parties. This is comprised of

43 arbitrations, 91 mediations, and 8 monetary cap trial agreements. This is consistent with prior years.

Claims Payments

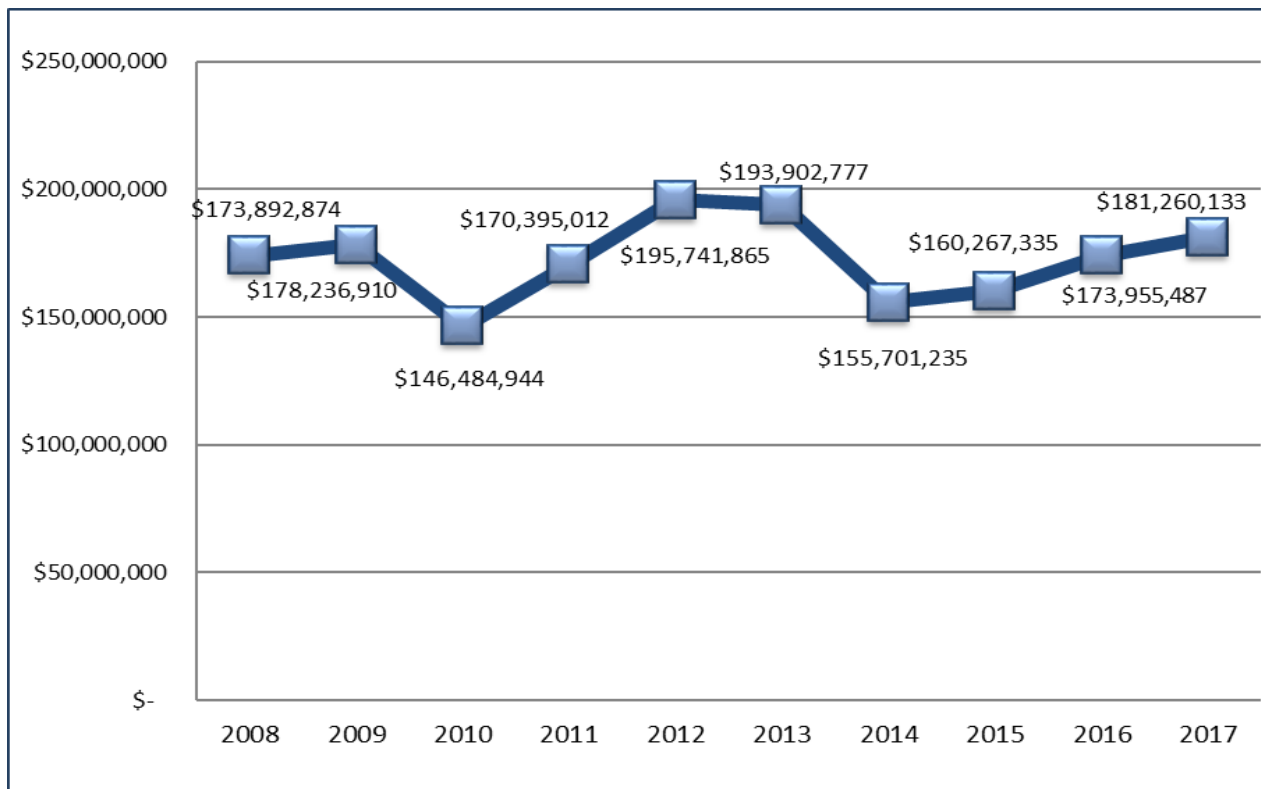
In 2017, Mcare paid \$181 million as compared to \$174 million in 2016. Mcare’s 2017 payments combined with insurers’ payments totaled \$663 million as compared to \$623 million in 2016.

claims payment statistics reflect the volatility associated with a relatively small number of high value indemnity payments. The difference in claims payments between 2016 and 2017 is in line with historical experience.

The following graph shows Mcare’s total payments for the last 10 claims period years.

Mcare adjusts catastrophic injury medical malpractice claims. Its annual

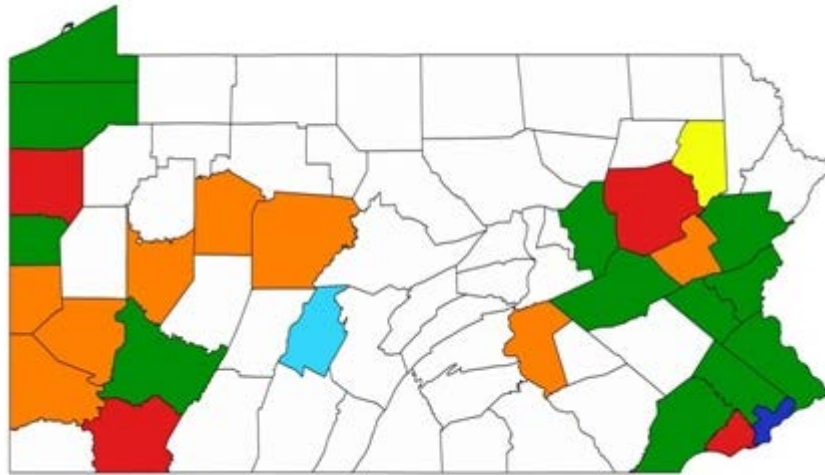
Chart 1: Claims Payments by Claims Year for 2008-2017



Regional Statistics

Mcare claims payments also vary by territory. Chart 2 on the following page shows the 2017 claims payments allocated by territory.

Chart 2: 2017 Mcare Paid Claims by Territory



Territory	Territory Total	County(ies) Within Territory
Territory 1	\$50,834,997	Philadelphia
Territory 2	\$25,122,735	Remainder of State
Territory 3	\$24,225,000	Allegheny
Territory 3	\$7,560,000	Armstrong, Beaver, Carbon, Clearfield, Dauphin, Jefferson, Washington
Territory 3	\$31,785,000	Territory 3 Total
Territory 4	\$21,744,207	Delaware, Fayette, Luzerne, Mercer
Territory 5	\$13,550,000	Lackawanna
Territory 6	\$37,223,194	Bucks, Chester, Columbia, Crawford, Erie, Lawrence, Lehigh, Monroe, Montgomery, Northampton, Schuylkill, Westmoreland
Territory 7	\$1,000,000	Blair
Total Paid	\$181,260,133	

Additional information on claims can be found in Appendix B.

B. Coverage Program

The Mcare Coverage Program consists of two major components. The first is collection of assessments from HCPs to provide the funding for Mcare's claims payments, defense of HCPs, and operations. The second is maintaining records of HCPs securing insurance from a private insurance company or by self-insuring. This information assists Mcare in enforcing the Commonwealth's mandatory medical malpractice insurance laws.

Assessment Collection

Coverage from Mcare is financed by assessments collected from HCPs as defined in the Mcare Act and interest on these funds. For 2017, the assessment revenue is \$192 million as compared to the assessment revenue of \$165 million for 2016. The variance is primarily due to less funds being left over to help offset the amount needed to be collected as well as an increase in claims payments that is in line with previous experience.

The statutory assessment formula, as modified by the PAMED/HAP/PPMA settlement has the following components:

1. The amount Mcare paid in claims;
2. The administrative costs of Mcare;
3. Repayment of any funds borrowed if claims payments and administrative expenses exceed

the amount collected in any given year, and

4. A 10% buffer to protect against a funding deficit if claims payments increase year over year, **minus**
5. The projected year-end balance which includes interest income.

The collection of the assessment is based on a statutorily defined base, the Prevailing Primary Premium (PPP). The PPP is defined as the schedule of occurrence rates approved for use by another Mcare Act agency. Consistent with prior year calculations, Mcare projected what amount would be raised if every HCP required to participate in the fund paid the PPP amount. Mcare then determined what percentage of the PPP would raise the amount to be collected using the statutory assessment formula.

Chart 3 below reflects the assessment percentage over the last 10 years and the impact of the assessment litigation settlement in which Mcare agreed to recalculate the assessment percentage for the five years in which there were funds remaining at year end. It was the difference between the original percentages and settlement adjusted percentages that was refunded to HCPs. Starting in the 2015 assessment year, the remaining funds were included in the calculation of the assessment percentage.

Chart 3: Assessment Percentage for 10 Most Recent Years

Year	Original Percentage	Settlement Adjusted Percentage
2009	19%	18%
2010	21%	15%
2011	19%	13%
2012	23%	22%
2013	25%	no change
2014	23%	19%
2015	12%	
2016	17%	
2017	19%	
2018	19%	

The Mcare Act provides for adjustments to hospitals' assessments based on loss experience. The range as provided for by statute is a 20% discount to a 20% increase. Chart 4 below shows how this provision affected the hospitals in 2017.

Chart 4: Hospitals Experience Modification Factors

	Adjustment	2017
Largest Discount	80.0%	95
Off-Balance Only	86.7%	36
Intermediate	86.8%-119.9%	16
Maximum Upward	120%	64
Total of all rated hospitals		211

Coverage Analysis

Mcare receives reports of coverage on physicians practicing in the Commonwealth, as well as their specialty and location of practice. It also receives reports of coverage on podiatrists and nurse midwives. Reports of coverage are also made by hospitals, nursing homes, primary health centers, birth centers and medical corporations. Under the Mcare Act, carriers have 60 days from when their coverage began to report coverage to Mcare. Thus, for the first two months of each calendar year, Mcare receives reports of coverage that are for the previous calendar year.

Additional information on the Mcare Coverage Program can be found in Appendix C.

C. Compliance Program

Mcare is responsible for receiving and analyzing reports of coverage from private insurance companies and self-insurers regarding HCPs' medical professional liability insurance coverage. These reports include what type of coverage it is, the periods of coverage, whether a reporting endorsement has been purchased upon the termination of a claims made policy, and the assessment amount being paid per HCP.

Mcare reviews each of these reports for compliance with Pennsylvania's mandatory insurance laws. For 2017, Mcare began a special initiative focused on the compliance of hospitals and other facilities. This was due to the acceleration in the past few years

of ownership and affiliation changes. The initiative successfully provided support to these hospitals and other facilities by giving them information about differences in what had been reported by the previous owner and what was being reported by the new owner. Mcare was also able to provide information to those involved in an acquisition or other major change in their insurance program on how to most effectively and efficiently report the changes to Mcare.

Mcare also continued its focus on exploring ways to minimize the amount of time insurers, HCPs, and their staffs spend in Mcare compliance activities.

V. Mcare Unfunded Liability

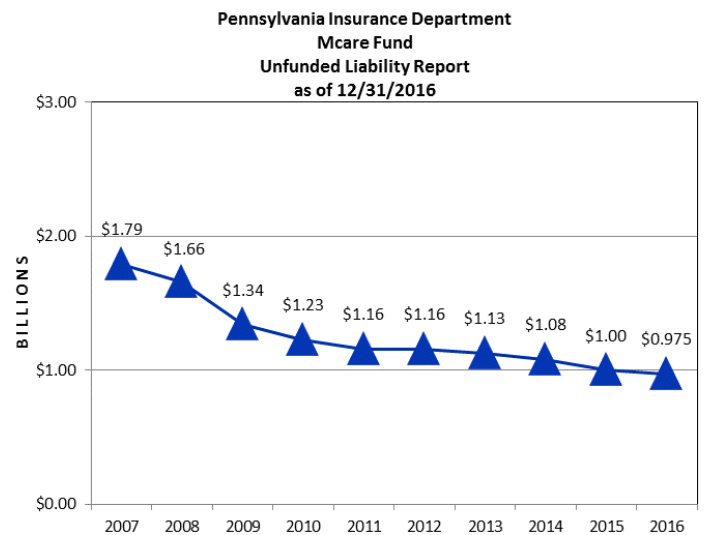
Mcare operates on what has been characterized as a “pay-as-you-go” model since it holds no reserves like a traditional insurance company would. The HCPs required to participate in Mcare are mandated as a condition of licensure to pay their Mcare assessment. Thus, in a very real sense, the funds that a traditional private insurance company would have already collected remain in the possession of the HCPs until the funds are needed by Mcare to pay claims or other expenses.

One step taken in 2002 to reduce Mcare’s unfunded liability was the change in the Mcare Act to place the responsibility for claims reported more than four (4) years from the incident back on the private insurers or self-insureds effective January 1, 2006. This “long tail” portion of the medical professional liability exposure had been the responsibility of a patient compensation fund in Pennsylvania since 1975.

This change, coupled with the limits being provided by private insurers increasing to \$500,000 and the overall coverage limit going from \$1.2 million to \$1 million, has resulted in the Mcare unfunded liability projection decreasing. The annual actuarial study, prepared in 2017 by Deloitte Consulting LLP, concludes that an unfunded liability of \$975 million exists as of December 31, 2016.

Below is a chart reflecting the projected unfunded liability over the last 10 years.

Chart 5: Mcare Projected Unfunded Liability over the last 10 years



Additional information on the Mcare Unfunded Liability can be found in Appendix D.

VI. Limits Step Up and Podiatrists' Exit

Limits Step Up

The Mcare Act has a provision that requires a study of the private insurance market's capacity to write increased coverage limits with a corresponding decrease in the coverage limits provided by Mcare. The statute further provides that unless the Insurance Commissioner finds that additional basic insurance coverage capacity is not available, the limits written by the market will increase.

The first time this analysis was conducted, in 2005, the Commissioner did not allow the limits to increase or "step-up." Subsequent studies on a two-year cycle as provided for in the Mcare Act have made similar findings so that the limits have not changed.

The study conducted in 2017 found that it cannot be determined that additional basic insurance capacity is currently available. Reasons for this determination included the large market share of risk retention groups in the market, the changing health care landscape, and the financial impact on health care providers. Thus, there is no increase to the current basic primary insurance limits for calendar years 2018 and 2019.

The next capacity study will be conducted in 2019 for a potential step up in limits effective January 1, 2020.

Podiatrists' Exit

Another provision of the Mcare Act provides for the exit of the podiatrist class of HCPs from the Mcare Fund upon the satisfaction of an arrangement for the class to retire the fund's liabilities associated with podiatrists. Mcare has maintained a dialogue with the podiatrists, however, as of this time, a mutually desirable plan to retire their Mcare liabilities has not been identified.

APPENDIX

Additional Financials

Appendix A

- A.1 Cash Basis Statement of Operations - 2017
- A.2 Summary of Financials - 10 Most Recent Years

Additional Claims Information

Appendix B

- B.1 Paid Claims by Region - 5 Most Recent Years
- B.2 Claim and Case Payments - 5 Most Recent Years
- B.3 Summary of Annual Fund Claim Payments by Health Care Provider Group - 10 Most Recent Years
- B.4 Claim Payments by Primary Carrier and Self-Insurer - 5 Most Recent Years

Additional Coverage Information

Appendix C

- C.1 2017 Annual Assessment Rate Calculation
- C.2 2017 Hospital Experience Modification Factor Calculation
- C.3 Amount of Assessment Received by Provider Type by Assessment Year - 10 Most Recent Years
- C.4 Yearly Average Unabated Assessment by Provider Group - 10 Most Recent Years
- C.5 Assessment Remitted by Primary Carrier and Self-Insurer - 10 Most Recent Years
- C.6 Count of Unique Health Care Providers by Provider Type by Assessment Year - 10 Most Recent Years

Additional Mcare Unfunded Liability Information

Appendix D

- D.1 Pennsylvania Medical Care Availability and Reduction of Error Fund Estimation of 12/31/2016 Unfunded Liability prepared by Deloitte Consulting LLP – Summary of Results

Appendix A

MEDICAL CARE AVAILABILITY AND REDUCTION OF ERROR FUND

CASH BASIS STATEMENT OF OPERATIONS

JANUARY 1, 2017 TO DECEMBER 31, 2017

SETTLEMENT AGREEMENT FUNDS

Reserve Fund Balance	\$ 30,000,000	#1
Assessment Relief Fund (Refund Account) Balance		\$0 #2
<u>MCARE FUND BALANCE JANUARY 1, 2017</u>		\$ 12,102,042

Receipts:

ASSESSMENT REVENUE	\$ 191,738,889	
INVESTMENT INCOME ON ASSESSMENTS	\$ 2,123,475	
INVESTMENT INCOME ON RESERVE FUND	\$ 323,583	
MISCELLANEOUS REVENUE	\$ -	
TRANSIT & PAYABLES SUMMARY	\$ 501,667	
TOTAL RECEIPTS	<u>\$ 194,687,614</u>	\$ 194,687,614

TOTAL FUNDS AVAILABLE \$ 206,789,656

Claims Deductions:

2017 CLAIMS PAYMENTS	\$ 181,260,133	#3
CLAIMS DEDUCTIONS	<u>\$ 181,260,133</u>	

Operating Expenses:

SALARIES	\$ 2,493,555	
PAYROLL TAXES & BENEFITS	\$ 1,856,963	
DATA PROCESSING SERVICES	\$ 272,404	
LEGAL FEES & EXPENSES	\$ 2,425,646	#4
OFFICE SUPPLIES & EQUIPMENT	\$ 27,636	
CONSULTANTS	\$ 1,267,036	
TELECOMMUNICATIONS	\$ 107,931	
REAL ESTATE	\$ 358,623	
OTHER OPERATIONAL EXPENSES	\$ 174,424	
TOTAL OPERATING EXPENSES	<u>\$ 8,984,219</u>	

TOTAL DEDUCTIONS AND EXPENSES: \$ (190,244,352)

MCARE FUND BALANCE DECEMBER 31, 2017 \$ 16,545,303

FINANCIAL FOOTNOTES:

#1 Reserve Fund Balance (Not to exceed \$30 M) 12/31/17	\$ 30,000,000	
#2 Assessment Relief Fund (Refund Account) Balance 01/01/16	\$ 139,012,919	
1st Round Relief Payment	\$ (33,186,036.85)	
2nd Round Relief Payment	\$ (104,086,984.54)	
3rd Round Relief Payment	\$ (1,115,586.71)	
Escheated Payments	\$ (624,303.98)	
Amount used to reduce 2018 Assessment Calculation	\$ (6.92)	
Assessment Relief Fund (Refund Account) Balance 12/31/17		\$0
#3 2017 Claims Payments	\$ 181,260,133	
Includes \$350,000 check issued on 01/03/18 due to payee change		
#4 Legal Fees & Expenses	\$ 2,425,646	
Amount paid to defend Health Care Providers under §715		

Source:

COMMONWEALTH'S SAP ACCOUNTING RECORDS AND BUREAU OF FISCAL MANAGEMENT MONTHLY REPORTS.

Mcare Fund

Summary of Financials from CY 2008 to 2017

* In Millions *

		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
1	Beginning Balance	34	104	61	124	130	130	169	73	28	12
2	Settlement Agreement ¹							(169)			
3	ADJUSTED BEGINNING BALANCE	34	104	61	124	130	130	0	73	28	12
	Receipts:										
4	Assessment Revenue	229	218	218	184	209	239	233	124	165	192
5	Investment Income Earned	4	3	9	2	2	2	2	2	1	2
6	Auto CAT Fund	47	22	0	0	0	0	0	0	0	0
7	Abatement Repayment/Credits	4	2	0	0	0	0	0	0	0	0
8	Transfer from Other Funds	0	0	0	0	0	0	0	0	0	0
9	Loan from Other Funds	0	0	0	0	0	0	0	0	0	0
10	Misc. Other	1	2	0	0	1	4	1	0	1	1
11	Net Increase/Decrease in Fair Value of Investments	0	0	0	0	0	0	4	(1)	0	0
12	Subtotal Receipts without Beginning Balance (4+5+6+7+8+9+10+11)	285	247	227	186	212	245	240	125	167	195
13	Grand Total Receipts with Beginning Balance (3+4+5+6+7+8+9+10+11)	319	351	288	310	342	375	240	198	195	207
		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	Expenditures:										
14	Salaries & Benefits	5	5	5	4	4	4	4	4	4	4
15	Loan Repayment	0	0	0	0	0	0	0	0	0	0
16	Transfer to HCPRA for Abatement Repayments	14	0	0	0	0	0	0	0	0	0
17	Interagency Transfer	0	100	0	0	0	0	0	0	0	0
18	Loss on Investments	12	0	0	0	0	0	0	0	0	0
19	Legal Fees & Expenses	4	3	9	6	6	6	6	4	3	2
20	Liability Claims Paid	174	178	146	170	196	194	156	160	174	181
21	Misc. Other ²	6	4	4	0	6	2	1	2	2	3
22	Grand Total Expenditures (14+15+16+17+18+19+20+21)	215	290	164	180	212	206	167	170	183	190
23	Year End Balance (13-22)	104	61	124	130	130	169	73	28	12	17
¹ Settlement Agreement - Pursuant to the Settlement Agreement effective October 3, 2014 between the Pennsylvania Medical Society, the Hospital & Healthsystem Association of Pennsylvania and the Pennsylvania Podiatric Medical Association, \$139 million of the 2013 Year End Balance is to be returned to the Eligible Health Care Providers who paid assessments during the years of 2009, 2010, 2011, 2012 and 2014. The remaining \$30 million is to be held by Mcare separately and only used to pay claims or other Mcare expenses where other Mcare revenues, including statutory buffer, are insufficient and in lieu of borrowing.											
² Misc. Other - includes rounding adjustments and 4.9/M Credit Refunds issued in 2012											

Appendix B

Pennsylvania Insurance Department

Mcare Fund

Paid Claims by Region 2013 - 2017*

Year	Total Annual Claim Payment	Eastern		Central		Western		Other	
		Region Paid Claims	Percent of Region to Total Paid Claims	Region Paid Claims	Percent of Region to Total Paid Claims	Region Paid Claims	Percent of Region to Total Paid Claims	Region Paid Claims	Percent of Region to Total Paid Claims
2013	\$193,902,777	\$108,502,306	55.96%	\$39,770,471	20.51%	\$45,630,000	23.53%	\$0	0.00%
2014	\$155,701,235	\$87,078,232	55.93%	\$33,328,883	21.41%	\$35,294,120	22.67%	\$0	0.00%
2015	\$160,267,335	\$83,120,211	51.86%	\$34,728,429	21.67%	\$39,968,695	24.94%	\$2,450,000	1.53%
2016	\$173,955,487	\$80,324,997	46.18%	\$58,425,451	33.59%	\$34,705,039	19.95%	\$500,000	0.29%
2017	\$181,260,133	\$81,406,418	44.91%	\$48,480,436	26.75%	\$51,373,279	28.34%	\$0	0.00%

Regional County Definition:

Eastern	Bucks, Chester, Delaware, Montgomery, Northampton, Philadelphia
Central	Adams, Berks, Bradford, Carbon, Centre, Clinton, Columbia, Cumberland, Dauphin, Franklin, Fulton, Huntingdon, Juniata, Lackawanna, Lancaster, Lebanon, Lehigh, Luzerne, Lycoming, Mifflin, Monroe, Montour, Northumberland, Perry, Pike, Schuylkill, Snyder, Sullivan, Susquehanna, Tioga, Union, Wayne, Wyoming, York
Western	Allegheny, Armstrong, Beaver, Bedford, Blair, Butler, Cambria, Cameron, Clarion, Clearfield, Crawford, Elk, Erie, Fayette, Forest, Greene, Indiana, Jefferson, Lawrence, McKean, Mercer, Potter, Somerset, Venango, Warren, Washington, Westmoreland
Other	Includes all other states and the United States District Courts where an Mcare defendant was involved.

*County designation within region is for Mcare claims handling purposes only.

Pennsylvania Insurance Department

Mcare Fund

Claim and Case Payments - 5 Most Recent Years

Year	Fund Money	Claim Count	Average Claim Value	Case Count	Average Case Value
2013	\$193,902,777	414	\$468,364	295	\$657,298
2014	\$155,701,235	346	\$450,003	257	\$605,841
2015	\$160,267,335	352	\$455,304	269	\$595,789
2016	\$173,955,487	372	\$467,622	290	\$599,847
2017	\$181,260,133	402	\$450,895	294	\$616,531

Note: One "case" consists of 1 to many "claims"

Pennsylvania Insurance Department

Mcare Fund

Summary of Annual Fund Claim Payments by Health Care Provider Group

2008 - 2017

Year	<u>Individuals</u>				<u>Medical Corporations</u>				<u>Institutions</u>				<u>Totals</u>	
	Claim Count	% of Total Claims	Amount of Fund Payment	% of Annual Fund Claims Payment	Claim Count	% of Total Claims	Amount of Fund Payment	% of Annual Fund Claims Payment	Claim Count	% of Total Claims	Amount of Fund Payment	% of Annual Fund Claims Payment	Total Claim Count	Total Annual Fund Claims Payment
	MD's, DO's, Podiatrists Certified Nurse Midwives								Hospitals, Nursing Homes Birth Centers, Primary Care Centers					
2008	256	68%	\$116,967,358	67%	16	4%	\$8,165,387	5%	105	28%	\$48,760,129	28%	377	\$173,892,874
2009	285	72%	\$127,713,538	72%	14	4%	\$9,012,513	5%	97	24%	\$41,510,859	23%	396	\$178,236,910
2010	194	59%	\$87,936,023	60%	10	3%	\$5,592,973	4%	125	38%	\$52,955,948	36%	329	\$146,484,944
2011	230	65%	\$110,890,028	65%	18	5%	\$8,543,331	5%	105	30%	\$50,961,653	30%	353	\$170,395,012
2012	256	63%	\$128,473,897	66%	16	4%	\$8,912,666	5%	132	33%	\$58,355,302	30%	404	\$195,741,865
2013	267	64%	\$125,139,084	65%	21	5%	\$9,230,191	5%	126	30%	\$59,533,502	31%	414	\$193,902,777
2014	225	65%	\$103,366,679	66%	12	3%	\$6,050,000	4%	109	32%	\$46,284,556	30%	346	\$155,701,235
2015	241	68%	\$108,303,790	68%	5	1%	\$2,675,000	2%	106	30%	\$49,288,545	31%	352	\$160,267,335
2016	229	62%	\$106,235,581	61%	12	3%	\$6,112,500	4%	131	35%	\$61,607,406	35%	372	\$173,955,487
2017	244	61%	\$113,657,457	63%	19	5%	\$9,179,486	5%	139	35%	\$58,423,190	32%	402	\$181,260,133

Pennsylvania Insurance Department

Mcare Fund

2013 - 2017 Claim Payments by Primary Carrier and Self-Insurer

Carrier Code	2013	2014	2015	2016	2017
S01	\$4,000,000				
S07					
S10	\$1,625,000	\$1,483,000	\$3,790,000	\$3,450,000	\$2,500,000
S11					
S12	\$1,532,357	\$1,650,000	\$1,000,000	\$1,150,000	\$1,945,952
S14					
S23					
S24					
S32					
S34					
S35			\$1,000,000		
S36					
S40				\$300,000	
S41					
S43		\$400,000			
S45		\$700,000			
S48					
S49	\$1,000,000	\$131,138	\$500,000	\$500,000	
S51		\$1,000,000	\$1,825,000	\$1,000,000	\$1,500,000
S53		\$500,000		\$1,500,000	
S54			\$500,000		
S57		\$500,000			
S60	\$1,000,000			\$1,900,000	
S62	\$1,500,000				
S63			\$500,000		
S66	\$254,000				
S68					\$500,000
003	\$13,170,000	\$15,750,000	\$9,362,500	\$11,877,500	\$10,600,000
011	\$2,350,000	\$2,276,207	\$5,400,000	\$1,000,000	\$2,000,000
020					
031	\$19,113,834	\$12,526,320	\$15,041,192	\$13,371,493	\$14,343,972
032	\$2,100,000	\$4,150,000	\$3,568,695	\$500,000	\$2,450,000
039					\$560,000
045	\$1,000,000	\$87,500			
052					
055					
067	\$13,253,500	\$9,559,462	\$9,592,500	\$11,215,050	\$12,863,755
086	\$1,127,470	\$1,500,000	\$1,050,000	\$1,000,000	\$3,800,000
088					
093	\$2,875,000	\$1,300,000			\$1,840,000
102					
103				\$1,000,000	\$500,000
112		\$500,000			
119					

Pennsylvania Insurance Department

Mcare Fund

2013 - 2017 Claim Payments by Primary Carrier and Self-Insurer

Carrier Code	2013	2014	2015	2016	2017
121	\$1,000,000				\$1,000,000
124			\$300,000		\$250,000
126		\$570,000		\$1,000,000	
127				\$500,000	\$563,544
129	\$3,100,000	\$8,100,000	\$5,622,983	\$2,800,000	\$2,500,000
130				\$400,000	
131					
135		\$1,000,000		\$2,000,000	
136	\$2,385,000	\$1,675,000		\$1,000,000	\$3,000,000
138		\$500,000	\$950,000		
139	\$800,000				
143		\$350,000			
144	\$14,750,000	\$8,875,000	\$15,900,000	\$18,425,000	\$15,475,000
145	\$2,411,644	\$5,562,000	\$4,700,000	\$9,225,000	\$4,450,000
155	\$11,535,000	\$12,015,342	\$11,987,500	\$10,752,500	\$10,325,000
156	\$7,050,000	\$1,925,000	\$4,900,000	\$4,925,480	\$4,025,000
157					
159	\$232,000				
160					
161					
162			\$200,000	\$187,500	
164					
166					
167					
169					
181				\$1,000,000	
183					
184	\$1,600,000		\$450,000	\$2,750,000	
185	\$375,000				
194				\$500,000	
196	\$1,700,000	\$2,000,000	\$500,000	\$1,000,000	\$400,000
197	\$5,559,421	\$2,427,245	\$3,325,000	\$5,933,947	\$5,996,484
199	\$8,775,000	\$2,631,138	\$2,750,000	\$1,500,000	\$4,000,000
201					
202	\$9,490,000	\$5,260,000	\$4,375,000	\$1,960,000	\$3,976,350
203		\$1,414,438	\$1,330,929	\$500,000	\$900,000
207	\$13,731,250	\$10,077,342	\$11,442,078	\$6,882,922	\$11,704,487
208	\$500,000	\$500,000	\$1,261,667	\$525,000	\$544,207
210	\$1,000,000			\$350,000	\$150,000
211	\$5,740,000	\$6,374,809	\$2,500,000	\$4,587,111	\$4,572,391
212	\$500,000	\$500,000			
219	\$2,775,000	\$1,850,000	\$500,000	\$1,350,000	\$3,000,000
220	\$1,575,000		\$1,750,000	\$800,000	\$1,850,000
221	\$2,509,608	\$3,875,000	\$2,509,904	\$4,625,000	\$2,350,000

Pennsylvania Insurance Department

Mcare Fund

2013 - 2017 Claim Payments by Primary Carrier and Self-Insurer

Carrier Code	2013	2014	2015	2016	2017
222	\$500,000		\$1,750,000	\$3,500,000	\$850,000
223	\$2,450,000	\$1,400,000	\$2,400,000	\$2,500,000	\$1,800,000
224	\$1,000,000	\$30,000	\$2,000,000	\$500,000	\$1,200,000
228		\$2,000,000	\$2,000,000	\$975,000	\$950,000
229			\$200,000		
232					\$500,000
234					
239	\$500,000		\$1,000,000	\$1,000,000	\$2,974,590
241	\$1,000,000	\$500,000	\$130,000	\$500,000	\$500,000
243				\$375,000	
245	\$6,082,693	\$6,500,000	\$5,225,000	\$8,250,000	\$19,253,000
246	\$3,025,000	\$825,000	\$950,000	\$2,675,000	\$1,000,000
248					
250		\$500,000			
251					
253	\$5,050,000	\$3,365,000	\$2,827,387	\$4,150,000	\$1,500,000
256					
258	\$1,000,000	\$1,860,294	\$1,500,000	\$1,675,000	\$500,000
261	\$500,000	\$250,000		\$500,000	
262			\$250,000		
271	\$2,300,000	\$1,000,000	\$1,950,000	\$3,275,000	\$2,950,000
275		\$500,000			
276	\$2,100,000	\$600,000	\$800,000	\$1,200,000	\$1,550,000
279	\$150,000			\$200,000	\$500,000
285	\$500,000				\$500,000
286		\$150,000			
290					\$283,385
293					
297			\$250,000		
308			\$700,000		\$1,000,000
310	\$2,750,000	\$4,725,000	\$3,525,000	\$4,936,984	\$2,463,016
312					\$150,000
320			\$500,000	\$500,000	\$500,000
331					\$250,000
333			\$425,000	\$500,000	\$500,000
338			\$1,500,000	\$1,500,000	\$2,150,000
341					\$500,000
351					\$500,000
Totals	\$193,902,777	\$155,701,235	\$160,267,335	\$173,955,487	\$181,260,133

Appendix C



2017

ANNUAL ASSESSMENT RATE CALCULATION

PENNSYLVANIA INSURANCE DEPARTMENT
Medical Care Availability and
Reduction of Error Fund

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I. Executive Summary

The Medical Care Availability and Reduction of Error Fund (Mcare) is funded by annual assessments collected from health care providers (HCPs) providing services in Pennsylvania. Mcare calculates the assessment percentage in the fall of each year and informs the HCP community and their insurers of the assessment rate by November 1. The insurers use the Mcare Assessment Manual to learn what amount they should collect from each of their insured HCPs and forward to Mcare when a policy is issued.

The assessment calculation process is set by the Mcare Act as well as a settlement agreement with HCP representatives that Mcare entered into in 2014. These provisions detail how both the numerator and denominator of the calculation are determined and discussed below.

Calculation Numerator

The numerator of the calculation consists of claim payments, operating expenses and principal and interest Mcare paid on borrowed funds (if any) during the claims year. These numbers all come from Mcare's records. A buffer of 10% is added as required by the Mcare Act. Mcare agreed in the Settlement Agreement to reduce the total by Mcare's management projection of what the year's starting balance, if any, will be. This forms the numerator of the assessment calculation.

Calculation Denominator

The denominator of the calculation is based on the Prevailing Primary Premium (PPP). PPP is defined in the Mcare Act and is used rather than the amount the HCP actually pays for their private insurance to provide a fair

methodology to allocate the assessment among HCPs based on their specialty and area of practice (territory). It also provides a more stable base to predict what the actual assessment proceeds will be. The denominator is calculated based on data from Mcare's records about how many HCPs there are in a specialty and territory and the amount they would pay if they paid the full PPP.

Assessment Rate Calculation

The assessment rate calculation divides the numerator by the denominator. The percentage derived by the calculation is then reviewed by Mcare for a determination whether to round the percentage up or down based on three decimal places. Historically, decimals less than .500 are rounded down with decimals over .500 rounded up.

Assessment Calculation Implementation

Mcare applies the assessment percentage to each of the PPP specialty and territory cells and generates a rate chart. This chart as well as other assessment reporting information is made available in the annual assessment manual which is available on the Mcare website at www.insurance.pa.gov.

II. Mcare Assessment Rate Calculation

The Mcare Act lists four categories of expenses to be included in the assessment calculation, the sum of which is divided by the PPP to determine the assessment percentage. Each component of the calculation is discussed in more detail below.

Final Claims During the Claims Period

To provide sufficient lead time for Mcare to make the assessment calculation and to provide the HCP community the assessment rate to use in the following year, the Mcare Act defines the "claims period" as September 1 – August 31. For a claim to be considered "final" during the claims period, Mcare must have received a signed release or a final judgment by August 31.

For claims year 2016, the final claims payments are \$174 million, up from \$160 million in the previous year.

Mcare Expenses in the Claims Period

In addition to Mcare staff and office expenses, Mcare incurs defense expenses for certain types of claims as required by the Mcare Act. For claims year 2016, the operating expenses are \$9.1 million which compares favorably to \$11 million in the previous year.

Principal and Interest on Money Borrowed

The Mcare Act provides for the borrowing of funds by Mcare if it experiences a funding shortfall. This did not occur in this claims period nor is it expected to be needed in the upcoming claims period.

Target Reserve

The Mcare Act provides for a 10% reserve of all the expense amounts. Historically, claims payments increased year-over-year and the purpose of the reserve was to provide Mcare sufficient additional funds for the upcoming claims period. Recently, the claims payments have been less predictable and without a clear trend. Appendix A has a graph showing claims payments over the last 10 claims periods.

Projected Starting Balance

Prior to the 2014 assessment calculation, Mcare accumulated funds not used at the end of a calendar year. HCP representatives sued Mcare arguing that the funds should be used to reduce the following year's assessment calculation.

The litigation settled in October 2014 and for the 2015 assessment calculation a \$61 million projected starting balance was used to reduce the assessment amount that was collected. In 2016, the starting balance of \$27 million was used to reduce the assessment amount to be collected.

For the 2017 assessment calculation, Mcare management has projected a starting balance of \$14 million. It will be used to reduce the assessment amount that will be collected.

Selection of PPP

Mcare takes the specialty and territory specific HCP data reported to it and calculates a number that equals what the assessment would collect if all the HCPs paid the full PPP. Mcare has historically also taken the actual assessment collected in the prior two years and adjusted it to the current PPP rates for comparison purposes. The results of these calculations and analysis for the current year and the past three years are in Appendix B. The selection of the PPP is a management decision by Mcare, not purely an acceptance of one or more calculations or averaging numbers. Mcare has continued to exercise its judgment this year and selected a PPP of \$980 million, which is consistent with the previous three assessment calculation periods.

Appendix C breaks out the tipping points between each assessment percentage based on collecting the \$188 million for 2017 as required by the Mcare Act.

Appendix D provides information on the assessment rates for the last 10 years. For the last three years a PPP of \$980 million has been used (the percentages vary depending on the amount Mcare needs to collect under the statutory formula).

Appendix E shows the HCP count by provider type. There is a clear upward trend which provides additional assurance the calculated rate should produce the projected amount.

The 2017 assessment calculation incorporating all of these factors is provided on the following page. The assessment rate without rounding is 19.15%. The chart also provides a

comparison with the 2016 calculation to provide information why the assessment has gone up two percentage points.

Summary of 2016 and 2017 Assessment Rate Calculations

	2017	2016	Difference	Assessment Rate Impact
(1) Claim Year Ending 8/31 Claims Settled	\$173,955,487	\$160,267,335	\$13,688,152	1%
(2) Claim Year Ending 8/31 Operating Expenses	\$9,162,344	\$11,098,196	(\$1,935,852)	0%
(3) Target Reserve (10% of (1) + (2))	\$18,311,783	\$17,136,553	\$1,175,230	0%
(4) Assessment Costs ((1) +(2)+(3))	\$201,429,614	\$188,502,084	\$12,927,530	1%
(5) Projected Starting Balance	(\$13,712,900)	(\$26,791,145)	\$13,078,245	1%
(6) Contribution from Reserve Fund	\$0	\$0	\$0	0%
(7) Assessment Amount, (4)+(5)+(6)	\$187,716,714	\$161,710,939	\$26,005,775	2%
(8) Projected Primary Premium	\$980,000,000	\$980,000,000	\$0	0%
(9) Indicated Assessment Rate, (7)/(8)*	19%	17%	2%	2%*
<i>*reflects rounding</i>				

The rounded assessment percentage for 2017 is 19%, a two percentage point increase over the 2016 rounded assessment percentage of 17%. The increase is due to increased claims payments in claims year 2016 of \$14 million and a decrease in the projected starting balance of \$13 million. The rounding in each of the assessment years results in a 2% differential.

Operating costs reflected a \$2 million decrease, primarily due to lower defense costs in the cases for which Mcare is responsible to provide a defense.

III. Conclusion

The Mcare Act clearly states what should be done to calculate the assessment rate. Mcare is to take the current claims year expenses (claims payments and its operating expenses) and add the costs of the principal and interest of any borrowing plus add a 10% buffer. The litigation settlement requires Mcare to reduce that sum with the projected starting balance.

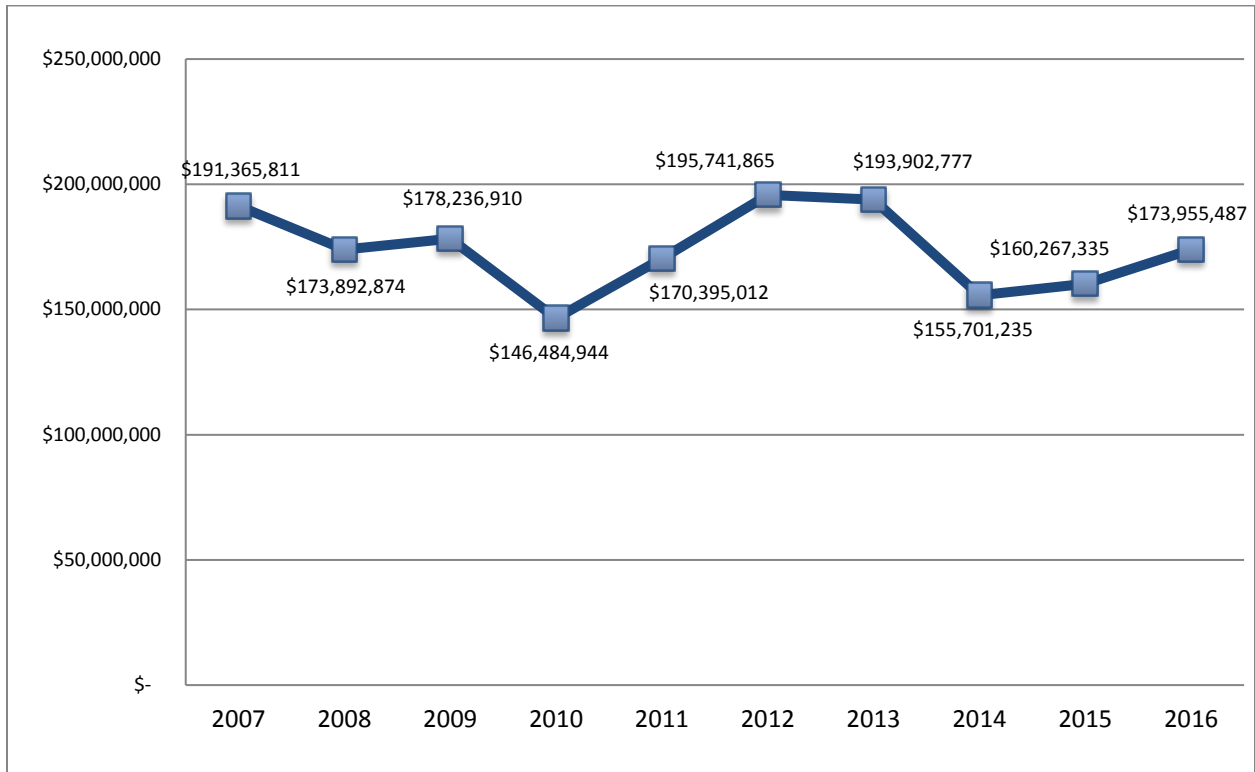
The remaining amount is then divided by the PPP to determine the assessment percentage that is rounded for ease of implementation.

Mcare can be reached at 717-783-3770, via e-mail at ra-in-mcare-exec-web@pa.gov, or by visiting our website at www.insurance.pa.gov.

APPENDICES

APPENDIX A

Claims Payments by Claims Year for 2007-2016



APPENDIX B

PPP Ranges and Mcare Selection

PWC PPP Range 2014 Calculation*				
Collecting		\$227	Million	
		Projected PPP	Assessment %	% Used
	Based on 2010 Remittances	\$955,501,849	23.70%	
	Based on 2011 Remittances	\$956,439,921	23.70%	
	Based on 2012 Remittances	\$983,299,385	23.10%	
	<i>Mcare Selected 2014</i>	<i>\$980,000,000</i>	<i>23.20%</i>	23%

PWC PPP Range 2015 Calculation*				
Collecting		\$122	Million	
		Projected PPP	Assessment %	% Used
	Based on 2011 Remittances	\$956,422,051	12.80%	
	Based on 2012 Remittances	\$983,191,107	12.50%	
	Based on 2013 Remittances	\$977,845,422	12.50%	
	<i>Mcare Selected 2015</i>	<i>\$980,000,000</i>	<i>12.49%</i>	12%

PWC PPP Range 2016 Calculation*				
Collecting		\$160	Million	
		Projected PPP	Assessment %	% Used
	Based on 2012 Remittances	\$983,473,443	16.40%	
	Based on 2013 Remittances	\$978,457,334	16.50%	
	Based on 2014 Remittances	\$988,808,118	16.40%	
	<i>Mcare Selected 2016</i>	<i>\$980,000,000</i>	<i>16.50%</i>	17%

Mcare PPP Range 2017 Calculation				
Collecting		\$187,716,714		
		Projected PPP	Assessment %	% Used
	Based on 2013 Remittances	\$977,596,442	19.20%	
	Based on 2014 Remittances	\$987,407,178	19.01%	
	Based on 2015 Remittances	\$1,001,555,043	18.74%	
	<i>Mcare Selected 2017</i>	<i>\$980,000,000</i>	<i>19.15%</i>	19%

* PWC information excerpted from the assessment calculation reports.

APPENDIX C

Selected PPP Assessment Percentage Impact

	2017 Assessment Expenses	PPP	%	% Rounded
	\$187,716,714	\$1,015,000,000	18.49%	18%
	\$187,716,714	\$1,014,000,000	18.51%	19%
Selected	\$187,716,714	\$980,000,000	19.15%	19%
	\$187,716,714	\$963,000,000	19.49%	19%
	\$187,716,714	\$962,000,000	19.51%	20%

APPENDIX D

Assessment Percentage 10 Most Recent Years

Year	Original Percentage
2007	23%
2008	20%
2009	19%
2010	21%
2011	19%
2012	23%
2013	25%
2014	23%
2015	12%
2016	17%

Bolded years used a PPP of \$980 Million

APPENDIX E

Health Care Provider Count

Assessment Year	Physicians (MD/DO)	Podiatrists	Nurse Midwives	Hospitals	Nursing Homes	Primary Health Centers	Birth Centers	Total Annual Count of Unique Providers
2007	37,981	1,110	266	226	716	4	4	40,307
2008	38,890	1,126	266	224	713	5	4	41,228
2009	39,584	1,138	255	221	714	5	4	41,921
2010	40,339	1,162	271	223	702	5	4	42,706
2011	41,425	1,174	285	223	701	5	5	43,818
2012	42,211	1,201	300	221	699	5	5	44,642
2013	42,847	1,221	315	220	698	5	5	45,311
2014	43,291	1,239	316	223	690	5	6	45,770
2015	43,575	1,232	322	218	681	5	5	46,038
*2016	32,995	810	242	147	465	5	3	34,667

*Coverage for policies that incept or renew during the month of December is due to Mcare on or before March 1, 2017. Coverage for policies that has been reported and processed as of September 14, 2016 is included in the counts.



2017

HOSPITAL EXPERIENCE MODIFICATION FACTOR CALCULATION

PENNSYLVANIA INSURANCE DEPARTMENT
Medical Care Availability and
Reduction of Error Fund

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I. Executive Summary

The Medical Care Availability and Reduction of Error Fund (Mcare) is funded by annual assessments collected from health care providers (HCPs) providing services in Pennsylvania. Mcare calculates the assessment percentage in the fall of each year and informs the HCP community and their insurers of the assessment rate by November 1.

Mcare's enabling statute (Mcare Act) also provides for a hospital experience modification (HEM) program. The purpose of the program is to provide appropriate financial incentives to encourage effective risk management practices and to promote quality care.

Each hospital may receive a +/- 20% adjustment to the assessment they pay based on the claims payments Mcare has made on their behalf as compared to what they have paid to Mcare in assessments. The Mcare Act directs that the five most recent claims periods are to be used. In addition, a hospital's experience is to be compared to its peers. The following report provides information on how the 2017 HEM factors were calculated and distributed.

II. Mcare HEM Factor Calculation and Distribution

The Mcare HEM factor calculation is like a paid loss retrospective rating plan. It directly correlates the hospital's claims experience at the Mcare layer of coverage with what the hospital has paid in to Mcare.

The first step in calculating the HEM factors is identifying which hospitals will be included. Closed hospitals are excluded as they are no longer paying an assessment. New hospitals must be in operation for five years to be eligible for a HEM factor. Prior to that their HEM factor is 1.0.

Once those hospitals eligible for a HEM factor have been identified, their individual Mcare loss ratio is calculated (Mcare Hospital Loss Ratio). As provided for in the Mcare Act, five years of data is used. Five years of claims payments is divided by five years of assessment payments.

For the 2017 HEM calculation, claims payments made in claims years 2011 to 2015 were used. Under the Mcare Act, claims payments are made on the last business day of the year. The HEM calculation is completed in the fall so the 2016 claims payments had not yet been made.

Assessment payments made from 2012 to 2016 were used in the calculation. The overwhelming bulk of hospital assessment payments are for coverage effective either in January or July. Thus, the number of hospitals for which Mcare must advance calculate their projected assessment payment for 2016 using the previous year's bed and visit count is not material.

If a hospital has no Mcare paid claims during the five-year evaluation period, their HEM factor of 80% is the maximum discount allowed by the Mcare Act. If a hospital has one or more Mcare paid claims, additional analysis is needed to determine its HEM factor.

To compare a hospital's Mcare Hospital Loss Ratio to its peers, hospitals are placed in one of five bands. A hospital's band is determined by its Annualized Prevailing Primary Premium (APPP). APPP is calculated by taking the hospital's annual bed and visit counts and multiplying them by the unadjusted Prevailing Primary Premium as defined in the Mcare Act (PPP).

The bands are as follows:

Band based on APPP	
Band #	Band Range
1	\$0 to \$330,000
2	\$330,001 to \$640,000
3	\$640,001 to \$1,300,000
4	\$1,300,001 to \$2,760,000
5	\$2,760,001 and greater

The band loss ratio is developed by taking the five years of Mcare claims payments on behalf of all the hospitals in the band and dividing it by five years of assessments paid to Mcare by all hospitals in the band. This produces the Mcare Band Loss Ratio.

Each hospital's Mcare Hospital Loss Ratio is compared to the Mcare Band Loss Ratio to determine whether the hospital's ratio is better, the same or worse than others in the band. It is

this difference that forms the foundation of the HEM factor. The results of this comparison may indicate a HEM factor that is outside the +/-20% allowed by the statute so the results of this initial analysis is called the Uncapped HEM Factor.

Since its inception in the 1990's, the Mcare HEM program has been "revenue neutral". Revenue neutral in this context means that the hospitals as a provider group will pay the same with the HEM program as they would have without it. By doing so other health care providers do not benefit from reduced assessment payments nor have to subsidize the hospital provider group assessment payments.

To determine whether the HEM program is revenue neutral, Mcare calculates how much hospitals as a group would pay into Mcare if there was not a HEM program (Baseline Assessment). Then the amount the hospitals would pay once the HEM factors are applied (Modified Assessment) is calculated. The Baseline Assessment is compared to the Modified Assessment and the difference is the Off-Balance Target. The Off-Balance Target is generally a positive number which means the initial HEM factor calculation generates less assessment than if there were no HEM program. Thus, a factor (Off-Balance Factor) is applied to the Modified Assessment so that it is increased to generate the additional assessment needed to match the Baseline Assessment.

The use of the Off-Balance Factor on the Uncapped HEM Factor must be done together with the application of the +/- 20% statutory restriction. Multiple calculations are needed

because as a hospital's HEM factor is increased with the application of the Off-Balance Factor, it has the possible impact of taking the factor to the statutory maximum of 120%. Once this happens, no additional assessment may be collected from the hospital. Successive calculations limit the hospitals new HEM Factor at the maximum until the Off-Balance Target is reached. This process results in the Capped HEM which is the hospital's final HEM.

The Mcare Act requires that frequency be incorporated into the HEM calculation process. Mcare addresses this mandate by including all hospitals with one or more claims in calculating the Off-Balance Factor. It is possible for a hospital to have one or more Mcare paid claims but their Mcare Hospital Loss Ratio as compared to their peers still be under the statutory minimum of 80%. For these hospitals, their loss ratio is brought to 80% and then the Off-Balance Factor is applied to it.

Below are the results of the HEM calculation for the 2017 assessment year.

2017 HEM Distribution	
80% (No Mcare Claims Paid)	95
86.7% (Off-Balance only)	36
86.8%-119.9% (Intermediate)	16
120% (Maximum)	64
Rated Hospitals	211

To distribute the HEM factors, Mcare prepares a document for each individual hospital that communicates its HEM factor and how to use it when calculating the hospital's assessment. Hospitals with no Mcare claims payments during the five-year

evaluation period receive a slightly different document which confirms that they are receiving the largest discount permitted under the Mcare Act of 80%.

The transmittal document also gives the Executive Director's direct dial telephone number, email address and a dedicated email account if there are any questions regarding the hospital's HEM calculation or if they need it to be resent. Responses to hospitals are generally accomplished within an hour with a service standard of same day communications.

Using email to distribute these documents allows Mcare to get the information directly to the person(s) responsible for using the HEM factor. In addition, documents for hospital systems or those with the same producer can be grouped together for greater efficiency.

III. Conclusion

The 2017 HEM factor calculation provides hospitals with an understandable methodology of how their factor is determined. The process is intuitive as it directly compares what a hospital paid in with what Mcare paid out on their behalf. Hospitals without an Mcare paid claim during the 5-year evaluation period are assured of the maximum discount permitted by the Mcare Act. Hospitals can also keep track of their Mcare claims payments and determine when the payment(s) will be outside the evaluation period.

Hospitals who want more detail on how their HEM factor is calculated are responded to by Mcare quickly because Mcare staff have materials already prepared to convey the relevant data elements and calculations. In addition to providing information by telephone, Mcare encourages an email follow up which contains all the information the hospital needs to first confirm that the data used by Mcare is consistent with the hospital's records and how to explain the calculation to others in hospital management.

If there are any questions on this report or the HEM program, Mcare can be reached at 717-783-3770 or via e-mail at ra-in-mcare-exec-web@pa.gov. Frequently asked questions and their answers are available on the Mcare website at www.insurance.pa.gov.

Pennsylvania Insurance Department

Mcare Fund

Amount of Assessment Received by Provider Type and Assessment Year

Assessment Year	Rate ²	Physicians (MD/DO)	Podiatrists	Nurse Midwives	Hospitals	Nursing Homes	Primary Health Centers	Birth Centers	Medical Corporations
2008	20%	\$171,318,038	\$2,990,281	\$996,867	\$45,906,131	\$5,231,463	\$825,196	\$20,708	\$6,018,628
2009	18%	\$159,225,687	\$2,819,565	\$896,034	\$42,501,737	\$4,770,358	\$776,744	\$19,991	\$5,537,568
2010	15%	\$161,796,803	\$2,913,844	\$980,820	\$41,474,745	\$4,487,694	\$784,659	\$24,203	\$5,301,037
2011	13%	\$133,415,361	\$2,417,219	\$814,723	\$34,052,259	\$3,756,234	\$665,985	\$21,712	\$4,307,149
2012	22%	\$152,552,227	\$3,065,651	\$1,065,859	\$40,416,868	\$4,099,402	\$831,401	\$34,245	\$4,616,815
2013	25%	\$176,086,179	\$3,709,954	\$1,267,572	\$44,045,124	\$5,532,965	\$927,072	\$34,509	\$5,019,754
2014	19%	\$169,636,024	\$3,938,854	\$1,312,783	\$41,779,458	\$4,821,131	\$917,792	\$35,630	\$4,388,092
2015	12%	\$89,495,404	\$2,067,749	\$770,982	\$22,837,130	\$2,556,454	\$492,162	\$18,676	\$2,311,172
2016	17%	\$127,185,397	\$2,941,003	\$1,067,286	\$31,235,829	\$3,577,075	\$726,980	\$27,829	\$3,261,562
2017 ¹	19%	\$139,571,836	\$3,142,842	\$1,159,926	\$35,757,911	\$3,564,738	\$865,740	\$32,020	\$2,956,034

¹ Coverage for policies that incept or renew during the month of December is due to Mcare on or before March 1, 2018. Coverage for policies that have been reported and processed as of January 29, 2018 is included in the counts.

² For years 2009, 2010, 2011, 2012, 2013 and 2014 the assessment rate reflects the after settlement percentage.

Pennsylvania Insurance Department

Mcare Fund

Yearly Average Unabated Assessment by Provider Group

Assessment Year	Assessment Rate ¹	Physicians			Podiatrists			Hospitals			Nursing Homes		
		Yearly Average ²	% Change over Prior Year ²	% Change from 2008 to 2017 ²	Yearly Average ²	% Change over Prior Year ²	% Change from 2008 to 2017 ²	Yearly Average ²	% Change over Prior Year ²	% Change from 2008 to 2017 ²	Yearly Average ²	% Change over Prior Year ²	% Change from 2008 to 2017 ²
2008 ³	20%	\$4,405	-9%		\$2,656	-20%		\$204,938	-7%		\$7,337	-2%	
2009	18%	\$4,022	-9%		\$2,478	-7%		\$191,449	-7%		\$6,681	-9%	
2010	15%	\$4,011	0%		\$2,508	1%		\$185,985	-3%		\$6,393	-4%	
2011	13%	\$3,244	-19%		\$2,059	-18%		\$152,701	-18%		\$5,358	-16%	
2012	22%	\$3,614	11%		\$2,553	24%		\$182,058	19%		\$5,865	9%	
2013	25%	\$4,108	14%		\$3,038	19%		\$200,205	10%		\$7,927	35%	
2014	19%	\$3,915	-5%		\$3,179	5%		\$187,352	-6%		\$6,977	-12%	
2015	12%	\$2,047	-48%		\$1,680	-47%		\$103,335	-45%		\$3,705	-47%	
2016	17%	\$2,887	41%		\$2,423	44%		\$141,981	37%		\$5,207	41%	
2017	19%	\$3,301	14%	-25%	\$2,747	13%	3%	\$166,316	17%	-19%	\$5,631	8%	-23%

¹ For years 2009, 2010, 2011, 2012, 2013 and 2014 the assessment rate reflects the after settlement percentage.

² The reporting of coverage adjustments throughout the year may impact yearly average and percent change.

³ Assessment Year in which the Abatement Program was in place; however, the averages are based on unabated assessments.

Pennsylvania Insurance Department

Mcare Fund

Assessments Remitted by Primary Carrier for 2008 - 2017

Carrier Code	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	Amount	Amount	Amount	Amount	Amount	Amount	Amount	Amount	Amount	Amount
001	\$18,923	\$17,490	\$12,880	\$10,341	\$11,721	\$12,712	\$15,384			
003	\$16,184,813	\$14,646,003	\$14,222,774	\$11,611,179	\$12,841,431	\$16,161,019	\$16,359,558	\$8,342,170	\$10,772,265	\$10,763,120
011	\$3,227,203	\$2,465,129	\$2,730,107	\$2,460,337	\$2,371,383	\$3,272,132	\$3,698,585	\$1,586,015	\$2,582,354	\$2,880,206
021	\$92,290	\$82,229	\$81,444	\$69,248	\$82,237	\$87,430				
023	\$65,366	\$51,034	\$57,250	\$58,602	\$101,281	\$113,314	\$95,281	\$38,811	\$29,639	\$28,449
026	\$9,870									
031	\$23,320,832	\$21,572,773	\$21,276,762	\$17,186,612	\$18,763,571	\$19,998,192	\$17,427,943	\$8,485,520	\$11,766,651	\$11,959,086
032	\$2,358,328	\$1,640,523	\$1,289,616	\$865,976	\$852,573	\$887,549	\$681,269	\$331,630	\$379,837	\$412,093
035									\$45,583	
038								\$21,082	\$30,021	\$33,750
052	\$119,473	\$203,452	\$115,870	\$93,642	\$71,237	\$132,046	\$64,126	\$22,820	\$32,438	\$95,634
055							\$89,425	\$41,805	\$55,682	\$62,238
067	\$15,474,041	\$15,815,478	\$15,192,037	\$11,624,705	\$12,658,645	\$13,922,436	\$13,591,548	\$6,925,763	\$9,321,603	\$10,534,544
090	\$139,276	\$124,663	\$70,966	\$69,784	\$66,940	\$81,584	\$80,774	\$40,467	\$56,382	\$64,524
103	\$538,712	\$450,494	\$407,558	\$321,365	\$268,261	\$721,779	\$1,212,657	\$682,136	\$2,191,713	\$314,069
110	\$31,004	\$35,085	\$39,745	\$37,335	\$52,843	\$75,359	\$39,898	\$1,291	\$1,828	\$2,043
112	\$227,379	\$180,419	\$113,931	\$96,636	\$8,661	\$10,064	\$9,573	\$4,995	\$7,076	\$7,908
113			\$2,434	\$8,969	\$10,868	\$15,394	\$17,432	\$7,030	\$14,166	\$12,332
118		\$7,157			\$18,269	\$9,171	\$8,738	\$8,918	\$12,657	
121	\$776,633	\$678,834	\$678,970	\$549,636	\$491,566	\$515,043	\$453,844	\$291,794	\$575,231	\$516,764
124	\$916,065	\$885,896	\$830,255	\$678,519	\$788,170	\$830,074	\$783,419	\$375,219	\$503,243	\$1,618,409
127	\$242,147	\$331,553	\$360,052	\$316,702	\$376,394	\$246,674	\$541,576	\$611,065	\$939,007	\$744,316
129	\$5,986,165	\$5,249,232	\$5,348,398	\$4,152,203	\$4,358,661	\$3,053,635	\$4,457,342	\$2,198,184	\$2,827,169	\$3,200,340
130					\$19,970	\$74,714	\$43,833	\$6,162	\$8	
137	\$136,705	\$118,536	\$118,127	\$79,619	\$95,517	\$114,141	\$277,059	\$145,743	\$206,289	\$48,100
138	\$616,309	\$596,813	\$717,329	\$767,426	\$745,968	\$850,573	\$934,886	\$499,036	\$745,370	\$898,412
139	\$149,005	\$56,086								
144	\$18,699,003	\$16,864,194	\$18,023,412	\$15,900,663	\$18,959,413	\$23,529,925	\$22,371,254	\$11,610,620	\$17,124,801	\$19,270,160
145	\$4,095,438	\$4,092,878	\$4,162,160	\$3,679,225	\$4,749,814	\$5,422,506	\$5,133,278	\$2,770,363	\$2,943,423	\$2,564,202
155	\$15,775,505	\$14,724,440	\$14,962,605	\$12,384,028	\$13,822,694	\$15,921,480	\$15,407,100	\$8,142,409	\$11,675,019	\$14,845,506
156	\$8,189,173	\$10,275,742	\$9,119,695	\$7,134,927	\$7,930,512	\$8,659,201	\$7,590,581	\$5,166,850	\$5,539,002	\$6,348,333
162	\$53,423	\$36,978	\$17,535	\$17,843	\$69,802	\$120,908	\$118,044	\$80,361	\$177,998	\$246,597
165		\$184	\$22,195	\$198,391	\$259,445	\$272,372	\$76,617	\$69,798	\$81,708	\$79,729
169			\$4,180							
173						\$1,242			\$405,707	\$16,311
179	\$79,223	\$37,368	\$36,539	\$30,926	\$35,611	\$35,955	\$36,917	\$19,318	\$24,830	\$51,423
182	\$4,368									
186	\$147,828	\$113,095	\$105,611	\$60,230	\$34,101	\$22,421				
191	\$54,711	\$20,188								
194	\$113,328	\$21,707	\$106,244	\$94,753	\$48,581	\$11,573	\$10,750	\$6,430	\$6,126	\$8,058
196	\$1,152,322	\$1,260,810	\$1,186,669	\$1,061,362	\$979,269	\$1,038,089	\$898,586	\$425,638	\$539,998	\$645,493
197	\$5,680,051	\$4,926,472	\$4,957,888	\$4,277,301	\$5,610,095	\$6,872,008	\$5,961,363	\$2,983,614	\$4,002,875	\$4,411,282
198	\$6,734	\$6,218	\$76,675	\$74,078	\$103,003	\$118,884				
199	\$4,774,694	\$4,587,769	\$4,849,906	\$4,066,367	\$4,610,605	\$5,392,354	\$5,329,961	\$2,901,439	\$4,271,173	\$5,026,162
200	\$241									
202	\$8,573,179	\$7,791,910	\$8,064,521	\$6,638,291	\$6,456,603	\$7,752,483				
203	\$1,304,080	\$1,294,032	\$1,369,529	\$1,317,844	\$1,324,129	\$1,747,218	\$1,794,879	\$932,468	\$1,419,086	\$1,940,948
206	\$41,631	\$54,164	\$24,312	\$28,762	\$23,432					\$132,202
207	\$20,761,244	\$19,085,429	\$14,794,610	\$12,769,476	\$14,147,817	\$15,991,773	\$15,264,229	\$6,652,058	\$9,656,067	\$10,939,946
208	\$2,051,039	\$1,869,269	\$1,970,116	\$1,669,532	\$1,862,098	\$2,125,547	\$2,033,677	\$1,045,518	\$1,386,314	\$282,884
210	\$567,407	\$788,053	\$879,944	\$895,795	\$1,524,161	\$901,695	\$892,473	\$444,525	\$128,071	\$733

Pennsylvania Insurance Department

Mcare Fund

Assessments Remitted by Primary Carrier for 2008 - 2017

Carrier Code	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	Amount	Amount	Amount	Amount	Amount	Amount	Amount	Amount	Amount	Amount
211	\$9,612,577	\$8,350,530	\$8,935,740	\$6,967,934	\$7,627,800	\$8,661,482	\$7,357,394	\$1,548,641		
212	\$197,423	\$185,955	\$199,165	\$234,820	\$269,253	\$392,633	\$649,432	\$427,673	\$769,857	
216	\$7,052	\$7,039	\$7,392	\$5,448	\$5,644	\$6,893				
217	\$459,023	\$384,630	\$357,590	\$288,634	\$332,970	\$378,859	\$289,646	\$145,666	\$246,912	\$358,438
218	\$232,387	\$258,318	\$285,174	\$259,598	\$297,256	\$385,246	\$369,694	\$208,964	\$318,772	\$412,875
219	\$5,219,972	\$4,347,059	\$3,992,115	\$3,348,451	\$3,505,084	\$4,236,274	\$3,809,573	\$2,013,611	\$2,740,014	\$3,067,013
220	\$2,103,498	\$2,087,079	\$2,061,850	\$1,779,618	\$2,194,540	\$1,873,290	\$1,368,698	\$449,627	\$626,340	\$573,005
221	\$4,865,330	\$4,409,132	\$4,457,088	\$3,369,688	\$3,473,170	\$4,345,005	\$4,468,244	\$2,416,512	\$2,211,071	\$1,242,066
222	\$3,497,115	\$3,299,424	\$3,455,919	\$3,071,859	\$3,603,862	\$4,552,750	\$4,716,981	\$2,597,269	\$4,020,285	\$5,089,809
223	\$3,849,643	\$3,500,761	\$3,420,200	\$680,542	\$5,717,928	\$3,790,788	\$3,743,490	\$2,109,907	\$3,167,667	\$3,718,495
224	\$1,815,565	\$1,714,821	\$1,771,228	\$1,537,149	\$1,890,197	\$2,297,211	\$2,549,984	\$1,502,253	\$2,329,516	\$2,861,906
225	\$48,020	\$47,223	\$55,395	\$58,234	\$70,114	\$80,901	\$77,034	\$40,020		
226	\$90,967	\$82,373	\$81,390	\$64,177	\$75,865	\$77,175	\$75,123	\$39,308	\$1,151	
227	\$3,675	\$3,338	\$3,360	\$2,755	\$3,225					
228	\$1,703,895	\$1,605,407	\$1,633,760	\$1,297,886	\$1,470,236	\$1,052,576				
229	\$2,422,927	\$2,324								
230	\$22,103	\$20,715	\$20,859	\$7,414						
232	\$32,884	\$60,383	\$101,537	\$124,590	\$122,274	\$136,670	\$174,369	\$154,431	\$193,872	\$160,773
233	\$4,592	\$617	\$119	\$1,339	\$1,504					
234	\$211,825	\$225,656	\$211,684	\$171,751	\$196,256	\$217,077	\$226,606	\$128,959	\$171,953	\$176,524
235	\$81,046	\$73,644	\$73,290	\$60,010	\$69,698	\$81,258	\$76,906	\$39,742	\$57,102	\$65,495
236	\$49,931	\$77,890	\$53,065	\$14,613	\$17,106	\$36,456	\$58,055	\$28,097	\$17,643	\$14,067
237	\$25,463	\$37,613	\$18,081	\$37,038	\$20,319	\$21,057	\$18,694	\$10,590	\$17,505	\$18,962
239	\$2,862,069	\$2,544,367	\$2,501,619	\$2,327,394	\$2,308,816	\$2,282,374	\$2,321,286	\$1,429,963	\$2,085,856	\$2,444,610
241	\$1,011,930	\$927,277	\$936,689	\$780,430	\$841,842	\$973,242	\$974,336	\$485,175	\$768,680	\$882,424
242	\$41,115	\$37,341	\$37,599	\$30,820	\$36,079	\$41,922	\$39,879	\$20,806	\$29,476	\$32,944
243	\$30,088	\$26,843	\$23,892	\$19,320	\$22,679	\$26,343	\$26,156	\$13,873	\$21,605	\$21,723
244	\$104,665	\$93,843	\$92,656	\$73,106	\$43,307	\$56,157	\$67,363	\$34,033	\$5,652	\$6,318
245	\$5,229,282	\$5,082,741	\$5,428,849	\$4,995,186	\$6,501,002	\$7,878,484	\$7,923,310	\$4,526,608	\$7,065,254	\$8,294,640
246	\$2,872,355	\$2,398,499	\$2,154,129	\$1,663,726	\$1,726,585	\$1,960,684	\$610,356			
247	\$98,780	\$25,672	\$33,807	\$30,579	\$41,704	\$108,481	\$56,497	\$36,331	\$67,606	\$78,186
248	\$375,191	\$302,166	\$314,244	\$289,671	\$370,397	\$443,530	\$405,018	\$209,820	\$82,171	
249	\$11,495	\$11,427	\$21,289	\$15,689	\$14,768	\$22,767	\$6,897	\$4,692		
250	\$612,257	\$549,842	\$482,819	\$51,022						
251	\$178,568	\$73,792	\$53,983	\$44,006						
252	\$84,861	\$78,382	\$67,892	\$53,245	\$54,800	\$58,348	\$20,063	\$10,632	\$14,341	\$18,017
253	\$4,117,837	\$3,963,999	\$4,120,407	\$3,483,392	\$4,130,535	\$4,783,081	\$4,571,137	\$2,265,845	\$3,255,496	\$3,648,885
257	\$35,638	\$69,671	\$48,673	\$38,693	\$17,602					
258	\$2,594,752	\$2,105,917	\$1,916,725	\$1,591,372	\$1,686,363	\$1,780,722	\$1,510,059	\$768,586	\$934,809	\$909,182
261	\$1,225,646	\$1,326,180	\$1,196,930	\$1,282,512	\$1,179,670	\$981,214	\$858,640	\$458,924	\$701,770	\$672,428
262	\$21,229	\$26,752	\$33,772	\$36,892	\$62,788	\$68,836	\$59,488	\$25,076	\$28,240	\$38,460
263		\$3,080								
264	\$1,161	\$1,075	\$920	\$949	\$1,066	\$1,308	\$1,207	\$630		\$997
265	\$104,788	\$28,958	\$13,756	\$66,711	\$140,669	\$146,164	\$138,607	\$70,576	\$122,115	\$128,090
266	\$23,553	\$21,106	\$21,252	\$31,786	\$33,962	\$46,564	\$44,295	\$1,675	\$2,374	\$28,808
267	\$1,038	\$536	\$573	\$470	\$633	\$807	\$741	\$387		
268	\$6,439	\$5,204	\$1,752	\$1,674	\$2,043					
271	\$957,861	\$1,670,604	\$2,508,591	\$2,157,805	\$2,508,055	\$2,533,213	\$4,123,421	\$2,556,109	\$3,319,575	\$4,216,616
272	\$8,822									
274	\$174,291	\$164,117	\$181,037	\$145,726	\$175,616	\$193,020	\$167,227	\$84,043	\$112,858	\$122,030
275	\$539,368	\$471,145	\$551,696	\$401,488	\$544,901	\$18,100	\$21,501	\$33,860	\$25,686	\$26,007

Pennsylvania Insurance Department

Mcare Fund

Assessments Remitted by Primary Carrier for 2008 - 2017

Carrier Code	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	Amount	Amount	Amount	Amount	Amount	Amount	Amount	Amount	Amount	Amount
276	\$598,144	\$538,114	\$538,184	\$437,079	\$512,402	\$597,451	\$563,886	\$290,947	\$368,373	\$287,662
277			\$31,687	\$59,623	\$77,756	\$89,387	\$139,269	\$90,233	\$36,433	\$33,147
278	\$566									
279	\$228,393	\$216,826	\$540,063	\$470,105	\$593,152	\$563,997	\$136,277			
280										\$2,797
281	\$943	\$949								
282	\$67,019	\$70,584	\$41,605	\$24,332						
285	\$98,668	\$273,106	\$420,044	\$281,021						
286	\$38,594	\$50,081	\$78,039	\$119,105	\$157,730	\$120,817	\$124,559	\$80,916	\$105,914	\$138,281
287	\$28,721									
289			\$13,782	\$11,298	\$59,699	\$74,364	\$55,565	\$31,938	\$67,569	\$36,266
290	\$3,929	\$113,197	\$64,152	\$59,224	\$64,324	\$76,356	\$74,558	\$39,054	\$55,670	\$59,283
291					\$19,927	\$5,520				
292		\$37,934	\$11,491	\$13,718	\$71,920	\$7,992	\$19,965	\$4,999	\$5,179	
293		\$50,314	\$53,367	\$46,060	\$47,614	\$21,814	\$17,178	\$7,583	\$843	\$942
294		\$2,944	\$7,299	\$5,982	\$4,734	\$1,813	\$3,472	\$4,032	\$4,814	\$5,380
296	\$4,270	\$2,682	\$2,814	\$7,908	\$2,797	\$3,324	\$3,449	\$1,799	\$2,549	\$2,849
297		\$33,500	\$18,398	\$8,824	\$11,047					
298		\$5,495	\$24,403	\$25,482	\$26,560	\$32,910	\$32,527	\$18,997	\$26,913	\$30,080
303			\$19,540	\$29,308	\$30,070	\$40,121	\$48,304	\$27,066	\$33,720	\$40,418
305		\$2,678	\$45,945	\$38,857	\$36,547	\$39,130				
307			\$1,272	\$1,147	\$2,633	\$3,155	\$7,208	\$4,005	\$5,429	\$5,256
308			\$360,392	\$568,835	\$791,283	\$1,082,553	\$525,390	\$581,624	\$94,102	\$61,020
309							\$4,675	\$2,439	\$111,890	\$138,418
310		\$6,264	\$4,765,557	\$3,871,097	\$5,288,515	\$5,789,251	\$5,489,944	\$3,114,571	\$4,607,101	\$5,208,349
312					\$34,459	\$20,797	\$25,161	\$32,280	\$25,084	
313		\$572	\$882	\$723	\$904	\$1,242	\$1,140	\$595	\$208	
314			\$25,112	\$43,592	\$107,938	\$121,336	\$218,223	\$112,271	\$129,078	\$19,279
315			\$53,824	\$44,083	\$41,374	\$52,256	\$43,491	\$8,309	\$21,250	\$22,837
316				\$12,325	\$29,157					
318				\$7,288	\$4,435		\$85			
320				\$137,894	\$472,986	\$298,395	\$1,236			
321					\$5,926	\$36,484	\$29,869	\$19,247	\$20,428	\$4,161
322				\$5,224	\$30,874	\$45,692	\$22,319	\$8,879	\$80,208	\$74,993
323					\$62,024	\$64,842				
324	\$2,041	\$408			\$25,623	\$32,452	\$29,512	\$99,264	\$1,116,086	\$1,557,205
325					\$20	\$31,562	\$47,118	\$36,088	\$52,979	\$19,349
326					\$9,404	\$54,729	\$71,617	\$50,683	\$71,882	\$17,115
327						\$179,962	\$47,961	\$22,241	\$33,635	\$35,094
328					\$330	\$597,683	\$504,286	\$270,612	\$398,017	\$430,641
329					\$97,845	\$128,862	\$164,086	\$172,805	\$93,961	\$329,953
330					\$502	\$463,142	\$485,066	\$80,266	\$127,556	\$36,428
331						\$548,451	\$78,726	\$52,784	\$49,922	\$42,040
332				\$20	\$735		\$4,942	\$3	\$4,183	\$7,365
333						\$213,686	\$597,202	\$267,156	\$49,478	\$137,777
334						\$229,235	\$601,547	\$300,039	\$274,790	\$288,112
335								\$2,245	\$10,222	\$11,424
336						\$3,747	\$3,564	\$1,860		
337										\$1,227
338				\$4,676	\$31,297	\$1,692,242	\$6,844,269	\$4,293,573	\$6,254,238	\$6,953,228
339						\$24,230	\$16,187			

Pennsylvania Insurance Department

Mcare Fund

Assessments Remitted by Primary Carrier for 2008 - 2017

Carrier Code	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	Amount	Amount	Amount	Amount	Amount	Amount	Amount	Amount	Amount	Amount
340						\$161	\$60,581	\$28,454	\$51,229	
341							\$1,404,521	\$783,310	\$1,174,183	\$1,378,759
342							\$2,391	\$5,095	\$7,217	\$8,067
343							\$14,795	\$9,012	\$12,767	\$4,668
344							\$2,944			\$188,697
345						\$3,101	\$2,074		\$12,417	\$23,469
346								\$26,462	\$56,403	\$2,293
347								\$15,377	\$122,611	\$274,576
348								\$3,233	\$8,317	\$83,937
349							\$836	\$56,306	\$29,632	\$22,662
350								\$18,350	\$365,133	\$489,198
351								\$2,490,143	\$5,352,341	\$4,547,777
353									\$30,991	
354									\$220,198	\$352,350
355									\$1,977,297	\$2,459,527
359										\$241,317
360									\$19,663	\$64,572
361										\$120,589
362									\$3,766	
363										\$6,699
365										\$1,251,218
900	\$3,242	\$6,278	\$2,428	\$1,486	\$1,032					
Totals	\$223,711,683	\$207,264,172	\$209,462,683	\$172,692,158	\$199,773,110	\$227,545,875	\$216,353,241	\$114,385,124	\$161,795,503	\$177,894,850

¹ The "Amount" is based on the gross rated undiscounted assessment remitted and processed as of January 29, 2018.

Pennsylvania Insurance Department

Mcare Fund

Assessments Remitted by Self-Insurer for 2008 - 2017

Carrier Code	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	Amount	Amount	Amount	Amount	Amount	Amount	Amount	Amount	Amount	Amount
S10	\$4,515,980	\$4,401,573	\$4,581,217	\$3,845,277	\$3,925,897	\$5,086,715	\$4,881,939	\$2,596,208		
S12	\$1,533,370	\$1,442,094	\$1,497,885	\$1,447,174	\$1,701,974	\$2,119,427	\$2,127,528	\$1,095,316	\$1,718,428	\$1,964,829
S40	\$405,479	\$398,985	\$422,801	\$320,702	\$408,489	\$536,411	\$548,490	\$290,537	\$444,667	\$519,604
S41	\$98,300	\$84,109	\$75,339	\$61,967	\$68,635	\$75,056	\$77,831	\$40,570	\$58,952	\$79,101
S43	\$276,166	\$265,791								
S46	\$12,820	\$11,331								
S47	\$135,249									
S49	\$778,995	\$661,673	\$639,358	\$515,432						
S51	\$687,254	\$661,708	\$540,122	\$291,594						
S53	\$201,167	\$190,741	\$182,191	\$76,434						
S54	\$340,441	\$343,321	\$372,268	\$342,107	\$393,845	\$483,422	\$455,435	\$260,698	\$410,417	\$480,415
S57	\$55,414	\$49,877	\$52,078	\$39,633	\$21,273					
S58	\$12,503	\$13,637	\$16,372	\$10,656	\$12,482	\$15,481	\$15,492	\$8,881	\$9,245	\$10,262
S59	\$24,514	\$22,223	\$11,932							
S60	\$412,089	\$419,605	\$399,292	\$387,342	\$480,035	\$545,819	\$538,398	\$307,303	\$185,366	
S61	\$12,516	\$11,367	\$11,445	\$9,306	\$10,805	\$12,555	\$11,943	\$6,231	\$8,900	\$9,947
S62	\$806,096									
S63	\$285,887	\$250,675	\$244,193	\$154,020	\$178,381	\$216,347	\$216,499	\$67,749		
S64	\$16,912	\$15,095	\$15,199	\$12,459	\$14,663	\$16,946	\$16,121			
S66		\$467,498								
S67			\$3,004	\$14,561	\$9,742	\$11,114	\$10,671	\$8,634	\$24,771	\$28,574
S68							\$1,586,950	\$843,002	\$1,128,295	\$1,129,713
S69									\$4,167,007	\$4,935,245
Totals	\$10,611,152	\$9,711,303	\$9,064,696	\$7,528,664	\$7,226,221	\$9,119,293	\$10,487,297	\$5,525,129	\$8,156,048	\$9,157,690

¹ The "Amount" is based on the gross rated undiscounted assessment remitted and processed as of January 29, 2018.

Pennsylvania Insurance Department

Mcare Fund

Count of Unique Health Care Providers by Provider Type and Assessment Year

Assessment Year	Physicians (MD/DO)	Podiatrists	Nurse Midwives	Hospitals	Nursing Homes	Primary Health Centers	Birth Centers	Medical Corporations	Total Annual Count of Unique Providers
2008	38,890	1,126	267	224	713	5	4	2,455	43,684
2009	39,585	1,138	256	222	714	5	4	2,378	44,302
2010	40,341	1,162	271	223	702	5	4	2,314	45,022
2011	41,127	1,174	286	223	701	5	5	2,243	43,521
2012	42,209	1,201	309	222	699	5	5	2,151	44,650
2013	42,867	1,221	315	220	698	5	5	2,075	45,331
2014	43,325	1,239	315	223	691	5	5	1,973	45,803
2015	43,727	1,231	321	221	690	5	6	1,905	46,201
2016	44,048	1,214	334	220	687	5	6	1,841	48,355
*2017	42,276	1,144	327	215	633	4	6	1,724	46,329

*Coverage for policies that incept or renew during the month of December is due to Mcare on or before March 1, 2018. Coverage for policies that have been reported and processed as of January 29, 2018 is included in the counts.

Appendix D



Pennsylvania Medical Care Availability and Reduction of Error Fund

Unfunded Liability as of December 31, 2016, with a rollforward to June 30, 2017

Deloitte Consulting LLP
July 17, 2017

This report is confidential and only for the benefit of and use by Pennsylvania Insurance Department and is not for the benefit of any other party. No further distribution of this document is permitted without the express written consent of Deloitte Consulting LLP.



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July 17, 2017

Mr. Theodore G. Otto, III
Executive Director – Mcare Fund
Pennsylvania Insurance Department – Bureau of Mcare
1010 North 7th Street, Suite 201
Harrisburg, PA 17102

Dear Mr. Otto:

Deloitte Consulting LLP is pleased to submit our actuarial report regarding our analysis of Pennsylvania Insurance Department (“Department”) the unfunded liability associated with the Medical Care Availability and Reduction of Error Fund as of December 31, 2016, including a roll-forward estimate as of June 30, 2017.

We are members of the Casualty Actuarial Society and the American Academy of Actuaries and meet the qualification standards to issue this actuarial report.

We have enjoyed working with Pennsylvania Insurance Department on this analysis. If you have any questions after reviewing this report, please do not hesitate to contact us.

Sincerely,

Kevin Bingham, ACAS, MAAA
Principal
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Greg Chrin, FCAS, MAAA
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I. OVERVIEW

Deloitte Consulting LLP (“Deloitte Consulting”, “us”, “we” or “our”) was retained by the Pennsylvania Insurance Department to provide an independent actuarial analysis regarding the Department’s unfunded liability of the Medical Care Availability and Reduction of Error Fund (“Mcare” or “the Fund”) as of December 31, 2016. This report has been created to support and document the analysis.

This report discusses our approach and presents the results of our December 31, 2016 review, with a roll forward to June 30, 2017. Our reserve estimates are presented on an undiscounted basis. All information presented in this report is as of December 31, 2016 and displayed in thousands of US dollars unless otherwise stated.

BACKGROUND

Fund Background

The Medical Professional Liability Catastrophe Loss Fund (“CAT Fund”) was created on January 13, 1976 to ensure reasonable compensation for persons injured due to medical negligence. As a successor to CAT Fund, the Medical Care Availability and Reduction of Error Fund was created by Act 13 of 2002, and signed into law on March 20, 2002.

The Fund provides excess coverage (to varying historical limits) for health care providers who have exhausted their primary limits (“Excess Claims”), and previously provided first dollar coverage, including defense, for claims that are reported within the statute of limitations, but four or more years after the occurrence event (“Section 715 Claims”).

Section 715 of Act 13 of 2002 included a provision that eliminated the Fund’s first-dollar coverage of late reported claims. More specifically, all medical professional liability insurance policies issued on or after January 1, 2006 provide coverage (within the primary policy limit) for claims which occurred after December 31, 2005 and reported four or more years after the breach of contract or the tort occurred. The Fund no longer provides first-dollar coverage for these late reported claims but does provide coverage in excess of the primary policy limit (as is the case for Excess Claims). Prior to Act 13, these late reported claims were known as Section 605 claims.

The mandatory medical professional liability primary coverage limits are scheduled to increase (with corresponding decreases in the Fund coverage limits), subject to the Commissioner’s assessment of the basic insurance coverage capacity. Per our discussions with the Department, the estimates contained in this report assume that the basic coverage limits will increase to \$750,000 in 2020 through 2022 and then to \$1 million in 2023, and that the Fund provides no new coverage beginning with policies issued or renewed in 2023.

The details of the Fund’s program structure are summarized in the chart below:

Policy Year	Hospital: Mandatory Primary Occurrence / Aggregate Limits	Physician: Mandatory Primary Occurrence / Aggregate Limits	Mcare Fund Excess Occurrence / Aggregate Limits	Section 605/715 Limits
1996 & Prior	200 / 1,000	200 / 600	1,000 / 3,000	1,000
1997 – 1998	300 / 1,500	300 / 900	900 / 2,700	1,000
1999 – 2000	400 / 2,000	400 / 1,200	800 / 2,400	1,000
2001 – 2002	500 / 2,500	500 / 1,500	700 / 2,100	1,000
2003 – 2005	500 / 2,500	500 / 1,500	500 / 1,500	1,000
2006 – 2019	500 / 2,500	500 / 1,500	500 / 1,500	500 (excess)
2020 – 2022	750 / 2,750	750 / 1,750	250 / 1,250	250 (excess)
2023 & Ahead	1,000 / 3,000	1,000 / 2,000	0 / 1,000	0 (excess)

The Fund is supported by an assessment collected from each participating health care provider. The annual assessment percentage for calendar year 2017 is 19%.¹ Act 13 requires an assessment that will, in the aggregate, produce an amount sufficient to accomplish the following:

- 1) Reimburse the Fund for payments of reported claims which became final during the preceding claims period²;
- 2) Pay expenses of the Fund incurred during the preceding claims period;
- 3) Pay principal and interest on moneys transferred into the Fund; and
- 4) Provide a reserve that should be 10% of the sum of (1), (2) and (3).

Beginning with the 2015 assessment and for each annual assessment thereafter, the Fund computes the assessment by subtracting any projected starting balance from the sum of items (i) through (iv) above.³ The assessment is collected via the application of an assessment rate to the policy year prevailing primary premium, which is based on the Joint Underwriting Association (JUA) occurrence rates applicable to the health care provider. Given that the assessments are primarily designed to reimburse the Fund for claims and expenses paid during the preceding claims period, the Fund effectively operates on a pay-as-you-go basis. The Fund does not maintain a reserve dedicated to

¹ <http://www.insurance.pa.gov/Pages/2017-Coverage-Rating.aspx>

² The Funds fiscal year for claim payments ends on August 31st, with actual payments on the claims settled within the fiscal year being made on or about December 31st

³ Per the “settlement agreement” effective October 3, 2014 between the Commonwealth of Pennsylvania and the “Petitioners” – the Hospital & Healthsystem Association of Pennsylvania (“HAP”), the Pennsylvania Medical Society (“PAMED”), and the Pennsylvania Podiatric Medical Association (“PPMA”).

support the liability for claims that have been incurred but not yet paid; however, the fund does require regular actuarial evaluations of its projected unfunded liability.

REPORT SECTIONS

This report is comprised of the following sections:

- **Overview** – general introduction and overview of the engagement;
- **Scope** – describes the work and reports that Deloitte Consulting has been requested to perform and produce;
- **Summary of Results** – results of our estimates of the unpaid claim liabilities;
- **Conditions and Limitations** – details the limitations that apply to this engagement’s work product, report and results;
- **Actuarial Methodology** – describes the approach underlying the results of our estimates of unpaid claim liabilities;
- **ASOP 43 Disclosures** – discusses certain disclosures required by Actuarial Standard of Practice #43 pertaining to the estimation of unpaid claims liabilities;
- **Exhibits** – describes the contents of the exhibits included in this report.

II. SCOPE

Deloitte Consulting serves as an independent consultant to Pennsylvania Insurance Department under an agreement between Pennsylvania Insurance Department and Deloitte Consulting. Our role under such engagement is to provide an actuarial analysis of the Mcare’s unfunded liability. The term “reserves” is sometimes referred to as “unpaid claims”, “liability” and “unpaid loss”. In this report, these terms are used interchangeably.

Kevin Bingham is a Member of the American Academy of Actuaries (MAAA) and an Associate of the Casualty Actuarial Society (ACAS). Gregory Chrin is a Member of the American Academy of Actuaries (MAAA) and a Fellow of the Casualty Actuarial Society (FCAS). Mr. Bingham and Mr. Chrin prepared and supervised the various analyses contained in this report that supports the findings expressed in our opinions, conclusions and observations. Mr. Bingham, ACAS, MAAA and Mr. Chrin, FCAS, MAAA, have met the qualification standards as promulgated by the American Academy of Actuaries and are appropriately qualified to perform this analysis; Mr. Bingham and Mr. Chrin have also attested compliance with the Casualty Actuarial Society’s Continuing Education Policy. These organizations have professional standards that, among other provisions, require an actuary perform only assignments for which he/she is qualified. Mr. Chrin is the current chairperson of the American Academy of Actuaries

medical professional liability committee. Mr. Bingham is a past chairperson of the American Academy of Actuaries medical professional liability committee.^{4,5}

During the course of our analysis, Deloitte Consulting considered the following:

- Historical paid loss development patterns by coverage and any recent changes in these patterns;
- Historical closed with payment claim count development patterns and any recent changes in these patterns; and
- Industry information where needed to supplement the Fund's own data.

The estimates contained in this report provide for losses and do not include any provisions for:

- Breast Implant and Pedicle Screw Claims
- Defense Costs
- Administrative expenses
- Brokerage or reinsurance costs including commissions
- Risk management fees
- Loss control fees
- Legal Fees (other than claim defense costs)
- Actuarial fees
- Assessments

Our reasonable loss reserve estimates provided in this report are intended to represent an "actuarial central estimate". "Actuarial central estimate" is defined by actuarial literature as "an estimate that represents an expected value over the range of reasonably possible outcomes."

Any use of the word "review" within this report should be interpreted in the common use of that term, and not in the definition of "review" promulgated by the American Institute of Certified Public Accountants ("AICPA").

⁴ <https://actuary.org/category/site-section/public-policy/casualty/medical-professional-liability>

⁵ <https://actuary.org/committees/dynamic/AAAMEDMAL>

III. SUMMARY OF RESULTS

CONCLUSIONS

A summary of our estimated unfunded liability, excluding breast implant and pedicle screw exposure, as of December 31, 2016, is displayed in the table below. We have included a 1% load to account for the unfunded liability associated with delay damages and post judgment interest (“DD & PJI”) costs.

Summary of Unfunded Liability (000's) as of December 31, 2016	
<u>Coverage</u>	<u>Indicated Undiscounted Total Unpaid Loss Estimate</u>
Excess Claims	\$815,353
Section 715 Claims (First Dollar Coverage)	\$39,411
Section 715 Claims (Excess Coverage)	\$110,919
Total excluding DD & PJI	\$965,683
DD & PJI Load	1.0%
Total including DD & PJI	\$975,340

Additionally, we performed a roll-forward of the unfunded liability as of June 30, 2017, using the actual and projected payment activity between January 1, 2017 and June 30, 2017. A summary of our estimated unfunded liability, excluding breast implant and pedicle screw exposure, as of June 30, 2017, is displayed in the table below.

Summary of Unfunded Liability (000's) as of June 30, 2017	
<u>Coverage</u>	<u>Indicated Undiscounted Total Unpaid Loss Estimate</u>
Excess Claims	\$810,102
Section 715 Claims (First Dollar Coverage)	\$35,811
Section 715 Claims (Excess Coverage)	\$118,058
Total excluding DD & PJI	\$963,972
DD & PJI Load	1.0%
Total including DD & PJI	\$973,612

A more detailed display of our unfunded liability estimates is presented on the Summary of the supporting exhibits.

The unpaid unfunded liability estimates provided above make provisions for:

- Case outstanding; claim adjusters' estimates of outstanding unpaid loss for known, reported claims.
- Incurred but not reported claims ("IBNR"); claims not yet reported and not recorded in the loss system, which are expected to arise from accidents that have already occurred
- "Pipeline" claims; claims known but not yet recorded in the loss system.
- Case development; future development on known, recorded claims.
- Reopened claims; future reopened claims which should be coded to the year the claim was originally incurred.

The last four components listed above are commonly referred to collectively as bulk IBNR.

RELEVANT COMMENTS

- **Breast Implant and Pedicle Screw Claims**

The Fund has been able to identify reported claims with exposure to breast implant or pedicle screw liability. These exposures have resulted in significant historical reported claim activity. However, nearly all breast implant and pedicle screw claims are closed with relatively minor historical Fund payment activity (less than \$10 million). Therefore, we have excluded these claims from the data used in our analysis to avoid the potential distortive effects on our projections. The unpaid claim estimates shown herein do not include a provision for these exposures.

- **Delay Damages and Post Judgment Interest**

Prior to Act 135 of 1996, delay damages and post-judgment interest costs were generally included within the limits of coverage provided by the Fund. Pursuant to Act 135, these costs are now shared with other carriers in proportion to the share of loss and outside the Fund limits of coverage. Data for recent calendar years indicate that Fund costs for delay damages and post-judgment interest have ranged from approximately 0.2% to approximately 1.8%. We have selected 1.0% as the estimated ratio of these costs to loss and have increased our estimates of the unfunded liability projections accordingly.

- **Defense and Other Costs**

Our estimates do not include a provision for the costs of providing defense for Section 715 claims. These costs, which have averaged approximately 20% per year of the Section 715 claims paid over recent years, have historically been included in the Fund's operating (rather than claims) budget. Similarly, our estimates do not include a provision for the cost of claims administration nor for the Fund's other operating costs.

We understand that defense is provided by the primary insurers for those claims where the Fund's coverage is provided on an excess basis.

- **Change in Prior Estimates**

We have compared our estimated ultimate losses to the prior actuary's estimates as of December 31, 2015. While our methodologies are similar, we have reflected an additional 12 months of experience and our own internal benchmarks while selecting our assumptions.

Accident Year	Deloitte Consulting	Prior Actuarial	Difference
	Ultimate Losses As of December 31, 2016	Ultimate Losses As of December 31, 2015	
(1)	(2)	(3)	(4)
Prior	1,447,294	1,447,382	(88)
1987	196,228	196,286	(58)
1988	215,625	215,713	(88)
1989	215,576	215,700	(124)
1990	255,649	255,758	(109)
1991	294,380	294,668	(288)
1992	269,516	269,715	(199)
1993	258,592	258,772	(180)
1994	293,783	293,619	164
1995	321,418	321,883	(466)
1996	308,827	309,420	(592)
1997	329,129	325,027	4,102
1998	298,450	300,141	(1,691)
1999	230,679	229,740	940
2000	230,236	231,565	(1,329)
2001	200,144	197,897	2,247
2002	147,235	149,329	(2,094)
2003	164,090	164,779	(690)
2004	144,556	148,296	(3,741)
2005	165,718	162,901	2,817
2006	132,247	135,625	(3,378)
2007	164,685	170,124	(5,439)
2008	158,746	160,107	(1,361)
2009	166,417	158,968	7,449
2010	162,704	160,788	1,916
2011	151,723	172,000	(20,277)
2012	163,565	172,974	(9,409)
2013	187,052	180,903	6,149
2014	177,727	185,367	(7,640)
2015	182,494	186,129	(3,635)
Total	7,634,486	7,671,577	(37,091)

- **Runoff of Liabilities**

Below we have projected the liability balance at December 31 of each of the upcoming years by rolling forward our estimated liability as of December 31, 2016 using the projected newly asserted claims and expected payments by calendar year.

Accident Year	1-Jan Unfunded Liability	Cost of Future Covered Claims	Projected Claim Payments	31-Dec Unfunded Liability
(1)	(2)	(3)	(4)	(5)
2016				975,340
2017	975,340	187,452	178,505	984,287
2018	984,287	171,126	179,368	976,045
2019	976,045	149,657	180,542	945,160
2020	945,160	100,428	180,724	864,864
2021	864,864	70,363	177,560	757,666
2022	757,666	51,724	167,705	641,685
2023	641,685	12,037	151,033	502,688
2024	502,688		128,280	374,408
2025	374,408		104,130	270,277
2026	270,277		81,276	189,001
2027	189,001		58,945	130,056
2028	130,056		40,744	89,313
2029	89,313		28,472	60,840
2030	60,840		19,914	40,926
2031	40,926		13,445	27,481
2032	27,481		8,789	18,692
2033	18,692		5,690	13,002
2034	13,002		3,841	9,161
2035	9,161		2,700	6,461
2036	6,461		1,931	4,530
2037	4,530		1,399	3,131
2038	3,131		1,017	2,114
2039	2,114		736	1,378
2040	1,378		522	856
2041	856		357	499
2042	499		234	265
2043	265		134	131
2044	131		76	55
2045	55		44	11
2046	11		11	1
2047	1		1	0
Total		742,785	1,718,125	

IV. CONDITIONS AND LIMITATIONS

Due to the inherent uncertainty in projecting the ultimate costs of claims, no assurance can be offered that any particular range of estimates of ultimate losses or loss reserves will be adequate. We believe, however, that the actuarial techniques and assumptions used in our analysis are reasonable.

In estimating unpaid unfunded liability, it is necessary to project the future payments of unfunded liability. It is certain that actual future payments of unfunded liability will not develop exactly as projected and may, in fact, vary significantly from the projections. No warranty is expressed or implied that such variance will not occur.

Further, our projections make no provision for the broadening of coverage by legislative action or judicial interpretation or for extraordinary future emergence of new classes of losses or types of losses not sufficiently represented in the Department's historical database or which are not yet quantifiable.

DISTRIBUTION AND USE

This analysis has been prepared solely for the internal use of Pennsylvania Insurance Department and as documentation supporting our estimates related to loss reserves as of December 31, 2016 and June 30, 2017. Limited distribution of this report is permitted to the Department's external auditors to support their audit process, provided that it is made available on a confidential basis and that any further distribution by auditors to third parties is prohibited without Deloitte Consulting's prior written consent. This report may be made available to applicable state insurance regulatory authorities who shall use the report solely in connection with the discharge of their regulatory oversight responsibilities and for no other purpose.

Any other distribution of this report is not permitted without the prior written consent of Deloitte Consulting. The supporting data, analysis and tables contained in our exhibits are provided to clearly document the assumptions which support the results stated herein and are integral parts of this study. It is our intention that this report be used in its entirety, as a whole, and not segmented for other purposes.

Deloitte Consulting shall have no liability, regardless of form, to any person or entity other than the Pennsylvania Insurance Department for any action taken or omitted to be taken by such parties in respect of this report. Third parties should recognize that the furnishing of this report is not a substitute for their own due diligence and may not place any reliance on this report or data contained herein that would result in the creation of any duty or liability by Deloitte Consulting to any third party.

DATA RELIANCE

Deloitte Consulting has relied upon data provided by the Department for this review. A specific audit to verify the accuracy or completeness of the data is beyond the scope of this engagement. While we have reviewed the data in regard to its reasonableness and consistency for our review, we have relied on

such data without audit or verification and our conclusions are based on the assumption that it is accurate and complete. If the underlying information provided is inaccurate or incomplete, the results of our analysis may likewise be inaccurate or incomplete.

V. ACTUARIAL METHODOLOGY

UNFUNDED LIABILITY

Several actuarial methods may be used for estimating ultimate losses. The methods used by each line of business are applied based on the credibility of the historical data, changes in Department operations affecting the historical data (e.g., changes in case reserving or claim reporting), the characteristics of that line of business (e.g., long versus short tail of development), and actuarial judgment. The paragraphs below describe the mechanics of the various methodologies and outline the underlying assumptions for each method.

General assumptions may include, but not be limited to, the following items:

- Loss development factors, including age-to-age, age-to-ultimate, and “tail” development factors
- Loss trends, including severity trend, frequency trend, and loss cost trend
- Loss cost amounts
- Rate changes

LOSS METHODOLOGIES

- **Paid Loss Development Method**

This method projects losses to ultimate based upon historical changes in the valuation of incurred losses at given points in time (e.g., 12 months, 24 months). This method is particularly appropriate when loss development patterns have been historically stable and can be predicted with reasonable accuracy.

- **Expected Loss Ratio Method**

The Expected Loss Ratio Method adjusts the historical loss ratios to a current year on-level basis to reflect changes in the claim cost inflation, frequency, rate change and retention levels. Loss ratios are defined as the estimated losses per unit of premium. An on-level loss ratio is selected and then unadjusted to each appropriate year. The selected unadjusted loss ratios are then multiplied by the premium to calculate ultimate losses.

- **Paid Bornhuetter-Ferguson (B-F) Method**

This method is essentially a combination of two other reserving techniques: the Paid Loss Development Method and the Expected Loss Ratio Method. The B-F Method blends these two methods by splitting expected losses into two distinct pieces: expected paid losses and expected unpaid losses. As an accident year matures, the expected paid losses are replaced with actual paid losses plus expected unpaid losses to produce ultimate losses. Thus, as the accident year matures, the initial expected paid loss estimate becomes less important while the actual paid loss experience becomes more important. To calculate this method, one must estimate initial expected losses and a loss payment pattern. The initial expected losses are calculated by

multiplying selected ultimate severities by ultimate counts. The payment pattern is taken from the Paid Loss Development Method.

- **Frequency-Severity Method**

The Frequency-Severity methodology begins with selecting initial expected loss severities, after consideration of the results from the loss development approaches. The initial loss severities are representative of the ultimate costs per claim. These expected loss severities are then applied to estimated ultimate claim counts to estimate ultimate losses.

We note that the Fund does not establish a provision for case reserves on open claims. Case reserves represent an estimate of the case value based on a claim adjuster's assessment of the relevant case-specific facts and circumstances. Therefore, we have not leveraged actuarial methods that rely upon case reserve estimates (e.g., Incurred Loss Development Method, Incurred-Bornhuetter Ferguson Method, etc.).

SELECTED ULTIMATE LOSSES AND UNPAID LOSS CALCULATION

The estimates of ultimate losses for the direct business by accident year is selected based on the indications of the reserving methodologies described above. More weight is applied to the Bornhuetter-Ferguson methods in more recent periods and the loss development method in older periods. We calculated unpaid loss by subtracting paid losses from these ultimate selections.

OTHER CONSIDERATIONS

ROLL-FORWARD ANALYSIS

We forecasted the undiscounted December 31, 2016 reserve indications to June 30, 2017 using our selected payment patterns produced by our analysis of the supporting data. Incremental payments between January 1, 2017 and June 30, 2017 are added to the cumulative payments made through December 31, 2016 to determine the cumulative payments as of June 30, 2017. The cumulative payments as of June 30, 2017 are then subtracted from the ultimate loss estimate to result in a reasonable estimate of undiscounted reserves as of June 30, 2017.

REINSURANCE COLLECTIBILITY

The Fund has not purchased reinsurance for many years, and reinsurance recoveries over recent calendar years have been insignificant. Future reinsurance recoveries are also expected to be insignificant, and no adjustment for reinsurance recoverables has been made to our estimate of the unfunded liability.

PENNSYLVANIA PROPERTY AND CASUALTY INSURANCE GUARANTY ASSOCIATION (PPCIGA)

For insurers who become insolvent, the PPCIGA provides coverage for primary policy limits, up to \$300,000. The Fund currently provides coverage in excess of \$500,000. This could create a gap between the protection of the PPCIGA and the Fund which is not explicitly covered by the Fund. However, the gap may impact the amount of payments provided by the Fund which adds to the uncertainty of the estimates. We do not expect this uncertainty to materially impact our estimates.

VI. ASOP 43 DISCLOSURES

Actuarial Standard of Practice 43: "*Property/Casualty Unpaid Claim Estimates*" requires certain disclosures to accompany actuarial estimates of unpaid losses. The following disclosures are applicable to our analysis of the Department's unfunded liability as of December 31, 2016 and June 30, 2017.

- **Terminology:** The terms "Unpaid Loss & ALAE Estimates", "Reserve Estimates", and "Unpaid Claim Estimates" are used interchangeably and are meant to convey the same meaning.
- **Purpose or Use of Unpaid Claim Estimates:** The purpose of the unpaid claim estimates is to provide the Department's Management with an independent analysis and estimates of unfunded liability associated with the Department's Mcare programs.
- **Scope of the Unpaid Claim Estimates:** The intended measure of the unpaid claim estimates provided is an actuarial central estimate (an estimate that represents an expected value over the range of reasonably likely outcomes). Our estimates are shown on an undiscounted basis.
- **Constraints on the Unpaid Claim Estimates:** There were certain constraints in the performance of this actuarial analysis. These constraints stem from substantial uncertainties in estimating the loss for unpaid claims. Examples include but are not limited to the rate of inflation inherent in losses during observable development periods, the projected development for losses as they age beyond the observable development periods, changes in full and final settlement practices, and the inherent variability in losses over time.
- **Uncertainty:** We have not attempted to measure the uncertainty in the estimates.
- **Applicable Dates:** These unpaid claim estimates as of December 31, 2016 and June 30, 2017 were based on loss data as of December 31, 2016 and June 30, 2017, and premium data evaluated as of December 31, 2016, and additional information provided to us through May 1, 2017.
- **Documentation:** This report, along with the accompanying exhibits, provides documentation supporting our unpaid claim estimates as of December 31, 2016 and June 30, 2017.



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End of Report