

Massachusetts Division of Insurance Medical Malpractice Insurance Report For the 2016 Calendar Year

Gary D. Anderson Commissioner of Insurance

Acknowledgements

This report was prepared by the State Rating Bureau staff of the Massachusetts Division of Insurance ("Division"). Matthew M. Mancini, State Rating Bureau Director, Gerald B. Condon, State Rating Bureau Researcher, Cara Blank, State Rating Bureau, Property Casualty Actuary, Cara Toomey, Counsel to the Commissioner, and Bashiru Abubakare, State Rating Bureau Actuary/Statistician, prepared the report and provided the analysis.

The Division relies on insurance companies, the National Association of Insurance Commissioners, and other regulatory agencies for the accuracy of all reported financial information.

TABLE OF CONTENTS

Page Title

- ii Acknowledgments
- iii Table of Contents
- iv Included Figures
- 1 Executive Summary
- 2 Massachusetts Health Care Professionals
 - 2 Number of Professionals
 - 3 Liability Coverage Requirements
- 4 Market for Medical Malpractice Coverage
 - 4 History
 - 5 Licensed Insurance Companies
 - 6 Surplus Lines Carriers
 - 7 Risk Retention Groups
 - 9 Shares of the Market
- 10 Financial Results for Insurance Carriers
 - 10 Premiums
 - 11 Costs
 - 12 Loss Ratios
 - 14 Profitability
- 15 Premiums for Medical Malpractice Coverage
 - 16 Average Claim Costs
 - 19 Premiums Compared to Those of Other States
- 21 Recent Medical Malpractice Reforms
- 22 Conclusion
- 23 Appendix A-1: Medical Malpractice Insurance Companies
- 24 Appendix A-2: Medical Malpractice Surplus Lines Carriers
- 26 Appendix A-3: Medical Malpractice Risk Retention Groups

INCLUDED FIGURES

Page	Figure	
5	Figure 1	2016 Property and Casualty Premium by Line of Coverage
6	Figure 2	Share of 2015 and 2016 Insurance Company Market
7	Figure 3	Share of 2015 and 2016 Surplus Lines Carrier Market
8	Figure 4	Share of 2015 and 2016 Risk Retention Group Market
9	Figure 5	Shares of 2015 and 2016 Combined Medical Malpractice Market
10	Figure 6	Total Market 2010, 2013 and 2016 (Combined Medical
		Malpractice Market)
11	Figure 7	Total Market Premiums Earned (by Type of Company [2010, 2013
		and 2016])
12	Figure 8	Total Market Losses (by Type of Company [2010, 2013 and
		2016])
13	Figure 9	Total Market Loss Ratios
14	Figure 10	Total MA Market Loss Ratios by Type of Company
15	Figure 11	Operating Ratios – Licensed Companies
16	Figure 12	Coverys (formerly ProMutual) Annual Rate Changes for
		Physicians/Surgeons
17	Figure 13	NPDB – Table 22, 2016 Median Malpractice Payments and Rank
		by Jurisdiction, Physicians
18	Figure 14	NPDB 2012 Annual Report – Table 24, Mean and Median
		Physician Malpractice Payments, 2002 - 2011
20	Figure 15	Coverys (formerly ProMutual) Rates for Claims Made Policies for
		Northeast States

Executive Summary

Health care professionals make daily decisions about treatment where they balance the need to use new procedures with the need to contain costs and avoid errors that may harm patients. When an error may have occurred and malpractice is claimed, medical malpractice insurance covers the cost to defend professionals and pay claims for damages.

Massachusetts requires that doctors have medical malpractice coverage¹ and that insurance companies make medical malpractice coverage available on an equal basis, under the "take all comers" statute to all doctors and certain other licensed healthcare providers willing to pay for it.²

Massachusetts medical malpractice insurance can be obtained through licensed insurers, risk retention groups and surplus lines insurers. Medical malpractice insurers that are licensed in Massachusetts and provide coverage to certain medical practitioners may not refuse to provide coverage for any such medical practitioner. In contrast, surplus lines insurers and risk retention groups may refuse to provide medical malpractice coverage to certain medical providers based on the insurer's underwriting standards.

Trends observed for the medical malpractice market through 2016 include the following:

- Total medical malpractice insurance premiums increased approximately 4.3% to \$314.3 million in 2016 from \$300.7 million in 2015.
- Licensed insurers no longer provide the majority of medical malpractice insurance in Massachusetts when compared to risk retention groups. Their share of the market, compared to that offered by surplus lines carriers and risk retention groups continue to decrease to 41.1% in 2016 from 45.4% in 2015.
- Almost three-fourths of the medical malpractice insurance market continues to be underwritten by two companies – Coverys (formerly known as ProMutual or as the Massachusetts JUA) and the Controlled Risk Insurance Company of Vermont (CRICO). CRICO is a risk retention group created to insure the physicians and employees of Harvard-affiliated medical institutions and writes approximately 40% of the medical malpractice insurance in Massachusetts.
- The financial strength of licensed insurance companies continues to improve in Massachusetts without significant rate activity. Coverys did not change its rates for physicians and surgeons in 2016.

While pressure on rates has eased, Massachusetts continues to have higher medical malpractice claim payments than most states. In 2016, the Massachusetts mean malpractice claim payment was the highest in the country while the median malpractice claim payment for physicians was the third highest nationally as seen in Figure 13.

-

¹ 243 CMR 2.07(16).

² M.G.L. c .175, §193U.

Massachusetts Health Care Professionals

Number of Professionals

For 2016, there were approximately 298,873 individual health care professionals licensed by state agencies to practice in the following categories:³

165,564	Nurses
25,977	Social Workers
36,364	Medical and Osteopathic Doctors
23,699	Allied Health Providers (Therapists, Assistants and Athletic Trainers)
7,304	Dentists
9,837	Allied Mental Health Providers
5,959	Psychologists
7,420	Audiologists, Speech Pathologists and Assistants
3,060	Respiratory Care Specialists
2,136	Chiropractors
2,648	Dietitians/Nutritionists
1,504	Dispensing Opticians
3,466	Physician Assistants
1,524	Optometrists
1,081	Acupuncturists
572	Podiatrists
558	Hearing Instrument Specialists (includes apprentices)
95	Certified Health Officers
105	Perfusionists

In addition to the above-noted individual professionals, approximately 1,809 facilities and programs were licensed to operate as the following types of entities:⁴

Nursing Homes/Rest Homes
Clinics
Home Health Care Agencies
Mammography Facilities
Hospitals (acute care and non-acute)
Ambulance services
Hospices

In order to practice in the Commonwealth of Massachusetts, a health care professional must be licensed or registered by an agency such as the Board of Registration in Medicine,⁵ the

³ Numbers of current licensed health care professionals as reported to the Division of Insurance by the following agencies: Massachusetts Board of Registration in Medicine for active board licensed medical and osteopathic doctors; Department of Professional Licensure and Division of Health Care Quality in the Department of Public Health; and the Department of Mental Health. The reported statistics reflect current licensed health care professionals; the number actively practicing in a profession may be smaller than the number reported.

⁴ Numbers of licensed facilities and programs, not including satellites, as reported to the Division of Insurance by the Department of Professional Licensure and Division of Health Care Quality in the Department of Public Health. While the reported statistics reflect the number licensed, the number actively operating may be lower.

⁵ The Board of Registration in Medicine coordinates the licensing of doctors (MDs and DOs) and acupuncturists.

Division of Professional Licensure, ⁶ Boards of Registration, ⁷ the Department of Mental Health ⁸ or the Department of Public Health. ⁹ A health care professional may also need to satisfy additional training to represent that he or she is specially trained or board-certified in a specialty and may need to meet other requirements in order to practice in a hospital or to be included in a health plan network.

Liability Coverage Requirements

Even when a health care professional's medical decision may be appropriate based upon available information, adverse outcomes may occur with long-term financial consequences. Medical malpractice coverage pays the cost to defend a health care professional's reputation and cover the cost of damages.

In Massachusetts, if an insurance company offers medical malpractice coverage to health care professionals or facilities included in certain statutorily identified categories, the insurance company must provide coverage to any other practitioner or facility in that category. The statutory categories include ¹⁰:

Doctor of Medicine;

Doctor of Osteopathy;

Doctor of Optometry;

Doctor of Dental Science;

Physical Therapists and Physical Therapist Assistants;

Doctor of Podiatry;

Doctor of Chiropractic;

Registered Nurses;

Interns, fellows or medical officers; and

Licensed hospitals, clinics, or nursing homes, and their agents and employees.

Health care professionals outside the statutorily defined categories may apply for coverage with insurance companies, but a company has the right to decline to provide coverage for non-protected categories.

_

⁶ The Division of Health Professions Licensure within the Department of Public Health coordinates the licensure for Dentists; Genetic Counselors; Nursing; Nursing Home Administrators; Perfusionists; Pharmacy; Physician Assistants; and Respiratory Care.

Poards of Registration in the Office of Consumer Affairs and Business Regulation coordinate the registration of Allied Health Care professionals (*i.e.*, Athletic Trainers, Occupational Therapists, Occupational Therapist Assistants, Physical Therapists, Physical Therapists, Physical Therapist Assistants, Physical Therapists, Physical Therapists, Rehabilitation Counselors, Educational Psychologists); Certified Health Counselors, Marriage and Family Therapists, Rehabilitation Counselors, Educational Psychologists); Certified Health Officers; Chiropractors and Chiropractic Facilities; Dietitians and Nutritionists; Dispensing Opticians; Hearing Instrument (Hearing Aid) Specialists; Massage Therapist/Practitioners, Massage Therapy Salons, and Massage Therapy Schools; Optometrists; Psychologists; Licensed Independent Clinical Social Workers, Licensed Certified Social Workers, Licensed Social Workers, and Licensed Social Worker Associates; and Audiologists, Audiologist Assistants, Speech Pathologists and Speech Pathologist Assistants.

⁸ The Department of Mental Health licenses private mental health hospitals and clinics.

⁹ The Department of Public Health licenses hospitals, nursing/rest homes, long-term care facilities, clinics, home health care agencies, hospices, ambulances, nursing service agencies and mammography facilities.

¹⁰ M.G.L. c. 175, §193U. The Commissioner of Insurance also may designate other categories when they are eligible to be ceded to the medical malpractice reinsurance plan. Chapter 444 of the Acts of 2008 added Physical Therapists and Physical Therapist Assistants to M.G.L. c. 175, §193U.

It is a specific requirement of licensure that medical doctors and advanced practice registered nurses with direct patient care responsibilities have medical malpractice coverage sufficient to protect against claims of at least \$100,000 per claim and \$300,000 per year¹¹ and that limited liability company or limited liability partnership where chiropractors are a member, a partner or an employee maintain coverage of at least \$500,000 per claim and \$1 million per year.¹² Hospitals and health plans may impose additional requirements to permit health care professionals to practice in the hospital or to be part of a health plan network.

Market for Medical Malpractice Coverage

History

Medical malpractice insurance has gone through a number of national and regional "crises" over the past 35 years, with years of stability and available coverage followed by years of rate increases and decreased availability. Following the departure of a number of medical malpractice insurers from the Commonwealth in the 1970s, the Massachusetts Legislature created the Medical Malpractice Joint Underwriting Association ("MMJUA") to offer access to coverage for certain medical professionals, and authorized the MMJUA to assess other medical malpractice insurers for certain losses. ¹³

During the 1980s, the medical malpractice insurance industry developed new types of policies to stabilize losses and premiums. Policies written before the 1980s were "occurrence-based" policies (covering all claims filed for an incident that <u>occurred</u> during a coverage year.) Many insurers subsequently switched to "claims-made" policies (covering only claims <u>filed</u> during a coverage year.) Since losses under claims-made policies are more predictable, the new products enabled companies to more accurately determine their liabilities and stabilize their rating practices. ¹⁵

In 1994, Massachusetts passed legislation to transform the MMJUA into the Medical Professional Mutual Insurance Company (now known as "Coverys") with a board composed mainly of practicing or retired healthcare providers. ¹⁶ Since its inception, Coverys has been one of the largest medical malpractice insurance providers in Massachusetts.

¹¹ 244 CMR 4.09; 243 CMR 2.07(16)(b).

¹² According to 233 CMR 4.04 (1), "A limited liability company or limited liability partnership which provides or offers to provide Chiropractic Treatment in Massachusetts shall maintain in good standing professional liability insurance which meets the following minimum standards:

⁽a) The insurance shall cover negligence, wrongful acts, and errors and omissions;

⁽b) The insurance shall insure the limited liability company and its members, as required by M.G.L. c. 156C, § 65, or the limited liability partnership and its partners as required by M.G.L. c. 108A, § 45(8)(a);

⁽c) The insurance shall provide, for each registered chiropractor who is a member, partner or employee of the limited liability company or limited liability partnership, coverage in an amount of at least \$500,000 for each claim with an aggregate top limit of liability for all claims during any one year of at least \$1,000,000."

¹³ Section 6 of Chapter 362 of the Acts of 1975.

^{14 &}quot;Medical Malpractice: Implication of Rising Premiums on Access to Health Care," General Accounting Office, August 2003, p. 10.

¹⁵ In Massachusetts, only one company – the MMJUA's successor - is required to offer both "occurrence-based" and "claims-made" coverage, while other companies have switched to "claims-made" policies.

¹⁶ Chapter 330 of the Acts of 1994 created M.G.L. c. 175, § 193U. This law was further amended – Chapter 372 of the Acts of 1998 - to make clear that the coverage offered to each provider must be available at least at a certain standard level as defined in the rules of operation of the medical malpractice reinsurance plan.

Licensed Insurance Companies

Medical malpractice insurance companies may be licensed by the Division of Insurance with a designation of 6F - liability other than auto for "medical malpractice". These insurers are required to participate in the state's guaranty fund for property and casualty writers, which provides some protection to policyholders in the event of an insurer's insolvency. In 2016, licensed medical malpractice insurance companies wrote \$129.1 million in direct written premium; this is about 1.0% of the premium written for all property and casualty coverage. (Figure 1)

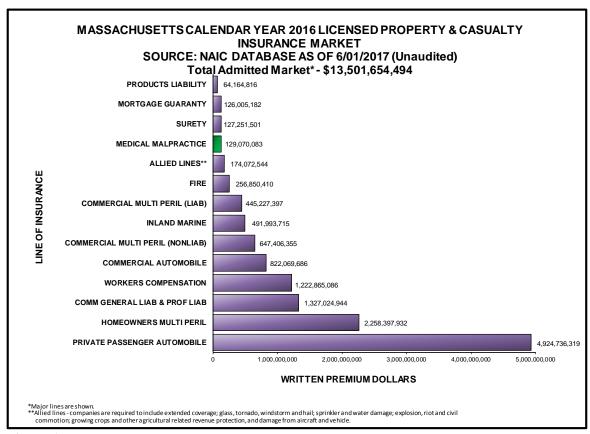


Figure 1

The Division of Insurance maintains a list of medical malpractice insurance companies on its website ¹⁷ identifying the "take all comers" classes of health care professionals written by the company. The list of licensed insurance companies writing medical malpractice coverage in 2016 is in Appendix A-1.

¹⁷ The Division's website indicates the companies that write each of the designated classes of providers https://www.mass.gov/service-details/medical-malpractice-insurance

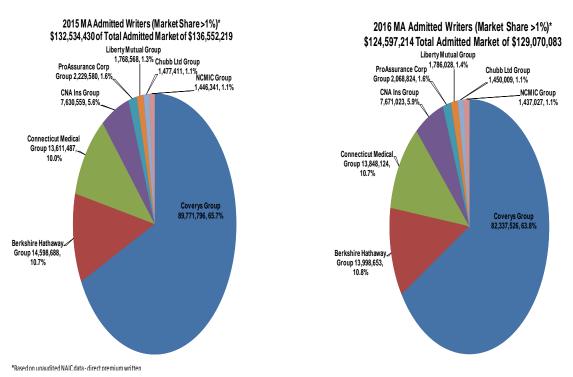


Figure 2

As noted in Figure 2, the Coverys Group, composed of Medical Professional Mutual Insurance Company, ProSelect Insurance Company and Preferred Professional Insurance Company, covered the predominant share of the 2016 medical malpractice insurance policies, collecting approximately 63.8% of total insurance premium. This is a decrease from its 65.7% market share of the market in 2015.

Surplus Lines Carriers

In addition to licensed insurance companies, health care professionals also may turn to surplus lines carriers for medical malpractice coverage. Surplus lines carriers are not licensed as insurers in Massachusetts, but are licensed in another jurisdiction and can issue coverage, through specially licensed brokers, to those who cannot obtain coverage from those insurers licensed to do business in Massachusetts (often referred to as the "admitted market"). Surplus lines carriers are not subject to Massachusetts insurance laws, such as the "take all comers" requirements, and do not participate in the state's guaranty fund. The Division of Insurance maintains a list of surplus lines carriers approved to do business in Massachusetts on its website. ¹⁸ The list of surplus lines carriers writing medical malpractice coverage in 2016 is in Appendix A-2.

Massachusetts Division of Insurance

6

¹⁸ The list is located at http://mass.gov/ocabr/docs/doi/companies/surpluslines.pdf

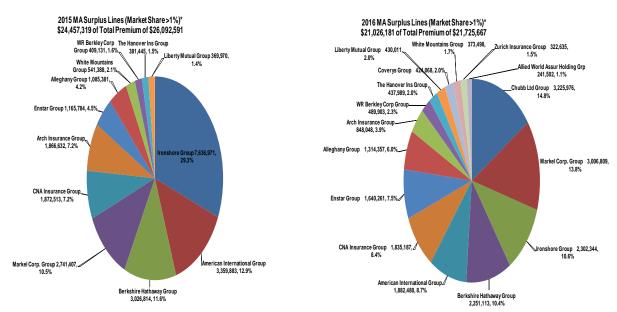


Figure 3

The largest medical malpractice carrier in the surplus lines market in 2016 was Chubb LTD Group, accounting for 14.8% of the 2016 medical malpractice policy premium provided in the surplus lines market. (Figure 3)

Risk Retention Groups

In addition to licensed insurance companies and surplus lines carriers, medical malpractice coverage also may be obtained through risk retention groups ("RRGs"). Under federal law, ¹⁹ an RRG may offer liability coverage in any state, provided the RRG is licensed as an insurance company in at least one state. RRGs are specifically exempted by federal law from participation in state guaranty funds and are not subject to the "take all comers" requirements that apply to licensed insurance companies. ²⁰

Under federal law,

- 1. An RRG can be formed and owned only by members who are engaged in a similar business or activity and with similar liability risk exposure²¹; and
- 2. An RRG cannot exclude eligible members solely to reduce the RRG's risk of loss. ²²

¹⁹ Liability Risk Retention Act of 1986, 15 U.S.C. § 3901.

²⁰ 15 U.S.C. § 3902.

²¹ 15 U.S.C. § 3901.

²² 15 U.S.C. § 3901.

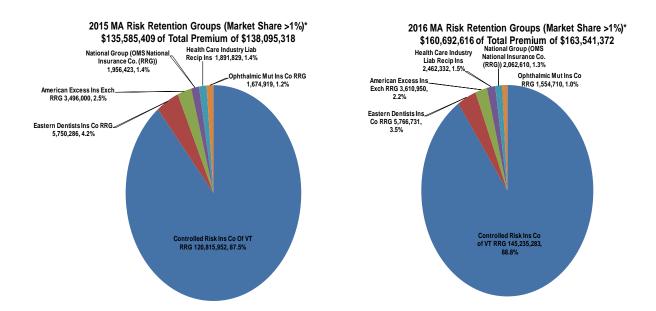


Figure 4

The Controlled Risk Insurance Company of Vermont RRG – also known as CRICO - has the predominant share of the RRG medical malpractice market, collecting approximately 87.5% of premium in 2015 and 88.8% in 2016. CRICO was created in 1979 to provide professional liability coverage to the physicians and employees of Harvard-affiliated medical institutions.²³ According to CRICO's business plan, physician applicants must meet CRICO underwriting criteria and are assigned to one of the many underwriting specialties based on level of risk exposure.

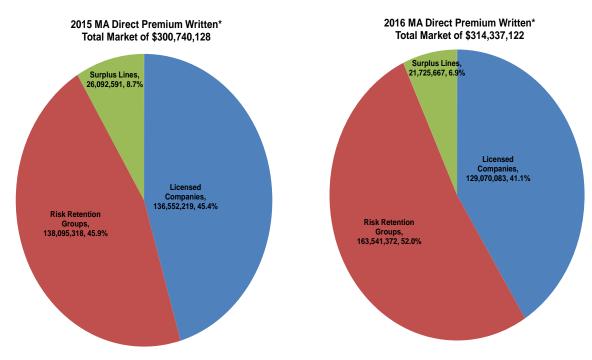
²³ Founding members of the Risk Management Foundation eligible for CRICO coverage include:

Beth Israel Hospital Association	Judge Baker's Children Center, Inc.
Brigham and Women's Hospital	Massachusetts Eye and Ear Infirmary
Cambridge Health Alliance	Massachusetts General Hospital
CareGroup, Inc.	Massachusetts Institute of Technology
Children's Hospital Corporation	McLean Hospital
Dana-Farber Cancer Institute, Inc.	Mount Auburn Hospital
Faulkner Hospital	New England Baptist Hospital
Harvard Pilgrim Health Care, Inc.	New England Deaconess Hospital Corporation
Harvard School of Dentistry	Newton-Wellesley Hospital
Harvard School of Public Health	North Shore Medical Center
Harvard University Medical School	Partners HealthCare System, Inc.
Harvard University Health Services	Presidents/Fellows of Harvard University
Harvard Vanguard Medical Associates, Inc.	Spaulding Rehabilitation Hospital
Joslin Diabetes Center, Inc.	

The five next largest RRGs collectively account for about 9.5% of the market, and some of them write coverage for specialty providers. The list of RRGs that were writing medical malpractice coverage in 2016 are in Appendix A-3.

Shares of the Market

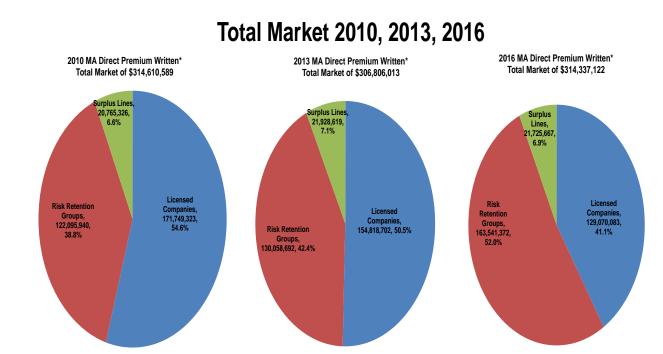
During 2016, insurers, surplus lines carriers and RRGs together wrote \$314.3 million of medical malpractice premium, with 41.1% written by insurance companies, 52.0% written by RRGs and 6.9% written by surplus lines carriers. In 2015, insurers, surplus lines carriers and RRGs together wrote \$300.7 million of medical malpractice premium, with 45.4% written by insurance companies, 45.9% written by RRGs and 8.7% written by surplus lines carriers. (Figure 5)



*Based on unaudited NAIC data - direct premium written

Figure 5

In 2010, 54.6% was written by insurance companies, 38.8% was written by RRGs and 6.6% was written by surplus lines carriers. (Figure 6)



*Based on unaudited NAIC data - direct premium written

Figure 6

Financial Results for Insurance Carriers

Premiums

Financial results for providers of medical malpractice insurance are calculated based on premiums earned during the calendar year. Between calendar years 2013 and 2016, total earned premium for insurance companies, RRGs and surplus lines carriers combined increased 3.6%, compared with a 2.8% decrease in earned premiums between calendar years 2010 and 2013.

Licensed insurance companies had earned premium of \$133.1 million in earned medical malpractice premium in 2016, which is 16.4% less than the \$159.3 million in medical malpractice premium in 2013 and 22.4% less than the \$171.4 million in medical malpractice premium in 2010. RRGs had earned premium of \$163.2 million in 2016, which was 25.8% more than the \$129.7 million in 2013 and 33.4% more than the \$122.4 million premium in 2010. Surplus lines carriers had earned premium of \$23.9 million in 2016 which was 19.7% more than the \$20.0 million premium in 2013 and 0.1% less than the \$23.9 million in 2010. (Figure 7)

The statistics above shows the rate of premium change over the period 2010 to 2016 varied considerably by the type of insurance provider. The change in the average annual

premium²⁴ for licensed insurance companies decreased by 4.1%, as compared to an increase of 4.9% for RRGs, and no percent change (0.0%) for surplus lines insurers.

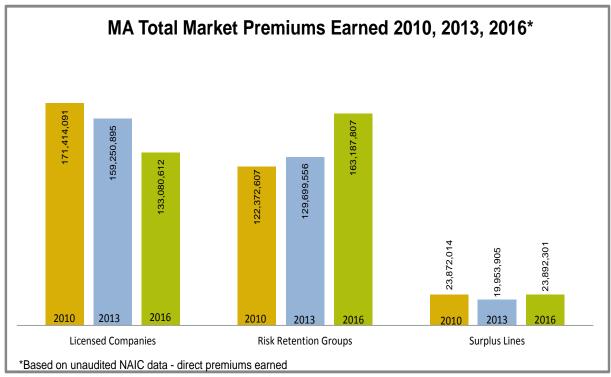


Figure 7

Claim Costs

Medical malpractice insurance premiums are based on projected medical malpractice claims costs, as well as the cost to settle or defend claims, general administrative expenses, agent commissions, and reinsurance expenses. Claims dollars are important drivers of overall costs, but examining insurance losses in financial reports may not present an accurate picture of an insurance provider's financial results. In Massachusetts, medical malpractice claims are resolved an average of six years²⁵ following a malpractice incident. Insurance losses reported in financial reports may be associated with premiums that were collected six years ago, even though they are compared with premiums that were collected in the past year.

Massachusetts Division of Insurance

 $^{^{24}}$ Average annual change is calculated as (2016 earned premium/2010 earned premium) $^{(1/6)}$ -1.0 using the premiums shown in Figure 7.

²⁵ National Practitioner Data Bank 2012 Annual Report, Table 24, Median and Mean Medical Malpractice Payment Delay, in Years, Between Incident and Payment, by Jurisdiction, 2003 – 2012, p.70.



Figure 8

Massachusetts licensed insurance companies reported total incurred losses of \$81.7 million in 2010, compared to \$171.4 million collected in earned premiums.

On an industry basis, licensed insurance companies had incurred losses - amounts that were reserved for claims that were open in the current year as well as amounts paid out for claims during the year - of \$34.5 million in 2016 which is less than incurred losses in both 2013 and 2010 respectively.

RRGs incurred \$78.7 million in losses in 2016 which, on the other hand is higher than losses for both2013 and 2010 respectively. Surplus lines carriers incurred \$7.2 million in losses in 2016, which is less than losses for both 2013 and 2010 respectively. (Figure 8)

Loss Ratios

Loss ratios from company financial statements (incurred losses divided by earned premium) reflect the proportion of premium dollars used to pay claims for medical malpractice. Financial statement loss ratios for medical malpractice can vary significantly from one year to the next because of changes in reserves for unpaid or unknown claims.

The calculated loss ratios for Massachusetts medical malpractice companies (licensed insurers, RRGs and surplus lines carriers) slightly decreased from 37.8% in 2010 to 37.6% in 2016. The loss ratios on a national basis for all medical malpractice companies increased from 32.5% in 2010 to 48.8% in 2016. (Figure 9)

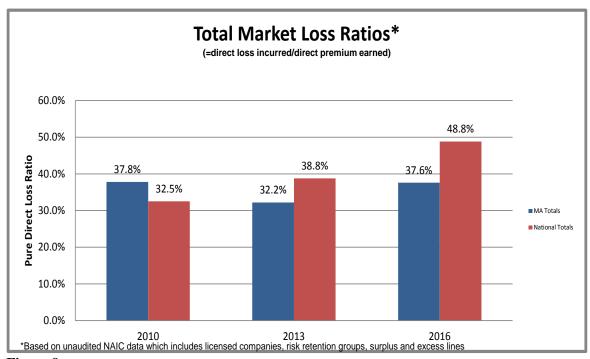


Figure 9

The licensed insurance companies' loss ratios declined from 47.7% in 2010 to 25.9% in 2016. The RRGs' loss ratios increased during this period from 23.9% in 2010 to 48.2% in 2016. The surplus lines carriers' loss ratios decreased from 38.4% in 2010 to 30.0% in 2016. (Figure 10)²⁶

²⁶Includes losses covered by reinsurance and does not necessarily reflect the loss expense of the primary insurers.

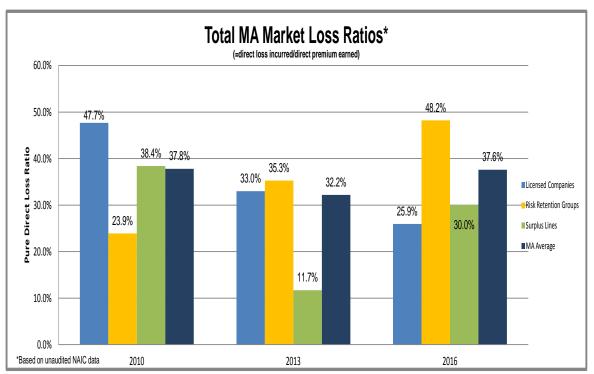


Figure 10

Profitability

An operating ratio represents the overall return on an insurer's investment in providing medical malpractice insurance. The operating ratio reflects the loss ratio of an insurance company, as well as the costs required to run it, including claims handling, commissions to agents, advertising, taxes, and dividends to policyholders. This combined ratio is then reduced by an insurer's investment returns, as a percentage of premium collected, to produce the operating ratio. If a company's operating ratio is less than 100%, it has made a profit²⁷; when the operating ratio is greater than 100%, it has lost money.

The operating ratio of the medical malpractice insurance industry over time indicates whether the historic experience of the market has returns that reasonably align with expectations. Operating ratios based on historic data are not good indicators of price strength in any given year, but are helpful to understand why prices are moving in a specific direction.

Since medical malpractice loss ratios from financial statements can vary widely from year to year, the Division of Insurance monitors the operating ratios of this industry using five year moving average loss ratios. This adjustment smooths out these fluctuations, and provides a more accurate picture of claim cost trends in this market. Also, since medical malpractice is considered a "long tailed line" where claim payments may not be made for many years after a claim has occurred or been reported, the investment income earned during this delay contributes significantly to an insurer's profitability. Because investment

Massachusetts Division of Insurance

²⁷Federal/state income tax and dividends to stockholders are paid out of the profits earned during the year.

returns can vary widely from year to year, the Division of Insurance similarly monitors the operating ratios of this industry using five-year moving average investment returns.

Figure 11 below displays the "adjusted" operating ratios for all medical malpractice insurers licensed in Massachusetts. Column (G) indicates that the operating returns to medical malpractice insurers are trending towards profitability, and indicates that the market is increasing its financial strength.

		Calculation of Adjusted Operating Ratios - Licensed Companies					
	(A)	(B)	(C)	(D)	(E)	(F)	(G)
		5 Year	1 Year	1 Year	1 Year	5 Year Average	Average
Calendar	Earned	Moving Loss	Other	Commission	Dividend	Net Investment	Return on
<u>Year</u>	<u>Premium</u>	<u>Ratio</u>	Expense Ratio	<u>& Premium Tax</u>	<u>Ratio</u>	<u>Income</u>	Premium
2016	\$133,094	44.4%	24.7%	16.2%	6.2%	17.1%	25.6%
2015	\$141,763	39.8%	16.4%	13.4%	1.4%	17.1%	46.2%
2014	\$152,077	49.3%	22.6%	10.0%	8.0%	17.4%	27.4%
2013	\$159,250	52.5%	19.2%	11.8%	6.5%	18.1%	28.1%
2012	\$173,829	54.9%	11.4%	11.6%	5.0%	14.7%	31.8%
2011	\$172,738	61.7%	12.0%	12.0%	5.2%	15.6%	24.7%
(A) NAIC data	base, licensed	d companies only					
(B) NAIC data	base, calenda	r year direct incurr	ed loss & DCCE adjus	ted by a factor of 1.07	1 to reflect ot	her	
claims adj	ustment expe	ense					
(C) Bests' Agg	regates and A	werages for MA lice	nsed companies onl	у			
(D) NAIC database, as percentage of direct written premium							
(E) NAIC datal	base, as perce	entage of direct wri	tten premium				
(F) Bests' Aggr	regates and Av	verages for MA lice	nsed companies only	,			
(G) = 1.0 - (B) -	(C)-(D)-(E)+	(F)					

Figure 11

Premiums for Medical Malpractice Coverage

Insurance companies develop premiums to pay future expected claims costs and business expenses, while also meeting company profit expectations and staying competitive with other insurance companies. Changes in future expected claim costs, business expenses, and investment returns drive changes in insurers' rates on a yearly basis. If an insurer's current rates are adequate to pay all claims and expenses, and provide a reasonable profit, the rates for the next year can be expected to rise by the expected changes in underlying costs.

The Coverys Group is the largest medical malpractice licensed insurer in Massachusetts, writing approximately 26.3% of the total market, and 63.8% of the admitted market. As such, its rate history can be used to illustrate the relationship between expected cost increases and changes in rates.

The rate history of Medical Professional Mutual Insurance Company (part of the Coverys Group) illustrates that medical malpractice rates rose quickly in the early 2000s. Between 2000 and 2004, Medical Professional's physician and surgeon average rates increased each year by at least 9.0%. After 2004, Medical Professional's rate changes were much more moderate, and less than their projected rate of cost increases of 5% per year. (Figure 12)

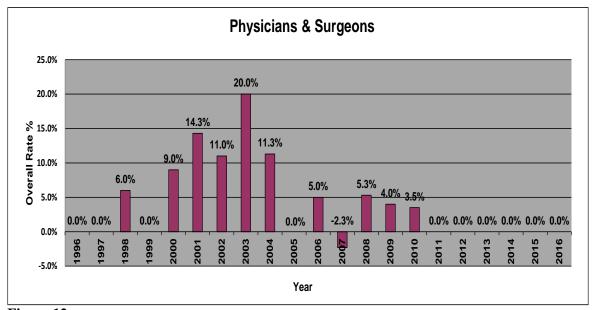


Figure 12

The rate change history of the Medical Professional Mutual Insurance Company supports the expectation that returns have improved, and that, absent any dramatic change in underlying claim costs or investment returns, rate changes have remained flat or declined from a high in 2003.

Average Claim Costs for Medical Malpractice Coverage

Regarding the size and type of paid claims, Massachusetts continues to have higher claim payouts than other states. In 2016, the median Massachusetts medical malpractice payment made on behalf of physicians was \$500,000, the third highest in the country only behind Illinois (first) and Rhode Island (second). In 2016, the mean Massachusetts medical malpractice payment made on behalf of physicians was \$871,776, the highest in the country.

National Practitioner Data Bank

Median and Mean Medical Malpractice Payments and Rank by Jurisdiction for 2016¹

	2016		2016	
State	Median Payment	Rank	Mean Payment	Rank
Alabama	\$400,000	6	\$567,159	9
Alaska	\$250,000	21	\$369,091	28
Arizona	\$225,000	26	\$408,575	22
Arkansas	\$250,000	21	\$391,768	25
California	\$100,000	48	\$243,746	43
Colorado	\$250,000	21	\$410,274	21
Connecticut	\$325,000	12	\$588,643	7
Delaware	\$145,000	42	\$241,882	44
District of Columbia	\$350,000	9	\$480,569	14
Florida	\$190,000	34	\$245,211	42
Georgia	\$299,000	17	\$457,963	16
Hawaii	\$225,000	26	\$356,756	31
Idaho	\$262,000	20	\$577,145	8
Illinois	\$540,000	1	\$749,893	3
Indiana	\$187,001	35	\$285,063	35
Iowa	\$175,000	37	\$423,221	19
Kansas	\$200,000	30	\$196,045	46
Kentucky	\$175,000	37	\$266,041	40
Louisiana	\$95,000	49	\$183,876	48
Maine	\$337,500	10	\$400,264	24
Maryland	\$300,000	13	\$528,623	11
Massachusetts	\$500,000	3	\$871,776	1
Michigan	\$124,375	46	\$178,523	49
Minnesota	\$300,000	13	\$504,080	13
Mississippi	\$129,000	44	\$357,808	30
Missouri	\$300,000	13	\$454,240	17
Montana	\$250,000	21	\$372,091	27
Nebraska	\$375,000	7	\$358,608	29
Nevada	\$138,868	43	\$284,021	37
New Hampshire	\$437,500	5	\$745,242	4
New Jersey	\$336,000	11	\$611,431	5
New Mexico	\$200,000	30	\$821,233	2
New York	\$375,000	7	\$532,723	10
North Carolina	\$162,500	39	\$258,665	41
North Dakota	\$70,750	51	\$70,750	51
Ohio	\$250,000	21	\$425,543	18
Oklahoma	\$225,000	26	\$386,283	26
Oregon	\$200,000	30	\$420,054	20
Pennsylvania	\$500,000	3	\$404,269	23
Rhode Island	\$530,000	2	\$593,146	6
South Carolina	\$177,500	36	\$270,808	38
South Dakota	\$90,000	50	\$124,167	50
Tennessee	\$150,000	40	\$323,514	32
Texas	\$126,255	45	\$226,937	45
Utah	\$200,000	30	\$315,064	33
Ctail	7200,000	30	7313,004	

Medical Malpractice Insurance in the Massachusetts Market

Vermont	\$273,750	18	\$299,583	34	
Virginia	\$262,500	19	\$511,346	12	
Washington	\$300,000	13	\$478,583	15	
West Virginia	\$105,000	47	\$267,275	39	
Wisconsin	\$147,000	41	\$185,410	47	
Wyoming	\$212,500	29	\$284,375	36	

Note: Year is malpractice payment year.

Figure 13²⁸

Obstetric-related malpractice paid claims, nationally, continue to have the highest average claim payouts. In 2012, the average national medical malpractice payment made on behalf of physicians for obstetrics related claims was \$572,199. When examining claim payments made over the ten years from 2003 to 2012 the average national medical malpractice payment made on behalf of physicians for obstetrics related claims was \$548,733. The national median obstetrics related payment was \$350,000 in 2012 and over the ten years from 2003 to 2012 the median payment was \$300,000. Diagnosis related malpractice claim payments ranked the second highest nationally with an average claim payment in 2012 of \$388,892 and over the ten years from 2003 to 2012 the average claim payment was \$378,730. (Figure 14)

	Medi	Median Payment		ber of Payments	Mean Payment	
Payment Reason	2012	2003-2012	2012	2003-2012	2012	2003-2012
Obstetrics Related	\$350,000	\$300,000	585	9,321	\$572,199	\$548,733
Anesthesia Related	\$239,980	\$200,000	2,872	37,836	\$373,476	\$340,667
Diagnosis Related	\$227,500	\$200,000	222	3,298	\$388,892	\$378,730
Monitoring Related	\$170,000	\$152,500	323	3,306	\$293,769	\$315,952
IV & Blood Products Related	\$169,400	\$150,000	2,559	30,782	\$319,332	\$271,443
Treatment Related	\$150,000	\$140,000	1,804	22,331	\$286,892	\$264,929
Surgery Related	\$140,000	\$150,000	21	247	\$205,203	\$241,172
Medication Related	\$125,000	\$125,000	511	5942	\$246,756	\$241,885
Behavioral Health Related	\$75,000	\$75,000	222	2407	\$278,249	\$211,332
Other Miscellaneous	\$65,625	\$100,000	26	379	\$282,567	\$236,656
Equipment/Product Related	\$30,000	\$55,000	49	627	\$160,323	\$145,413

Figure 14

_

²⁸ Figure 13 and Figure 14 are from the National Practitioner Data Bank. More recent National Practitioner Data for figure 14 was not available at the time of this report.

Premiums Compared to Those of Other States

Coverys submitted materials to supplement testimony it presented at the October 3, 2008 hearing presenting the rates the company charges by physician specialty in six Northeast states.²⁹ These rates since have been updated to reflect Massachusetts' rates as of October 1, 2017. The rates that the company charges, generally, in Massachusetts and Connecticut are among the highest of the six states, but not for every specialty. (Figure 15)

COVERYS GROUP'S (FORMERLY PROMUTUAL GROUP) MATURE RATES BY CLASS AS OF 10/1/2017 FOR CLAIMS MADE POLICIES*	
25 HIGHEST MASSACHUSETTS COMPARED TO RATES IN OTHER NORTHEAST STATES	

		Massachusetts	Connecticut	Rhode Island	N. Hampshire	New Jersey	PA-Territory 4
Class	<u>Description</u>	Effective 7/1/2015	Effective 10/1/2015	Effective 9/30/2017	Effective 10/1/2015	Effective 12/1/2014	Effective 9/1/2015
80152	Neurology - incl children, major surgery	111,274	122,472	100,212	114,857	99,912	95,805
80153	OB, gynecology, major surgery	104,071	135,643	111,312	77,990	108,410	101,122
80168	OB, major surgery	104,071	135,643	111,312	77,990	108,410	101,122
80154	Orthopedic incl. spinal, major surgery	89,418	49,913	73,028	66,645	69,340	71,867
80146	Vascular, major surgery	59,257	66,802	61,915	58,138	56,732	58,800
80150	Cardiovascular disease, major surgery	59,257	66,802	75,929	58,138	57,728	55,194
80170	Head & neck, major surgery	59,257	66,802	45,903	51,047	57,728	55,194
80171	Traumatic, major surgery	59,257	66,802	61,915	58,138	57,728	55,194
80354	Orthopedic excl. spinal, major surgery	48,353	35,971	58,446	51,047	56,732	58,800
80141	Cardiac, major surgery	48,305	49,913	44,384	58,138	57,728	55,194
80143	General (NOC), major surgery	48,305	83,930	44,384	51,543	57,728	55,194
80144	Thoracic, major surgery	48,305	66,802	45,903	58,138	56,732	58,800
80155	Plastic - otorhinolaryngology, major surg.	48,305	66,802	61,915	48,212	57,728	55,194
80156	Plastic (NOC), major surgery	48,305	66,802	61,915	48,212	57,728	55,194
80157	Emergency med, incl major surg (brd cert)	48,305	35,971	44,384	51,047	35,817	39,317
80166	Abdominal, major surgery	48,305	49,913	44,384	48,212	57,728	55,194
80167	Gynecology, major surgery	48,305	49,913	44,384	51,047	57,728	55,194
80169	Hand, major surgery	48,305	49,913	42,051	48,212	57,728	55,194
80184	Bariatric, major surgery	48,305	83,930	44,384	48,212	57,728	55,194
80465	Emergency med, inc major surg (no brd ce	48,305	35,971	44,384	N/A	35,817	39,317
80102	Emergency med, no major surg (brd cert)	33,170	32,974	30,370	21,071	28,948	30,904
80464	Emergency med, no major surg (no brd ce	33,170	32,974	30,370	21,071	28,948	30,904
80101	Bronco-Esophagology, major surgery	32,143	35,971	25,704	34,032	23,614	24,475
80103	Endocrinology, major surgery	32,143	35,971	25,704	34,032	17,776	18,423
80104	Gastroenterology, major surgery	32,143	35,971	25,704	24,106	23,614	24,475

*Covery's mature rates in a claims made policy are for those doctors who have been covered under the claims made policy for five or more years.

²⁹ Rates presented by Coverys that are being charged across six Northeast states for the same level of claims-made coverage. The presented chart is for the 25 highest rated specialty classes in Massachusetts with 1M/3M limits of liability, with the exception of Connecticut, where the limits are 1M/4M.

Figure 15

Among the specialty groups, Massachusetts' average rates for the obstetrician rating classes (80153 and 80168) are both \$104,071; this is in the middle of rates reported for five other Northeast Region states, but over \$26,000 more than what is reported for rates for obstetricians in New Hampshire.

Recent Medical Malpractice Reforms

Chapter 224 of the Acts of 2012³⁰ - An Act Improving The Quality of Health Care and Reducing Costs Through Increased Transparency, Efficiency and Innovation helped address some of the Division's 2007 recommendations by establishing new statutory provisions that prevent a patient from commencing a legal medical malpractice lawsuit against a Massachusetts-based health care provider until 182 days after the patient has given the health care provider a written notice of a malpractice claim. Essentially, this so-called "cooling-off period" establishes a period of time during which the aggrieved patient and the health care providers might communicate and exchange documents prior to the commencement of litigation, in the hope that the two sides may resolve the malpractice claim. This statute also makes a provider's apology inadmissible as evidence in a medical malpractice proceeding.

Chapter 224 of the Acts of 2012 also increases the statutory cap on medical malpractice damages for non-profit organizations that provide health care from \$20,000 to \$100,000, exclusive of interest and costs, and lowers the interest rate on malpractice damages from 4 percent to 2 percent.

These changes are intended to allow for more claims to be settled prior to any cases going into litigation. Prior to these changes, many health care providers may not have learned that a lawsuit had been filed until they were notified by the Medical Malpractice Tribunal. Chapter 224 also provides health care providers with the opportunity to seek dismissal of malpractice actions brought by plaintiffs who fail to comply with the statute's notice requirements.

Conclusion

While medical malpractice premiums have been relatively stable over the past several years, many health care professionals consider them to be too high and too prone to increase. While medical malpractice premiums can change for many reasons, Massachusetts' relative high cost compared to that of other states appears to be tied to the higher cost of medical malpractice claims here.

The Division's 2007 report analyzed different reasons that medical malpractice costs may be high, and proposed ideas to reform the tort or medical systems. Specifically, the 2007 report examined ways to address the number and size of medical malpractice claims by looking at the following types of changes:

- > Improving communications between patients and health care professionals to improve trust, reduce unreasonable expectations and avoid lawsuits;
- ➤ Shifting malpractice risk from individuals to enterprises *e.g.*, hospitals and health plans because systems' problems are responsible for many medical errors;

³⁰ Please see Chapter 224 of the Acts of 2012 sections 220, 221, 222, and 223 for complete description at https://malegislature.gov/Laws/SessionLaws/Acts/2012/Chapter224.

Medical Malpractice Insurance in the Massachusetts Market

- ➤ Changing the tort system e.g., limiting medical malpractice awards and establishing new procedural tort standards to reduce unnecessary lawsuits and lower the cost of those that remain; and
- ➤ Preventing medical errors e.g., disclosing all medical errors and establishing medical standards of care to reduce patient injuries.

The 2007 report identified that certain specialties (*e.g.*, obstetrics and gynecology) have higher claims and higher premiums than other specialties and identified that there may be ways to temper premiums for these specialties by looking at the following changes:

- > Increasing other providers' premiums to subsidize high-risk providers' premiums;
- Assessing insurers to subsidize high-cost providers' premiums; and
- Establishing limited no-fault systems to review claims for high-cost providers.

Although the Division did not conduct the same analysis for this report or previous calendar year reports, it does believe that the calendar year 2007 analysis and recommendations remain valid for the Massachusetts medical malpractice market today.

Appendix A-1: Medical Malpractice Insurance Companies

The following list identifies the admitted insurance companies that reported Massachusetts premium revenue for medical malpractice coverage during 2016:³¹

Company Name	Domicile
ACE American Insurance Company	PA
Allied World Insurance Company	NH
Allied World Specialty Insurance Company	DE
American Alternative Insurance Corporation	DE
American Casualty Company of Reading, Pennsylvania	PA
Atlantic Specialty Insurance Company	NY
Beazley Insurance Company, Inc.	CT
Berkshire Hathaway Specialty Insurance Company	NE
Church Mutual Insurance Company	WI
Connecticut Medical Insurance Company	CT
Continental Casualty Company	IL
(The) Doctors' Company	CA
Everest National Insurance Company	DE
Fair American Insurance and Reinsurance Company	NY
Fortress Insurance Company	IL
Great American Assurance Company	ОН
Great American Insurance Company	ОН
Great American Insurance Company of NY	NY
Great Divide Insurance Company	ND
Hudson Insurance Company	DE
Ironshore Indemnity, Inc.	MN
Liberty Insurance Underwriters, Inc.	IL
Medical Mutual Insurance Company of Maine	ME
Medical Professional Mutual Insurance Company	MA
Medical Protective Company	IN
National Union Fire Insurance Company of Pittsburgh, PA	PA
NCMIC Insurance Company	IA
PACO Assurance Company, Inc.	IL
Pharmacists Mutual Insurance Company	IA
Podiatry Insurance Company of America	IL
Preferred Professional Insurance Company	NE
Professional Solutions Insurance Company	IA
ProSelect Insurance Company	MA
State Farm Fire and Casualty Company	IL

³¹ According to direct written premium reported to the National Association of Insurance Commissioners.

Appendix A-2: Medical Malpractice Surplus Lines Carriers

The following list identifies the surplus lines carriers that reported Massachusetts premium revenue for medical malpractice coverage during 2016:³²

Company Name Admiral Insurance Company	Domicile DE
AIX Specialty Insurance Company	DE
Allied World Assurance Company (U.S.), Inc.	DE
Allied World Surplus Lines Insurance Company	AR
Arch Specialty Insurance Company	MO
Aspen Specialty Insurance Company	ND
AXIS Surplus Insurance Company	IL
Berkley Assurance Company	IA
Capitol Specialty Insurance Corporation	WI
Catlin Specialty Insurance Company	DE
Chubb Custom Insurance Company	NJ
Colony Insurance Company	VA
Columbia Casualty Company	IL
Coverys Specialty Insurance Company	NJ
Evanston Insurance Company	IL
Gemini Insurance Company	DE
General Star Insurance Company	DE
Great American E&S Insurance Company	DE
Hallmark Specialty Insurance Company	OK
Homeland Insurance Company of New York	NY
Houston Specialty Insurance Company	TX
Hudson Specialty Insurance Company	NY
Illinois Union Insurance Company	IL
Ironshore Specialty Insurance Company	AZ
James River Insurance Company	OH
Kinsale Insurance Company	AR
Landmark American Insurance Company	OK
Lexington Insurance Company	DE
Liberty Surplus Insurance Corporation	NH
Mt. Hawley Insurance Company	IL
National Fire & Marine Insurance Company	NE
Nautilus Insurance Company	AZ
Navigators Specialty Insurance Company	NY
NORCAL Specialty Insurance Company	PA
ProAssurance Casualty Company	MI
QBE Specialty Insurance Company	ND

 $^{^{32}}$ According to direct written premium reported to the National Association of Insurance Commissioners.

Massachusetts Division of Insurance

Medical Malpractice Insurance in the Massachusetts Market

StarStone Specialty Insurance Company	DE
Steadfast Insurance Company	DE
TDC Specialty Insurance Company	DC
Western World Insurance Company, Inc.	NH

Medical Malpractice Insurance in the Massachusetts Market

In Massachusetts, the following Risk Retention Groups (RRGs) reported Massachusetts premium revenue for medical malpractice coverage during 2016:³³

Company Name	Domicile
Academic Medical Professionals Insurance, LLC	VT
Affiliates Insurance Reciprocal (RRG)	VT
Allied Professionals Insurance Company (RRG)	AZ
American Association of Orthodontists (RRG)	AZ
American Excess Insurance Exchange (RRG)	VT
Applied Medico Legal Solutions (RRG)	AZ
BeaconHarbor Mutual (RRG)	ME
Caring Communities Reciprocal (RRG)	DC
CMIC (RRG)	DC
Controlled Risk Ins Co of VT (RRG) [aka CRICO]	VT
Eastern Dentists Insurance Company (RRG)	VT
Emergency Physicians Insurance Exchange (RRG)	VT
Green Hills Insurance Company (RRG)	VT
Health Care Industry Liability Reciprocal Insurance	D0
Company	DC
Ironshore RRG (DC), Inc.	DC
Lone Star Alliance (RRG)	DC
MMIC RRG, Inc.	DC
Oceanus Insurance Company (RRG)	SC
Oms National Insurance Company (RRG)	IL . —
Ophthalmic Mutual Insurance Company (RRG)	VT
Preferred Physicians Medical (RRG)	MO
Scrubs Mutual Assurance Company (RRG)	NV
Urgent Care Assurance Company RRG, Inc.	NV

-

³³ According to direct written premium reported to the National Association of Insurance Commissioners.