



Technical Release Notes – Version 12.2

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Executive summary

With Commercial Insight V12.2 products, MarketStance made many innovations, unveiling our first estimates of the medical malpractice market, an important workers’ compensation rates update, and adding about \$1.5 billion to our previously stated estimate of the commercial Inland Marine market.

With these medical malpractice estimates:

- We offer the first detailed view of the market by county, size, and class of business – built as only we can do, from the bottom up.
- Draw upon more than a dozen current data sources from the Centers for Medicare and Medicaid Services and rate filings of industry leading carriers.



- Are built upon detailed sub-line estimates, encompassing nearly fifty specialist medical occupations and every major medical malpractice facility exposure.
- Reflect rate differentials in the market, in many cases down to the county level.
- Are available in even more detailed forms, by type of medical specialization, type of facility, even by rating approach (per bed, per ER visit). **Please turn to page 3 to learn more. . .**

Updates to the workers' compensation rates and state classifications for certain industries resulted in modest shifts in premium distribution in most cases, with some of the largest shifts detailed in the tables below. **Please turn to page 6 to learn more. . .**

Additional premiums in our Inland Marine estimates stemmed from an improved model of the builder's risk subline introduced in version V12.1. **Please turn to page 8 to learn more. . .**

Who to contact for more information

Please contact our Client Services department at ms@marketstance.com / 888-777-2587 or your Regional Relationship Director if you have any questions or service needs. We value your business, and thank you for your continued support!



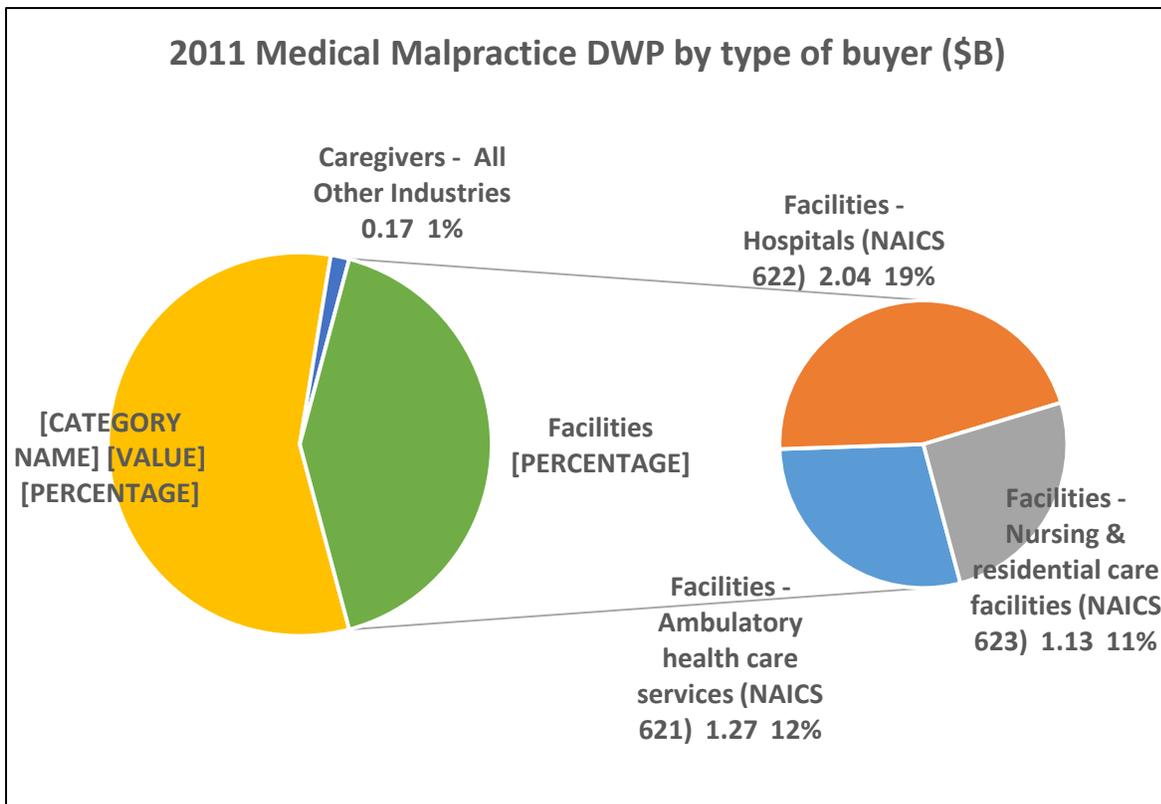
Section 1 - MarketStance estimates the Medical Malpractice market

With Commercial Insight V12.2, MarketStance added estimates of the medical malpractice market. The liability measure for all Commercial Insight clients adds medical malpractice premiums to the general liability, E&O, D&O, employment practices, and fiduciary lines previously reported. The medical malpractice exposure and premiums detail is an added feature for all of our Commercial Insight Special Liability Advisor customers. In what follows we detail some of the keys of our approach.

Our estimates draw upon the detailed insurable exposures tracked by the County Business Patterns, Economic Census and other U.S. Census programs, supplemented by industry data sourced from the Centers for Medicare and Medicaid Services (CMS). We combined such exposure data with current, territory specific rates and rating approaches of several of the leading carriers, providing the first authoritative, granular, and comprehensive view of this important, \$10 billion market.

We hope this helps establish MarketStance as one of the “go to” sources for carriers attempting to navigate the volatile waters of technical and institutional change in healthcare in upcoming years.

Figure 1: Medical Malpractice premiums by type of buyer



MarketStance Commercial Insight V12.2 (August 2013)

Description of the medmal model and estimates

The MarketStance medmal model revolves around two types of potential buyers: *individual caregivers* the doctors, surgeons, veterinarians, technicians, and nurses, delivering care predominantly through doctors’ offices and other ambulatory and clinical settings; and *facilities*—primarily hospitals, skilled



nursing facilities, and surgery and dialysis centers, where risk managers make the purchase, often as part of comprehensive risk management program with captives, excess, and/or self-insured retentions competing with the standard market for the risk dollar.

We estimate that in 2011, individual clinicians represented 58 percent and facilities 42 percent of the \$10.7 billion market opportunity, with facility buyers split about evenly between hospital and non-hospital settings (**Figure 1**, above). Notably, we benchmarked our market model to two primary sources: premiums reported on the statutory blank by A.M. Best, about \$10.2 billion in 2011; and added to this more than \$400 million in premium (or “surcharge”) collected in 2011, according to the annual reports of patient compensation funds and joint underwriting associations that were active in eight states, by far the largest being the Medical Care Availability & Reduction of Error (Mcare) Fund in Pennsylvania (\$178 million).

Diligent work by our development team replicated the underwriting process for medmal risks to the greatest extent feasible, given the data available. The exposures data produced routinely by the Centers for Medicare and Medicaid Services is indeed remarkable in its detail, in some respects far more so than what is available in other lines.

For example, certain crucial elements for rating facilities, such as the numbers of beds and bed occupancy rates, are reported in the source data at the actual facility level for that vast majority of operating locations that have some billing interface with the CMS payments system, thereby obligating each to provide copious operational details and enabling us to mine and warehouse those reports for relevant insurable exposures for the medmal line.

Table 1: Medmal facilities premiums by facility & exposure basis

Facilities - Exposure basis	2011 Medical Malpractice DWP (\$B)
Hospitals - per ER visit	0.5
Allied health facilities - laboratory revenue	0.3
Allied health facilities- per visit	1.0
Hospitals - per inpatient surgical procedure	0.6
Hospitals - per outpatient surgical procedure	0.1
Hospitals - per delivery	0.1
Nursing homes & hospitals - per occupied bed	1.8
Total	\$4.4B
<i>MarketStance Commercial Insight V12.2 (August 2013)</i>	

Table 1 breaks out the \$4.4 billion part of the medmal market sold to facilities in a different way, here by the specific rating approach supported by the primary data sources. The facilities rating model draws on numerous CMS series, hospital and non-hospitality natality data tracked by the Centers for Disease Control, and population and other U.S. Census programs whose statistics we already use in developing our Commercial Insight products.



Thanks to the detailed industry by occupation series provided annually by the U.S. Bureau of Labor Statistics, we tracked forty-eight distinct specialties across fifty-five industries where at least 0.5 percent of the total, estimating their buying propensity and assigning base rates separately for each with at least some propensity to buy the coverage, for every industry in our U.S. database. Our model assumes \$1M/3M limits, recognizing that market behavior varies from this standard.

Table 2 reflects the relative weight and premiums per specialist estimated in our model for the 2011 market, representing nearly 100 percent of the caregivers' part of the medmal market.

Table 2: Top 10 specialist occupations, ranked by market share

Occupation	2011 Medical Malpractice DWP (\$B)	2011 Number of covered specialists (thou.)	Average premium per specialist (\$)
Physicians and Surgeons, All Other	2.1	163	13,128
Anesthesiologists	1.0	32	32,122
Surgeons	1.0	37	28,090
Obstetricians and Gynecologists	0.6	18	31,680
Family and General Practitioners	0.5	71	6,844
Internists, General	0.3	38	7,913
Pediatricians, General	0.2	23	7,907
Dentists, General	0.1	86	1,699
Chiropractors	0.1	31	2,370
Physician Assistants	0.1	46	1,301
Caregivers' market, top-10 specialist occupations	6.0	546	11,036

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On the rates side, sources such as the Medical Liability Monitor and rate filings confirm the vast differences in 2011 rates, not merely between one specialization and another, but between discrete county and metro-area based rating territories.

Our modeled results reflect these rate differences by geography in many ways. For example, the OB-GYN markets varied substantially by state, very large markets such as Texas averaging about 17 thousand per OB-GYN – about half the average of the top-10 states in this market, while states such as Maryland and New York range to more than twice that average.

Perhaps even more compelling, the development team incorporated distinct territory modifiers consistently reflected in published rates and rate surveys in the marketplace. For example, Figure 2 displays the spread of OB-GYN rates paid in the top 10 Ohio counties, reflecting a clear Northeast/Southwest axis of rates, with average rates paid in Northeastern Ohio counties in Northeast Ohio being nearly 1.25-2 times the rates in Cincinnati, Dayton and Columbus areas to the Southwest.

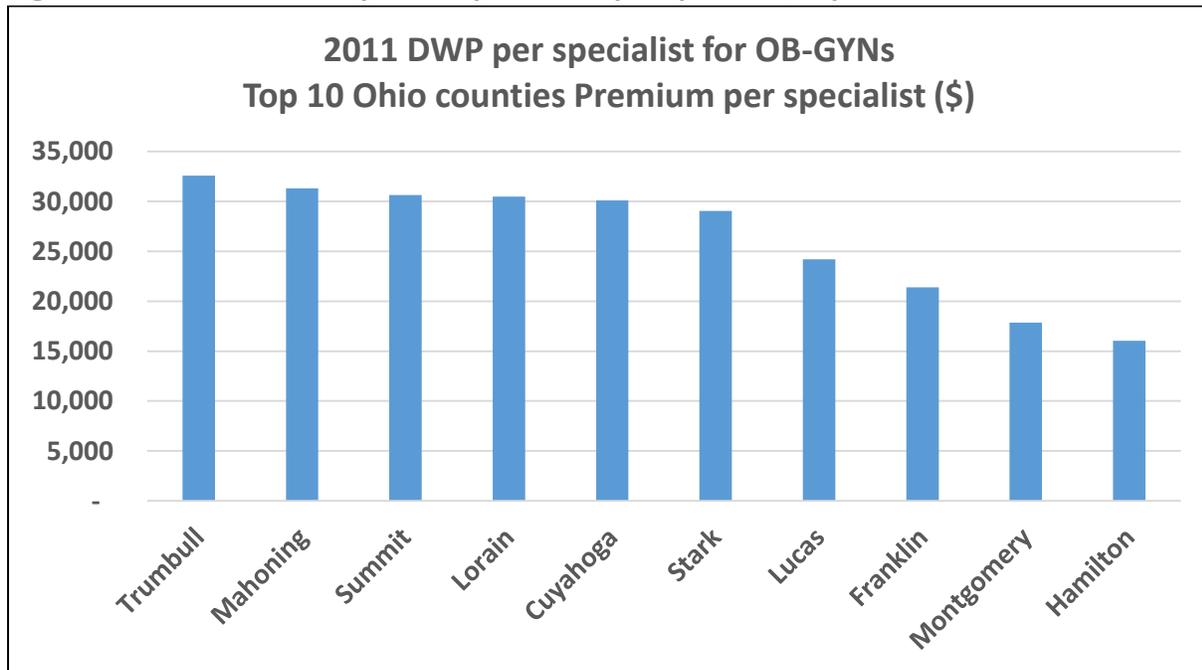


Table 3: Top 10 states, ranked by share of the OB-GYN market

State	Medical Malpractice DWP (\$millions)	Number of specialists	Premium per specialist (\$)
NY	91	1,175	77,649
PA	43	924	46,725
CA	41	2,072	20,018
NJ	29	565	51,707
FL	28	1,187	23,675
IL	27	686	38,767
TX	23	1,336	17,013
MA	21	418	49,382
MD	19	350	55,735
OH	16	677	23,381
OB-GYN market, Top 10 states	339	9,391	36,048

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Figure 2: Ohio medical malpractice premiums per specialist, top 10 counties



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Section 2 – Workers’ compensation & Inland Marine updates

Workers’ compensation rate updates and their premium impacts

MarketStance performed a comprehensive update of rates for the V12.2 Commercial Insight data in all states but California (update scheduled for version V13.0, November 2013).



Table 4: State x industry combinations with major changes in rates or rating procedures and direct premiums written

2007 NAICS	Description	State	MarketStance classifications for this state and industry	Classification description	Percent change, pure premium rate	Percent change, direct premiums written	
						State	US
212210	Iron Ore Mining	MN	1164	Ore mining - underground & drivers	-11.3	-22.9	-27.9
		MI	1164	Mining - NOC - underground - not coal	-39.1	-75.4	
114112	Shellfish Fishing	ME	7016	Fishing vessels	-48.2	-22.3	-28.9
			7024				
			7047				
813319	Other Social Advocacy Organizations	NY	8864	Develop. orgs - all employees & salespersons, drivers	30.6	16.2	111.7
		DC	8810	Clerical office employees NOC	3.6	7.5	
			8864	Social services organization - all employees & salespersons, drivers			
339994	Broom, Brush, and Mop Manufacturing	WI	2835	Brush or broom assembly; Mop mfg. - assembly only	54.7	16.7	28.3
			2836	Brush or broom mfg. NOC			
332115	Crown and Closure Manufacturing	PA	445	Hardware mfg., NOC.	3.1	14.6	26.8
		NY	3129	Buckle or button mfg.	71.4	17.5	
485112	Commuter Rail Systems	TX	7382	Bus co: All other employees & drivers	-31.3	-38.7	-25.6
		TN	7382	Railroad operation - street & drivers - all other than yard employees; Street railroads & drivers	-26.6	-43.2	
		MA	7382	Railroad operation - street & drivers - all other than yard employees; Street railroads & drivers	12.1	15.4	

Our team obtained advisory loss cost information from NCCI and state departments of insurance and made minor changes to our WComp model, principally in our industry-state classification relationship table. These changes in turn altered the state-wide distribution of workers' compensation premiums



reported in Commercial Insight in all industries. Changes in the state & industry combinations listed below were particularly significant (Table 4).

Inland Marine estimates fully reflect the builder's risk market

We made a major adjustment to our initial model of the builder's risk subline of the Inland Marine market, increasing substantially the total premiums reported from the \$8 billion levels reported in version 12.1. Our major revision of the Inland Marine debuted in Commercial Insight V12.1 (April 2013). That model, though largely intact for version V12.2, presumed a too-large fraction of builder's risk is being purchased by builders, which in turn has a high probability of being handled through the CMP line. Rather than being reported as Inland Marine in the statutory data it gets filed as CMP non-liability.

For version 12.2, after discussing the issues with our underwriting contacts, we increased the proportion of builder's risk coverage that is purchased by property owners as opposed to builders. Since building owners typically do not carry an Inland Marine endorsement on a CMP policy, this had a sizeable effect on the premiums, our estimate of which rose from \$8 billion to \$9.6 billion.

Who to contact for more information

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